## Data Set Name: bridge_fuq_nhlbiv1_180716.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 |  |
| 2 | EVENTNAME | Char | 30 |  |
| 3 | FORM | Char | 10 |  |
| 4 | VISIT | Char | 10 |  |
| 5 | FUQ01 | Char | 1 | 1) (Do not ask participant) Participant status (choose one): |
| 6 | FUQ01C | Char | 1 | 1c) Do you know if (insert decedent's name) was hospitalized or visited an emergency room for any reason since (date of last contact) and his/her death? |
| 7 | FUQ02 | Char | 1 | 2) Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 8 | FUQ02A | Num | 8 | 2a) How many episodes of chest trouble flare ups have you had since (date)? |
| 9 | FUQ3A | Char | 1 | 3a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 10 | FUQ3B | Char | 1 | 3b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 11 | FUQ3C | Char | 1 | 3c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 12 | FUQ3D | Char | 1 | 3d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 13 | FUQ3E | Char | 1 | 3e) Were you evaluated in a physician's office or urgent care? |
| 14 | FUQ03E1 | Num | 8 | 3e1) An additional antibiotic |
| 15 | FUQ03E2 | Num | 8 | 3e2) Additional steroids |
| 16 | FUQ03E3 | Num | 8 | 3e3) Don't know |
| 17 | FUQ03E4 | Num | 8 | 3e4) Don't remember |
| 18 | FUQ03F | Char | 1 | 3f) Were you evaluated in an Emergency Department? |
| 19 | FUQ03F1 | Num | 8 | 3f1) An additional antibiotic |
| 20 | FUQ03F2 | Num | 8 | 3f2) Additional steroids |
| 21 | FUQ03F3 | Num | 8 | 3f3) Don't know |
| 22 | FUQ03F4 | Num | 8 | 3f4) Don't remember |
| 23 | FUQ03G | Char | 1 | 3g) Were you admitted to the hospital? |
| 24 | FUQ05 | Char | 1 | 5) (do not ask) Did the participant have a second episode? |
| 25 | FUQ06A | Char | 1 | 6a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 26 | FUQ06B | Char | 1 | 6b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 27 | FUQ06C | Char | 1 | 6c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 28 | FUQ06D | Char | 1 | 6d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 29 | FUQ06E | Char | 1 | 6e) Were you evaluated in a physician's office or urgent care? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 30 | FUQ06E1 | Num | 8 | 6e1) An additional antibiotic |
| 31 | FUQ06E2 | Num | 8 | 6e2) Additional steroids |
| 32 | FUQ06E3 | Num | 8 | 6e3) Don't know |
| 33 | FUQ06E4 | Num | 8 | 6e4) Don't remember |
| 34 | FUQ06F | Char | 1 | 6f) Were you evaluated in an Emergency Department? |
| 35 | FUQ06F1 | Num | 8 | 6f1) An additional antibiotic |
| 36 | FUQ06F2 | Num | 8 | 6f2) Additional steroids |
| 37 | FUQ06F3 | Num | 8 | 6f3) Don't know |
| 38 | FUQ06F4 | Num | 8 | 6f4) Don't remember |
| 39 | FUQ06G | Char | 1 | 6g) Were you admitted to the hospital? |
| 40 | FUQ08 | Char | 1 | 8) (do not ask) Did the participant have a third episode? |
| 41 | FUQ09A | Char | 1 | 9a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 42 | FUQ09B | Char | 1 | 9b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 43 | FUQ09C | Char | 1 | 9c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 44 | FUQ09D | Char | 1 | 9d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 45 | FUQ09E | Char | 1 | 9e) Were you evaluated in a physician's office or urgent care? |
| 46 | FUQ09E1 | Num | 8 | 9e1) An additional antibiotic |
| 47 | FUQ09E2 | Num | 8 | 9e2) Additional steroids |
| 48 | FUQ09E3 | Num | 8 | 9e3) Don't know |
| 49 | FUQ09E4 | Num | 8 | 9e4) Don't remember |
| 50 | FUQ09F | Char | 1 | 9f) Were you evaluated in an Emergency Department? |
| 51 | FUQ09F1 | Num | 8 | 9f1) An additional antibiotic |
| 52 | FUQ09F2 | Num | 8 | 9f2) Additional steroids |
| 53 | FUQ09F3 | Num | 8 | 9f3) Don't know |
| 54 | FUQ09F4 | Num | 8 | 9f4) Don't remember |
| 55 | FUQ09G | Char | 1 | 9g) Were you admitted to the hospital? |
| 56 | FUQ11 | Char | 1 | 11) (do not ask) Did the participant have a fourth episode? |
| 57 | FUQ12A | Char | 1 | 12a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 58 | FUQ12B | Char | 1 | 12b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 59 | FUQ12C | Char | 1 | 12c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 60 | FUQ12D | Char | 1 | 12d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 61 | FUQ12E | Char | 1 | 12e) Were you evaluated in a physician's office or urgent care? |
| 62 | FUQ12E1 | Num | 8 | 12e1) An additional antibiotic |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 63 | FUQ12E2 | Num | 8 | 12e2) Additional steroids |
| 64 | FUQ12E3 | Num | 8 | 12e3) Don't know |
| 65 | FUQ12E4 | Num | 8 | 12e4) Don't remember |
| 66 | FUQ12F | Char | 1 | 12f) Were you evaluated in an Emergency Department? |
| 67 | FUQ12F1 | Num | 8 | 12f1) An additional antibiotic |
| 68 | FUQ12F2 | Num | 8 | 12f2) Additional steroids |
| 69 | FUQ12F3 | Num | 8 | 12f3) Don't know |
| 70 | FUQ12F4 | Num | 8 | 12f4) Don't remember |
| 71 | FUQ12G | Char | 1 | 12g) Were you admitted to the hospital? |
| 72 | FUQ14 | Char | 1 | 14) (do not ask) Did the participant have a fifth episode? |
| 73 | FUQ15A | Char | 1 | 15a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 74 | FUQ15B | Char | 1 | 15b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 75 | FUQ15C | Char | 1 | 15c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 76 | FUQ15D | Char | 1 | 15d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 77 | FUQ15E | Char | 1 | 15e) Were you evaluated in a physician's office or urgent care? |
| 78 | FUQ15E1 | Num | 8 | 15e1) An additional antibiotic |
| 79 | FUQ15E2 | Num | 8 | 15e2) Additional steroids |
| 80 | FUQ15E3 | Num | 8 | 15e3) Don't know |
| 81 | FUQ15E4 | Num | 8 | 15e4) Don't remember |
| 82 | FUQ15F | Char | 1 | 15f) Were you evaluated in an Emergency Department? |
| 83 | FUQ15F1 | Num | 8 | 15f1) An additional antibiotic |
| 84 | FUQ15F2 | Num | 8 | 15f2) Additional steroids |
| 85 | FUQ15F3 | Num | 8 | 15f3) Don't know |
| 86 | FUQ15F4 | Num | 8 | 15f4) Don't remember |
| 87 | FUQ15G | Char | 1 | $15 \mathrm{~g})$ Were you admitted to the hospital? |
| 88 | FUQ17 | Char | 1 | 17) (do not ask) Did the participant have a sixth episode? |
| 89 | FUQ18A | Char | 1 | 18a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 90 | FUQ18B | Char | 1 | 18b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 91 | FUQ18C | Char | 1 | 18c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 92 | FUQ18D | Char | 1 | 18d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 93 | FUQ18E | Char | 1 | 18e) Were you evaluated in a physician's office or urgent care? |
| 94 | FUQ18E1 | Num | 8 | 18e1) An additional antibiotic |
| 95 | FUQ18E2 | Num | 8 | 18e2) Additional steroids |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 96 | FUQ18E3 | Num | 8 | 18e3) Don't know |
| 97 | FUQ18E4 | Num | 8 | 18e4) Don't remember |
| 98 | FUQ18F | Char | 1 | 18f) Were you evaluated in an Emergency Department? |
| 99 | FUQ18F1 | Num | 8 | 18f1) An additional antibiotic |
| 100 | FUQ18F2 | Num | 8 | 18f2) Additional steroids |
| 101 | FUQ18F3 | Num | 8 | 18f3) Don't know |
| 102 | FUQ18F4 | Num | 8 | 18f4) Don't remember |
| 103 | FUQ18G | Char | 1 | 18 g ) Were you admitted to the hospital? |
| 104 | FUQ20 | Char | 1 | Since your last (center visit or telephone contact) on (date), have you at any time been admitted to a hospital (For COPD Participants: for any reason other than a chest flare up)? |
| 105 | FUQ20A | Num | 8 | 20a) How many hospitalizations have you had since (date)? |
| 106 | FUQ21E | Char | 1 | 21e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 107 | FUQ22E | Char | 1 | 22e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 108 | FUQ23E | Char | 1 | 23e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 109 | FUQ24E | Char | 1 | 24e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 110 | FUQ25E | Char | 1 | 25e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 111 | FUQ27 | Char | 1 | 27) Did your doctor put you on oxygen? |
| 112 | FUQ28 | Char | 1 | 28) Have you been listed for or received a lung transplant? |
| 113 | FUQ29 | Char | 1 | 29) Are you currently smoking cigarettes? |
| 114 | FUQ30 | Char | 1 | 30) Since your last (clinic visit or telephone contact) on (date), have you been diagnosed with other medical problems or been injured? |
| 115 | FUQ31A | Char | 1 | 31a) Lung cancer |
| 116 | FUQ31B | Char | 1 | 31b) Other type of cancer |
| 117 | FUQ31B1 | Char | 20 | If so, what type? |
| 118 | FUQ31C | Char | 1 | 31c) Diabetes |
| 119 | FUQ31D | Char | 1 | 31d) Blood Clots |
| 120 | FUQ31E | Char | 1 | 31e) Osteoporosis |
| 121 | FUQ31F | Char | 1 | 31f) Broken Hip |
| 122 | FUQ31G | Char | 1 | 31g) Heart attack or myocardial infarction |
| 123 | FUQ31H | Char | 1 | 31h) Stroke |
| 124 | FUQ31I | Char | 1 | 31i) Coronary artery disease (atherosclerosis) |
| 125 | FUQ01AY | Num | 8 | Year of 1a) What was the date of death? |
| 126 | FUQ04AY | Num | 8 | Year of 4a) What was the date of this event? |
| 127 | FUQ07AY | Num | 8 | Year of 7a) What was the date of this event? |
| 128 | FUQ0AY | Num | 8 | Year of Form Date |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 129 | FUQ10AY | Num | 8 | Year of 10a) What was the date of this event? |
| 130 | FUQ13AY | Num | 8 | Year of 13a) What was the date of this event? |
| 131 | FUQ21AY | Num | 8 | Year of 21a) What was the date of this event? |
| 132 | FUQ22AY | Num | 8 | Year of 22a) What was the date of this event? |
| 133 | FUQ23AY | Num | 8 | Year of 23a) What was the date of this event? |
| 134 | FUQ24AY | Num | 8 | Year of 24a) What was the date of this event? |
| 135 | FUQ25AY | Num | 8 | Year of 25a) What was the date of this event? |
| 136 | FUQ26AY | Num | 8 | Year of 26a) What was the date of this event? |
| 137 | VERSION | Char | 21 |  |
| 138 | BMI_AUX_CM01 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) at baseline |
| 139 | HT_CM01 | Num | 8 | Height (cm) (ANT02) at baseline |
| 140 | WT_KG01 | Num | 8 | Weight (kg) (ANT03) at baseline |
| 141 | BMI_AUX_CM02 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year1) |
| 142 | HT_CM02 | Num | 8 | Height (cm) (ANT02) (for visit=Year1) |
| 143 | WT_KG02 | Num | 8 | Weight (kg) (ANT03) (for visit=Year1) |
| 144 | BMI_AUX_CM03 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year2) |
| 145 | HT_CM03 | Num | 8 | Height (cm) (ANT02) (for visit=Year2) |
| 146 | WT_KG03 | Num | 8 | Weight (kg) (ANT03) (for visit=Year2) |
| 147 | BMI_AUX_CM04 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year3) |
| 148 | HT_CM04 | Num | 8 | Height (cm) (ANT02) (for visit=Year3) |
| 149 | WT_KG04 | Num | 8 | Weight (kg) (ANT03) (for visit=Year3) |
| 150 | BMI_AUX_IN01 | Num | 8 | BMI (computed by SC from imperial units) (from IEC05a,b at BASELINE) |
| 151 | GENDER | Num | 8 | Gender (1=Male,2=Female) (IEC04) |
| 152 | HT_IN01 | Num | 8 | Height (in) (IEC05a) |
| 153 | AGE01 | Num | 8 | Age at Baseline (years) (DEM01a) |
| 154 | ETHNICITY | Num | 8 | Ethnicity (1=Hispanic, $0=$ Non-hispanic) (DEM05 or DEM05a) |
| 155 | RACE | Num | 8 | Race <br> (1=White,2=Black,3=Asian,4=Amer.Ind./Pacif.Isl.,6=Mixed,7=Mis sing)(from DEM06a-e) |
| 156 | AGE_DERV_01 | Num | 8 | Age in years at baseline based on date of birth and date of enrollment |
| 157 | AGE_DERV_02 | Num | 8 | Age in years at year 1 visit based on date of birth and date of visit |
| 158 | AGE_DERV_03 | Num | 8 | Age in years at year 2 visit based on date of birth and date of visit |
| 159 | AGE_DERV_04 | Num | 8 | Age in years at year 3 visit based on date of birth and date of visit |
| 160 | AGECAT_BY05 | Num | 8 | Age at Baseline in 5 year groupings $(1=40-<45,2=45-<50$, $3=50-<55,4=55-<60,5=60-<65,6=65-<70,7=70-<75,8=75,<80)$ |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 161 | AGECAT_BY10 | Num | 8 | Age at Baseline in 10 year groupings $(1=40-<50,2=50-<60$, $3=60-<70,4=70-<80$ ) |
| 162 | AGE02 | Num | 8 | Age at Year 1 (years) |
| 163 | AGE03 | Num | 8 | Age at Year 2 (years) |
| 164 | AGE04 | Num | 8 | Age at Year 3 (years) |
| 165 | PRED_FEV1_V1 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at baseline |
| 166 | PRED_FEV1_V2 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 167 | PRED_FEV1_V3 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 168 | PRED_FEV1_V4 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 169 | PRED_FVC_V1 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at baseline |
| 170 | PRED_FVC_V2 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 171 | PRED_FVC_V3 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 172 | PRED_FVC_V4 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 173 | PRED_FEF2575_V1 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at baseline |
| 174 | PRED_FEF2575_V2 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 1 |
| 175 | PRED_FEF2575_V3 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 2 |
| 176 | PRED_FEF2575_V4 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 3 |
| 177 | PRED_PEFR_V1 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at baseline |
| 178 | PRED_PEFR_V2 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 1 |
| 179 | PRED_PEFR_V3 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 2 |
| 180 | PRED_PEFR_V4 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 3 |
| 181 | PRED_FEV1FVC_V1 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at baseline |
| 182 | PRED_FEV1FVC_V2 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 183 | PRED_FEV1FVC_V3 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 184 | PRED_FEV1FVC_V4 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 3 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 185 | PCT_PRE_FEV1_V1 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V1)) at baseline |
| 186 | PCT_PRE_FEV1_V2 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V2)) at year 1 |
| 187 | PCT_PRE_FEV1_V3 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V3)) at year 2 |
| 188 | PCT_PRE_FEV1_V4 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V4)) at year 3 |
| 189 | PCT_PRE_FVC_V1 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted FVC (100*(sfv40_Derv/pred_FVC_V1)) at baseline |
| 190 | PCT_PRE_FVC_V2 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted FVC (100*(sfv40_Derv/pred_FVC_V2)) at year 1 |
| 191 | PCT_PRE_FVC_V3 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted FVC (100*(sfv40_Derv/pred_FVC_V3)) at year 2 |
| 192 | PCT_PRE_FVC_V4 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted FVC (100*(sfv40_Derv/pred_FVC_V4)) at year 3 |
| 193 | PCT_PRE_FEV1FVC_V1 | Num | 8 | Percentage of observed prebronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*pre_FEV1FVC_DERV/pred_FEV1FVC_V1)) at baseline |
| 194 | PCT_PRE_FEV1FVC_V2 | Num | 8 | Percentage of observed prebronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*pre_FEV1FVC_DERV/pred_FEV1FVC_V2)) at year 1 |
| 195 | PCT_PRE_FEV1FVC_V3 | Num | 8 | Percentage of observed prebronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*pre_FEV1FVC_DERV/pred_FEV1FVC_V3)) at year 2 |
| 196 | PCT_PRE_FEV1FVC_V4 | Num | 8 | Percentage of observed prebronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*pre_FEV1FVC_DERV/pred_FEV1FVC_V4)) at year 3 |
| 197 | PCT_PRE_PEFR_V1 | Num | 8 | Percentage of observed prebronchodilator PEFR out of predicted PEFR (100*(sfv62_Derv/pred_PEFR_V1)) at baseline |
| 198 | PCT_PRE_PEFR_V2 | Num | 8 | Percentage of observed prebronchodilator PEFR out of predicted PEFR (100*(sfv62_Derv/pred_PEFR_V2)) at year 1 |
| 199 | PCT_PRE_PEFR_V3 | Num | 8 | Percentage of observed prebronchodilator PEFR out of predicted PEFR (100*(sfv62_Derv/pred_PEFR_V3)) at year 2 |
| 200 | PCT_PRE_PEFR_V4 | Num | 8 | Percentage of observed prebronchodilator PEFR out of predicted PEFR (100*(sfv62_Derv/pred_PEFR_V4)) at year 3 |
| 201 | PCT_PRE_SVC_V1 | Num | 8 | Percentage of observed prebronchodilator SVC out of predicted FVC (100*(ssv33_Derv/pred_FVC_V1)) at baseline |
| 202 | PCT_PRE_SVC_V2 | Num | 8 | Percentage of observed prebronchodilator SVC out of predicted FVC (100*(ssv33_Derv/pred_FVC_V2)) at year 1 |
| 203 | PCT_PRE_SVC_V3 | Num | 8 | Percentage of observed prebronchodilator SVC out of predicted FVC (100*(ssv33_Derv/pred_FVC_V3)) at year 2 |
| 204 | PCT_PRE_SVC_V4 | Num | 8 | Percentage of observed prebronchodilator SVC out of predicted FVC (100*(ssv33_Derv/pred_FVC_V4)) at year 3 |
| 205 | PCT_PRE_FEF2575_V1 | Num | 8 | Percentage of observed prebronchodilator FEF2575 out of predicted FEF2575 (100*(sfv53_Derv/pred_FEF2575_V1)) at baseline |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 206 | PCT_PRE_FEF2575_V2 | Num | 8 | Percentage of observed prebronchodilator FEF2575 out of predicted FEF2575 (100*(sfv53_Derv/pred_FEF2575_V2)) at year 1 |
| 207 | PCT_PRE_FEF2575_V3 | Num | 8 | Percentage of observed prebronchodilator FEF2575 out of predicted FEF2575 (100*(sfv53_Derv/pred_FEF2575_V3)) at year 2 |
| 208 | PCT_PRE_FEF2575_V4 | Num | 8 | Percentage of observed prebronchodilator FEF2575 out of predicted FEF2575 (100*(sfv53_Derv/pred_FEF2575_V4)) at year 3 |
| 209 | PCT_POST_FEV1_V1 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V1)) at baseline |
| 210 | PCT_POST_FEV1_V2 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V2)) at year 1 |
| 211 | PCT_POST_FEV1_V3 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V3)) at year 2 |
| 212 | PCT_POST_FEV1_V4 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V4)) at year 3 |
| 213 | PCT_POST_FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V1)) at baseline |
| 214 | PCT_POST_FVC_V2 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V2)) at year 1 |
| 215 | PCT_POST_FVC_V3 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V3)) at year 2 |
| 216 | PCT_POST_FVC_V4 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V4)) at year 3 |
| 217 | PCT_POST_FEV1FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V1)) at baseline |
| 218 | PCT_POST_FEV1FVC_V2 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V2)) at year 1 |
| 219 | PCT_POST_FEV1FVC_V3 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V3)) at year 2 |
| 220 | PCT_POST_FEV1FVC_V4 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V4)) at year 3 |
| 221 | PCT_POST_PEFR_V1 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V1)) at baseline |
| 222 | PCT_POST_PEFR_V2 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V2)) at year 1 |
| 223 | PCT_POST_PEFR_V3 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V3)) at year 2 |
| 224 | PCT_POST_PEFR_V4 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V4)) at year 3 |
| 225 | PCT_POST_SVC_V1 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V1)) at baseline |
| 226 | PCT_POST_SVC_V2 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V2)) at year 1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 227 | PCT_POST_SVC_V3 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V3)) at year 2 |
| 228 | PCT_POST_SVC_V4 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V4)) at year 3 |
| 229 | PCT_POST_FEF2575_V1 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V1)) at baseline |
| 230 | PCT_POST_FEF2575_V2 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V2)) at year 1 |
| 231 | PCT_POST_FEF2575_V3 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V3)) at year 2 |
| 232 | PCT_POST_FEF2575_V4 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V4)) at year 3 |
| 233 | LLN_FEV1_FVC_V1 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, race/ethnicity, age, and height) at baseline |
| 234 | LLN_FEV1_FVC_V2 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 235 | LLN_FEV1_FVC_V3 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 236 | LLN_FEV1_FVC_V4 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 237 | LLN_FEV1_V1 | Num | 8 | LLN for FEV1 (computed based on gender, race/ethnicity, age, and height) at baseline |
| 238 | LLN_FEV1_V2 | Num | 8 | LLN for FEV1 (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 239 | LLN_FEV1_V3 | Num | 8 | LLN for FEV1 (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 240 | LLN_FEV1_V4 | Num | 8 | LLN for FEV1 (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 241 | LLN_FVC_V1 | Num | 8 | LLN for FVC (computed based on gender, race/ethnicity, age, and height) at baseline |
| 242 | LLN_FVC_V2 | Num | 8 | LLN for FVC (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 243 | LLN_FVC_V3 | Num | 8 | LLN for FVC (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 244 | LLN_FVC_V4 | Num | 8 | LLN for FVC (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 245 | LLN_FEF2575_V1 | Num | 8 | LLN for FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at baseline |
| 246 | LLN_FEF2575_V2 | Num | 8 | LLN for FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 1 |
| 247 | LLN_FEF2575_V3 | Num | 8 | LLN for FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 2 |
| 248 | LLN_FEF2575_V4 | Num | 8 | LLN for FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 3 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 249 | PRED_FEV1 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) |
| 250 | GOLD_STAGE_COPD_SEVERITY | Num | 8 | GOLD Stage of COPD Severity at baseline |
| 251 | STRATUM | Num | 8 |  |
| 252 | WITHDRAWN | Num | 8 | Withdrawn ( $1=$ Yes, $0=$ No) (from RSW01 and RSW02) |
| 253 | SIX_MINUTE_WALK_DISTANCE01 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at BASELINE) |
| 254 | BODE_INDEX01 | Num | 8 | BODE Index at BASELINE |
| 255 | SIX_MINUTE_WALK_DISTANCE02 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at YEAR1) |
| 256 | BODE_INDEX02 | Num | 8 | BODE Index at YEAR1 |
| 257 | SIX_MINUTE_WALK_DISTANCE03 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at YEAR2) |
| 258 | BODE_INDEX03 | Num | 8 | BODE Index at YEAR2 |
| 259 | SIX_MINUTE_WALK_DISTANCE04 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at YEAR3) |
| 260 | BODE_INDEX04 | Num | 8 | BODE Index at YEAR3 |
| 261 | BRONCH_ELIGIBLE | Num | 8 | Eligible for bronchoscopy substudy (1=Yes, $0=\mathrm{No}$ ) |
| 262 | BRONCH_AGE01 | Num | 8 | Age when screened for bronchoscopy substudy (BIE3) |
| 263 | PEX_TOT0101 | Num | 8 | Total Exacerbations for baseline |
| 264 | PEX_HCUTOT0101 | Num | 8 | Exacerbations requiring HCU for baseline |
| 265 | PEX_ANTITOT0101 | Num | 8 | Exacerbations treated with antibiotics for baseline |
| 266 | PEX_STEROIDTOT0101 | Num | 8 | Exacerbations treated with steroids for baseline |
| 267 | PEX_DRUGTOT0101 | Num | 8 | Exacerbations treated with medications for baseline |
| 268 | PEX_SEVERETOT0101 | Num | 8 | Exacerbations requiring ED visit or hospitalization for baseline |
| 269 | COPDSCORE0101 | Num | 8 | COPD Assessment Test Score at visit 1 |
| 270 | COPDSCORE0102 | Num | 8 | COPD Assessment Test Score at visit 2 |
| 271 | COPDSCORE0103 | Num | 8 | COPD Assessment Test Score at visit 3 |
| 272 | COPDSCORE0104 | Num | 8 | COPD Assessment Test Score at visit 4 |
| 273 | GOLD_MMRC0101 | Char | 1 | Baseline GOLD status using the revised criteria and mMRC at baseline |
| 274 | GOLD_CAT0101 | Char | 1 | Baseline GOLD status using the revised criteria and CAT at baseline |
| 275 | CB_VISIT1 | Num | 8 | Chronic Bronchitis identified at baseline |
| 276 | ASTHMA_BASELINE | Num | 8 | Baseline Asthma |
| 277 | ASTHMA_EVER_REPORTED | Num | 8 | Ever Reported Asthma |
| 278 | EMPHYSEMA_VISIT1 | Num | 8 | Possible emphysema at visit 1 |
| 279 | PEX_TOT0102 | Num | 8 | Total Exacerbations at year 1 |
| 280 | PEX_SEVERETOT0102 | Num | 8 | Total severe exacerbations at year 1 |
| 281 | PEX_ANTITOT0102 | Num | 8 | Total exacerbations treated with antibiotics at year 1 |
| 282 | PEX_STEROIDTOT0102 | Num | 8 | Total exacerbations treated with steroids at year 1 |
| 283 | PEX_DRUGTOT0102 | Num | 8 | Total exacerbations treated with medications at year 1 |
| 284 | PEX_HCUTOT0102 | Num | 8 | Total exacerbations requiring HCU at year 1 |
| 285 | PEX_TOT0103 | Num | 8 | Total Exacerbations at Year 2 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 286 | PEX_SEVERETOT0103 | Num | 8 | Total severe exacerbations at Year 2 |
| 287 | PEX_ANTITOT0103 | Num | 8 | Total exacerbations treated with antibiotics at Year 2 |
| 288 | PEX_STEROIDTOT0103 | Num | 8 | Total exacerbations treated with steroids at Year 2 |
| 289 | PEX_DRUGTOT0103 | Num | 8 | Total exacerbations treated with medications at Year 2 |
| 290 | PEX_HCUTOT0103 | Num | 8 | Total exacerbations requiring HCU at Year 2 |
| 291 | PEX_TOT0104 | Num | 8 | Total Exacerbations at Year 3 |
| 292 | PEX_SEVERETOT0104 | Num | 8 | Total severe exacerbations at Year 3 |
| 293 | PEX_ANTITOT0104 | Num | 8 | Total exacerbations treated with antibiotics at Year 3 |
| 294 | PEX_STEROIDTOT0104 | Num | 8 | Total exacerbations treated with steroids at Year 3 |
| 295 | PEX_DRUGTOT0104 | Num | 8 | Total exacerbations treated with medications at Year 3 |
| 296 | PEX_HCUTOT0104 | Num | 8 | Total exacerbations requiring HCU at Year 3 |
| 297 | PEX_TOT | Num | 8 | Total count of exacerbations since entering the study |
| 298 | PEX_SEVERE | Num | 8 | Total count of exacerbations requiring ED visit or hospitalization since entering the study |
| 299 | PEX_ANTI | Num | 8 | total count of exacerbations treated with antibiotics since entering the study |
| 300 | PEX_STEROID | Num | 8 | total count of exacerbations treated with steroids since entering the study |
| 301 | PEX_DRUG | Num | 8 | total count of exacerbations treated with medications since entering the study |
| 302 | PEX_HCU | Num | 8 | total count of exacerbations requiring HCU since entering the study |
| 303 | DEATH | Num | 8 | indicator of deceased subject |
| 304 | DAYINSTUDY_DEATH | Num | 8 | Days in study till deceased |
| 305 | CURRENT_SMOKER_BRONCH | Num | 8 |  |
| 306 | FOLLOWUP_DAYS | Num | 8 | Length of follow-up instudy including only main study contacts |
| 307 | EYES_ENT_CONDITION01 | Num | 8 | History of Eyes, Ear, Nose, or Throat condition at baseline |
| 308 | CARDIOVASCULAR_CONDITION01 | Num | 8 | History of Cardiovascular condition at baseline |
| 309 | GI_CONDITION01 | Num | 8 | History of Gastrointestinal condition at baseline |
| 310 | PULMONARY_VASCULAR_CONDITION01 | Num | 8 | History of Pulmonary/vascular condition at baseline |
| 311 | ONCOLOGY_HEMA_CONDITION01 | Num | 8 | History of Oncology/hematology condition at baseline |
| 312 | GENITOURINARY_CONDITION01 | Num | 8 | History of Genitourinary and Reproductive condition at baseline |
| 313 | ENDOCRINE_CONDITION01 | Num | 8 | History of Endocrine condition at baseline |
| 314 | MUSCULAR_SKELETAL_CONDITION01 | Num | 8 | History of Muscular/skeletal condition at baseline |
| 315 | DERMATOLOGY_CONDITION01 | Num | 8 | History of Dermatology condition at baseline |
| 316 | INFECTIOUS_DISEASE_CONDITION01 | Num | 8 | History of Infectious disease condition at baseline |
| 317 | PSYCHIATRIC_CONDITION01 | Num | 8 | History of Psychiatric condition at baseline |
| 318 | CB_FATHER01 | Num | 8 | Father has a reported history of chronic bronchitis at baseline (1=Yes, 2=No, Unknowns treated as missing) |
| 319 | CB_MOTHER01 | Num | 8 | Mother has a reported history of chronic bronchitis |
| 320 | EMPHYSEMA_FATHER01 | Num | 8 | Father has a reported history of Emphysema |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 321 | EMPHYSEMA_MOTHER01 | Num | 8 | Mother has a reported history of Emphysema |
| 322 | COPD_FATHER01 | Num | 8 | Father has a reported history of COPD |
| 323 | COPD_MOTHER01 | Num | 8 | Mother has a reported history of COPD |
| 324 | ASTHMA_FATHER01 | Num | 8 | Father has a reported history of Asthma |
| 325 | ASTHMA_MOTHER01 | Num | 8 | Mother has a reported history of Asthma |
| 326 | LUNGCA_FATHER01 | Num | 8 | Father has a reported history of Lung Cancer |
| 327 | LUNGCA_MOTHER01 | Num | 8 | Mother has a reported history of Lung Cancer |
| 328 | CB_DIAGNOSED01 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at baseline (Yes=1, No=0, Unknowns treated as missing) |
| 329 | EMPHYSEMA_DIAGNOSED01 | Num | 8 | Emphysema diagnosed by a health professional reported at baseline |
| 330 | COPD_DIAGNOSED01 | Num | 8 | COPD diagnosed by a health professional reported at baseline |
| 331 | APNEA_DIAGNOSED01 | Num | 8 | Sleep apnea diagnosed by a health professional reported at baseline |
| 332 | MCQ_TOT01 | Num | 8 | Total MCQ score at baseline |
| 333 | VSASCORE01 | Num | 8 | Baseline veteran specific activity score |
| 334 | FEV1_BDRESPONSE_HANKINSON01 | Num | 8 | FEV1 Bronchodilator response, percent Hankinson 1999 |
| 335 | FEV1_BDRESPONSE_PELLERGINO01 | Num | 8 | FEV1 Bronchodilator response, volume (L) Pellergino 2005 (1=True, 0=False) |
| 336 | SMOKER_ECO_RECENT01 | Num | 8 | recent smoking identified on eCO measurement at baseline |
| 337 | COPD_FOUNDATION_RANKING01 | Char | 3 | COPD Foundation disease ranking |
| 338 | SMW_DSAT01 | Num | 8 | Oxygen desaturation with the six minute walk |
| 339 | SMW_HYPOX01 | Num | 8 | Hypoxemia with six minute walk |
| 340 | FAST_SCORE01 | Num | 8 | FAST Alcohol Screening Score (derived from BMH25-28) (NOTE: Did not differentiate between males and females, Used $>8$ drinks for first screening question) |
| 341 | PREFEV1_LT_LLN01 | Num | 8 | pre-bronchodilator FEV1 less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 342 | PREFVC_LT_LLN01 | Num | 8 | pre-bronchodilator FVC less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 343 | PREFEV1FVC_LT_LLN01 | Num | 8 | pre-bronchodilator FEV1/FVC less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 344 | FVC_BDRESPONSE_PCT01 | Num | 8 | FVC Bronchodilator response, percent baseline at Baseline |
| 345 | FVC_BDRESPONSE_VOL01 | Num | 8 | FVC Bronchodilator response, volume (ml) at Baseline |
| 346 | FVC_BDRESPONSE_HANKINSON01 | Num | 8 | FVC Bronchodilator response, percent Hankinson 1999 at Baseline |
| 347 | FVC_BDRESPONSE_PELLERGINO01 | Num | 8 | FVC Bronchodilator response, volume (L) Pellergino 2005 at Baseline (1=True, 0=False) |
| 348 | POSTFEV1_LT_LLN01 | Num | 8 | post-bronchodilator FEV1 less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 349 | POSTFVC_LT_LLN01 | Num | 8 | post-bronchodilator FVC less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 350 | POSTFEV1FVC_LT_LLN01 | Num | 8 | post-bronchodilator FEV1/FVC less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 351 | POSTFEV1FVC_LT_70_01 | Num | 8 | post_bronchodilator FEV1/FVC ratio less than 0.7 at Baseline (1=True, 0=False) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 352 | PREFEF2575_LT_LLN01 | Num | 8 | pre-bronchodilator FEF25-75\% less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, 0=False) |
| 353 | POSTFEF2575_LT_LLN01 | Num | 8 | post-bronchodilator FEF25-75\% less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 354 | CURRENT_SMOKER_V1 | Num | 8 | current smoking status at baseline |
| 355 | CURRENT_SMOKER_V2 | Num | 8 | current smoking status at Year 1 |
| 356 | CURRENT_SMOKER_V3 | Num | 8 | current smoking status at Year 2 |
| 357 | CURRENT_SMOKER_V4 | Num | 8 | current smoking status at Year 3 |
| 358 | BRONCH_DIAGNOSED01 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at baseline (Yes=1; No=0; Unknowns treated as missing) |
| 359 | MENOPAUSE01 | Char | 8 | Participant has reached menopause |
| 360 | SPUTUM_COLLECTED01 | Num | 8 | Sputum sample collected at baseline |
| 361 | SPUTUM_METHOD01 | Num | 8 | Method of specimen processing used for sputum collection at baseline |
| 362 | CBC_NEUTROPHIL_CNT01 | Num | 8 | CBC Neutrophil CNT at baseline |
| 363 | CBC_NEUTROPHIL_PCT01 | Num | 8 | CBC Neutrophil PCT at baseline |
| 364 | CBC_LYMPHOCYTE_CNT01 | Num | 8 | CBC lymphocyte CNT at baseline |
| 365 | CBC_LYMPHOCYTE_PCT01 | Num | 8 | CBC lymphocyte PCT at baseline |
| 366 | CBC_MONOCYTE_CNT01 | Num | 8 | CBC monocyte CNT at baseline |
| 367 | CBC_MONOCYTE_PCT01 | Num | 8 | CBC monocyte PCT at baseline |
| 368 | CBC_EOSINOPHIL_CNT01 | Num | 8 | CBC eosinophil CNT at baseline |
| 369 | CBC_EOSINOPHIL_PCT01 | Num | 8 | CBC eosinophil PCT at baseline |
| 370 | CBC_BASOPHIL_CNT01 | Num | 8 | CBC basophil CNT at baseline |
| 371 | CBC_BASOPHIL_PCT01 | Num | 8 | CBC basophil PCT at baseline |
| 372 | VGDF_EVER01 | Num | 8 | Ever exposed to vapors, gas, dust, or fumes at baseline |
| 373 | VGDF_YEARS01 | Num | 8 | Years exposed to vapors, gas, dust or fumes at baselined |
| 374 | LONGESTJOBDURATION01 | Num | 8 | Duration in years of longest job ever worked at baseline |
| 375 | VGDF_LONGESTJOB01 | Num | 8 | Exposed to vapors, gas, dust, or fumes during longest job |
| 376 | SMOKING_PACK_YEARS01 | Num | 8 | Smoking pack-years at Baseline |
| 377 | SMOKING_PACK_YEARS02 | Num | 8 | Smoking pack-years at Year 1 |
| 378 | SMOKING_PACK_YEARS03 | Num | 8 | Smoking pack-years at Year 2 |
| 379 | SMOKING_PACK_YEARS04 | Num | 8 | Smoking pack-years at Year 3 |
| 380 | PEX_TOT_365 | Num | 8 | total count of exacerbations in 365 days since entering the study |
| 381 | PEX_SEVERE_365 | Num | 8 | total count of exacerbations requiring ED visit or hospitalization in 365 days since entering the study |
| 382 | PEX_ANTI_365 | Num | 8 | total count of exacerbations treated with antibiotics in 365 days since entering the study |
| 383 | PEX_STEROID_365 | Num | 8 | total count of exacerbations treated with steroids in 365 days since entering the study |
| 384 | PEX_DRUG_365 | Num | 8 | total count of exacerbations treated with medications in 365 days since entering the study |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 385 | PEX_HCU_365 | Num | 8 | total count of exacerbations requiring HCU in 365 days since entering the study |
| 386 | FOLLOWUP_DEATH_DAYS | Num | 8 | Days in study. If deceased, then it is the days in study until death |
| 387 | V1_LAC_R_APEX_BASE_SLP_910DIF | Num | 8 | lac_r_apex_base_slp_910dif |
| 388 | V1_LAC_R_APEX_BASE_SLP_950DIF | Num | 8 | lac_r_apex_base_slp_950dif |
| 389 | V1_LAC_L_APEX_BASE_SLP_910DIF | Num | 8 | lac_l_apex_base_slp_910dif |
| 390 | V1_LAC_L_APEX_BASE_SLP_950DIF | Num | 8 | lac_l_apex_base_slp_950dif |
| 391 | V2_LAC_R_APEX_BASE_SLP_910DIF | Num | 8 | lac_r_apex_base_slp_910dif |
| 392 | V2_LAC_R_APEX_BASE_SLP_950DIF | Num | 8 | lac_r_apex_base_slp_950dif |
| 393 | V2_LAC_L_APEX_BASE_SLP_910DIF | Num | 8 | lac_l_apex_base_slp_910dif |
| 394 | V2_LAC_L_APEX_BASE_SLP_950DIF | Num | 8 | lac_l_apex_base_slp_950dif |
| 395 | V1_R_APEX_BASE_PCTBE910_RATIO | Num | 8 | r_apex_base_pctbe910_ratio |
| 396 | V1_R_APEX_BASE_PCTBE950_RATIO | Num | 8 | r_apex_base_pctbe950_ratio |
| 397 | V1_L_APEX_BASE_PCTBE910_RATIO | Num | 8 | l_apex_base_pctbe910_ratio |
| 398 | V1_L_APEX_BASE_PCTBE950_RATIO | Num | 8 | l_apex_base_pctbe950_ratio |
| 399 | V2_R_APEX_BASE_PCTBE910_RATIO | Num | 8 | r_apex_base_pctbe910_ratio |
| 400 | V2_R_APEX_BASE_PCTBE950_RATIO | Num | 8 | r_apex_base_pctbe950_ratio |
| 401 | V2_L_APEX_BASE_PCTBE910_RATIO | Num | 8 | l_apex_base_pctbe910_ratio |
| 402 | V2_L_APEX_BASE_PCTBE950_RATIO | Num | 8 | l_apex_base_pctbe950_ratio |
| 403 | V1_RB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB1+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 404 | V1_RB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB10+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 405 | V1_LB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB1 +1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 406 | V1_LB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB10 +1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 407 | V2_RB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB1 +1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 408 | V2_RB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB10+1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 409 | V2_LB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB1 +1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 410 | V2_LB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB10+1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 411 | V1_PI10_PATH_LEQ20_THICKEST | Num | 8 | Pi10_path_leq20_thickest |
| 412 | V1_PI10_PATH_LEQ20_AVG | Num | 8 | Pi10_path_leq20_avg |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 413 | V2_PI10_PATH_LEQ20_THICKEST | Num | 8 | Pi10_path_leq20_thickest |
| 414 | V2_PI10_PATH_LEQ20_AVG | Num | 8 | Pi10_path_leq20_avg |
| 415 | BASELINE_ASTHMA_CHILD | Num | 8 | History of childhood asthma diagnosed by a physician reported at baseline |
| 416 | BASELINE_ASTHMA_DX | Num | 8 | History of asthma diagnosed by a physician reported at baseline |
| 417 | EMPH950_HIGH01 | Num | 8 | Emphysema > ULN (defined by reference equation) at baseline |
| 418 | LOG950_VIDA01 | Num | 8 | Log transformed uncorrected percent emphysema 950(VIDA) at baseline |
| 419 | EMPH_ULN01 | Num | 8 | Upper limit of normal (defined by reference equation) at baseline |
| 420 | TOTALVOL_ULN_V1 | Num | 8 | Upper limit of normal for total lung volume based on race, age, gender, height, and BMI at baseline |
| 421 | TOTALVOLUME_YES_V1 | Num | 8 | indicator of total volume based total volum (BOTH_TOT_V) and totalvol_ULN at baseline |
| 422 | EMPH950_HIGH02 | Num | 8 | Emphysema > ULN (defined by reference equation) at year1 |
| 423 | LOG950_VIDA02 | Num | 8 | Log transformed uncorrected percent emphysema 950(VIDA) at year1 |
| 424 | EMPH_ULN02 | Num | 8 | Upper limit of normal (defined by reference equation) at year1 |
| 425 | TOTALVOL_ULN_V2 | Num | 8 | Upper limit of normal for total lung volume based on race, age, gender, height, and BMI at year1 |
| 426 | TOTALVOLUME_YES_V2 | Num | 8 | indicator of total volume based total volum (BOTH_TOT_V) and totalvol_ULN at year1 |
| 427 | DAYS_ENROLL_1STPEXREPORTDATE | Num | 8 | Number of days from the date of enrollment to form date the first any exacerbation - corrected 7/27/2018 |
| 428 | DAYS_ENROLL_1STHOSPEX | Num | 8 | Number of days from the date of enrollment to the first exacerbation requiring hospitalization(. N for no hospitalized episode reported, .M hospitalized episode reported but date is missing ) - corrected 7/27/2018 |
| 429 | PEX_HOS_IND | Num | 8 | Total count of independent exacerbations requiring hospitalization since entering the study |
| 430 | PEX_HOS_LINKED | Num | 8 | Total count of linked exacerbations requiring hospitalization since entering the study |
| 431 | PEX_HOS_TOT | Num | 8 | Sum of PEX_HOS_IND and PEX_HOS_LINKED |
| 432 | SXSMKR2_FVC_CORE3_V1 | Num | 8 | Non-smokers and smokers w/ or w/o symptoms using GIC PFT vars; $1=$ stratum $1 ; 2,3=$ smokers,FEV1/FVC>=.7, FVC>LLN, \& with CAT $<10$ for $2 \&$ CAT $>=10$ for $3 ; 4,5=$ smokers, GOLD $1 / 2$, \& with CAT<10 for $4 \&$ CAT $>=10$ for 5 |
| 433 | SXSMKR2_FVC_CORE3_V2 | Num | 8 | Non-smokers and smokers w/ or w/o symptoms using GIC PFT vars; $1=$ stratum $1 ; 2,3=$ smokers,FEV1/FVC>=.7, FVC $>L L N, \&$ with CAT $<10$ for $2 \&$ CAT $>=10$ for $3 ; 4,5=$ smokers, GOLD $1 / 2$, \& with CAT $<10$ for $4 \&$ CAT $>=10$ for 5 |
| 434 | SXSMKR2_FVC_CORE3_V3 | Num | 8 | Non-smokers and smokers w/ or w/o symptoms using GIC PFT vars; $1=$ stratum $1 ; 2,3=$ smokers,FEV1/FVC>=.7, FVC>LLN, \& with CAT $<10$ for $2 \&$ CAT $>=10$ for $3 ; 4,5=$ smokers, GOLD $1 / 2$, \& with $\mathrm{CAT}<10$ for $4 \& \mathrm{CAT}>=10$ for 5 |


| Num | Variable | Type | Len | Label |
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| 435 | SXSMKR2_FVC_CORE3_V4 | Num | 8 | Non-smokers and smokers w/ or w/o symptoms using GIC PFT vars; $1=$ stratum $1 ; 2,3=$ smokers,FEV1/FVC>=.7, FVC>LLN, \& with CAT<10 for $2 \&$ CAT $>=10$ for $3 ; 4,5=$ smokers, GOLD 1/2, \& with CAT $<10$ for $4 \&$ CAT $>=10$ for 5 |
| 436 | CB_SGRQ01 | Num | 8 | Chronic Bronchitis defined by questions 1 and 2 on the SGRQ at Baseline |
| 437 | CB_SGRQ02 | Num | 8 | Chronic Bronchitis defined by questions 1 and 2 on the SGRQ at Year 1 |
| 438 | CB_SGRQ03 | Num | 8 | Chronic Bronchitis defined by questions 1 and 2 on the SGRQ at Year 2 |
| 439 | CB_SGRQ04 | Num | 8 | Chronic Bronchitis defined by questions 1 and 2 on the SGRQ at Year 3 |
| 440 | PEX_HCUDRUG0101 | Num | 8 | History of HCU exacerbation treated with antibiotics or steroids at baseline |
| 441 | PEX_HCUDRUG | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids since entering the study |
| 442 | PEX_HCUDRUG_365 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids in the 365 days since entering the study (a,b,e1,e2, f1,f2) |
| 443 | PEX_HCUDRUG_730 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 366 and 730 days since entering the study (a,b,e1,e2, f1,f2) |
| 444 | PEX_HCUDRUG_1095 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 731 and 1095 days since entering the study (a,b,e1,e2, f1,f2) |
| 445 | PEX_HCUDRUG_1460 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 1096 and 1460 days since entering the study (a,b,e1,e2, f1,f2) |
| 446 | PEX_HCUDRUG_1825 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 1461 and 1825 days since entering the study (a,b,e1,e2, f1,f2) |
| 447 | PEX_HCUDRUG_CAT_365 | Num | 8 | Category of none, 1 , or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 365 days |
| 448 | PEX_HCUDRUG_CAT_730 | Num | 8 | Category of none, 1 , or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 730 days |
| 449 | PEX_HCUDRUG_CAT_1095 | Num | 8 | Category of none, 1 , or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 1095 days |
| 450 | APNEA_DIAGNOSED02 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 2 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 451 | BRONCH_DIAGNOSED02 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 452 | CB_DIAGNOSED02 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 2 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 453 | COPD_DIAGNOSED02 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 454 | EMPHYSEMA_DIAGNOSED02 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 2 (1=Yes, $0=$ No, $2=$ Unknown) |
| 455 | CB_VISIT02 | Num | 8 | Chronic bronchitis identified at Visit 2 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |


| Num | Variable | Type | Len | Label |
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| 456 | APNEA_DIAGNOSED03 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 3 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 457 | BRONCH_DIAGNOSED03 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 458 | CB_DIAGNOSED03 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 459 | COPD_DIAGNOSED03 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 460 | EMPHYSEMA_DIAGNOSED03 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 461 | CB_VISIT03 | Num | 8 | Chronic bronchitis identified at Visit 3 ( $1=\mathrm{Yes}, \mathrm{0=No}, \mathrm{2=Unknown)}$ |
| 462 | APNEA_DIAGNOSED04 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 463 | BRONCH_DIAGNOSED04 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 4 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 464 | CB_DIAGNOSED04 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 4 (1=Yes, $0=$ No, $2=$ Unknown) |
| 465 | COPD_DIAGNOSED04 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 4 (1=Yes, $0=$ No, $2=$ Unknown) |
| 466 | EMPHYSEMA_DIAGNOSED04 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 467 | CB_VISIT04 | Num | 8 | Chronic bronchitis identified at Visit 4 ( $1=\mathrm{Yes}, \mathrm{0=No}, \mathrm{2=Unknown)}$ |
| 468 | CARDIOVASCULAR_CONDITION02 | Num | 8 | Cardiovascular condition reported at Visit 2 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 469 | DERMATOLOGY_CONDITION02 | Num | 8 | Dermatological condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 470 | ENDOCRINE_CONDITION02 | Num | 8 | Endocrine condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 471 | EYES_ENT_CONDITION02 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 2 (1=Yes, $0=$ No, 2=Unknown) |
| 472 | GENITOURINARY_CONDITION02 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 473 | GI_CONDITION02 | Num | 8 | Gastrointestinal condition at Visit 2 ( $1=\mathrm{Yes} 0=\mathrm{No},, 2=$ Unknown) |
| 474 | INFECTIOUS_DISEASE_CONDITION02 | Num | 8 | Infectious disease condition at Visit 2 ( $1=$ Yes, 0=No, 2=Unknown) |
| 475 | MUSCULAR_SKELETAL_CONDITION02 | Num | 8 | Muscular/skeletal condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 476 | ONCOLOGY_HEMA_CONDITION02 | Num | 8 | Oncology/hematology condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 477 | PSYCHIATRIC_CONDITION02 | Num | 8 | Psychiatric condition reported at Visit $2(1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 478 | PULMONARY_VASCULAR_CONDITION02 | Num | 8 | Pulmonary/vascular condition reported at Visit 2 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 479 | NEUROLOGIC_CONDITION02 | Num | 8 | History of neurologic condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 480 | CARDIOVASCULAR_CONDITION03 | Num | 8 | Cardiovascular condition reported at Visit 3 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |


| Num | Variable | Type | Len | Label |
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| 481 | DERMATOLOGY_CONDITION03 | Num | 8 | Dermatological condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 482 | ENDOCRINE_CONDITION03 | Num | 8 | Endocrine condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 483 | EYES_ENT_CONDITION03 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 3 (1=Yes, $0=$ No, 2=Unknown) |
| 484 | GENITOURINARY_CONDITION03 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 3 (1=Yes, $0=$ No, $2=$ Unknown) |
| 485 | GI_CONDITION03 | Num | 8 | Gastrointestinal condition at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 486 | INFECTIOUS_DISEASE_CONDITION03 | Num | 8 | Infectious disease condition at Visit 3 ( $1=\mathrm{Yes}, 0=\mathrm{No}, 2=$ Unknown) |
| 487 | MUSCULAR_SKELETAL_CONDITION03 | Num | 8 | Muscular/skeletal condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 488 | ONCOLOGY_HEMA_CONDITION03 | Num | 8 | Oncology/hematology condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 489 | PSYCHIATRIC_CONDITION03 | Num | 8 | Psychiatric condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 490 | PULMONARY_VASCULAR_CONDITION03 | Num | 8 | Pulmonary/vascular condition reported at Visit 3 ( $1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 491 | NEUROLOGIC_CONDITION03 | Num | 8 | History of neurologic condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 492 | CARDIOVASCULAR_CONDITION04 | Num | 8 | Cardiovascular condition reported at Visit $4(1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 493 | DERMATOLOGY_CONDITION04 | Num | 8 | Dermatological condition reported at Visit $4(1=Y e s, 0=$ No, 2=Unknown) |
| 494 | ENDOCRINE_CONDITION04 | Num | 8 | Endocrine condition reported at Visit 4 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 495 | EYES_ENT_CONDITION04 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 496 | GENITOURINARY_CONDITION04 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 4 (1=Yes, $0=$ No, $2=$ Unknown) |
| 497 | GI_CONDITION04 | Num | 8 | Gastrointestinal condition at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 498 | INFECTIOUS_DISEASE_CONDITION04 | Num | 8 | Infectious disease condition at Visit 4 ( $1=\mathrm{Yes}, 0=$ No, $2=$ Unknown) |
| 499 | MUSCULAR_SKELETAL_CONDITION04 | Num | 8 | Muscular/skeletal condition reported at Visit $4(1=Y e s, 0=$ No, 2=Unknown) |
| 500 | ONCOLOGY_HEMA_CONDITION04 | Num | 8 | Oncology/hematology condition reported at Visit 4 ( $1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 501 | PSYCHIATRIC_CONDITION04 | Num | 8 | Psychiatric condition reported at Visit $4(1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 502 | PULMONARY_VASCULAR_CONDITION04 | Num | 8 | Pulmonary/vascular condition reported at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 503 | NEUROLOGIC_CONDITION04 | Num | 8 | History of neurologic condition reported at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 504 | INHALEDBRONCHODILATORS01 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 1 (1=Yes, 0=No, 2=Unknown) |
| 505 | NEBULIZEDBRONCHODILATORS01 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 1 (1=Yes, $0=$ No, $2=$ Unknown) |


| Num | Variable | Type | Len | Label |
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| 506 | INHALEDSTEROIDS01 | Char | 1 | Inhaled steroids used in the last three months at visit 1 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 507 | INHALEDBRONCHODILATORS02 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 2 (1=Yes, 0=No, 2=Unknown) |
| 508 | NEBULIZEDBRONCHODILATORS02 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 2 (1=Yes, 0=No, 2=Unknown) |
| 509 | INHALEDSTEROIDS02 | Char | 1 | Inhaled steroids used in the last three months at visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 510 | INHALEDBRONCHODILATORS03 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 3 (1=Yes, 0=No, 2=Unknown) |
| 511 | NEBULIZEDBRONCHODILATORS03 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 3 (1=Yes, 0=No, 2=Unknown) |
| 512 | INHALEDSTEROIDS03 | Char | 1 | Inhaled steroids used in the last three months at visit 3 (1=Yes, $0=$ No, 2=Unknown) |
| 513 | INHALEDBRONCHODILATORS04 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 4 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 514 | NEBULIZEDBRONCHODILATORS04 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 4 (1=Yes, 0=No, 2=Unknown) |
| 515 | INHALEDSTEROIDS04 | Char | 1 | Inhaled steroids used in the last three months at visit 4 (1=Yes, $0=$ No, 2=Unknown) |
| 516 | NEUROLOGIC_CONDITION01 | Num | 8 | History of neurologic condition reported at baseline |
| 517 | DAYS_BTW_BASELINE_Y1 | Num | 8 | Number of days between Baseline and Year 1 visit |
| 518 | DAYS_BTW_Y1_Y2 | Num | 8 | Number of days between Year 1 and Year 2 visit |
| 519 | DAYS_BTW_Y2_Y3 | Num | 8 | Number of days between Year 1 and Year 2 visit |
| 520 | FOLLOWUP_DAYS_ALL | Num | 8 | Days of follow-up in study including all study contacts |
| 521 | GOLD_CAT2013_0101 | Char | 1 | Baseline GOLD status revised using the 2013 guidelines and CAT |
| 522 | GOLD_CAT2017_0101 | Char | 1 | Baseline GOLD status using the 2017 guidelines and CAT |
| 523 | GOLD_MMRC2013_0101 | Char | 1 | Baseline GOLD status using the 2013 guidelines and mMRC |
| 524 | GOLD_MMRC2017_0101 | Char | 1 | Baseline GOLD status using the 2017 guidelines and mMRC |
| 525 | PEX_SEVERE_730 | Num | 8 | Total count of exacerbations between 366 and 730 days (f, g) |
| 526 | PEX_SEVERE_1095 | Num | 8 | Total count of exacerbations between 731 and 1095 days (f, g) |
| 527 | PEX_SEVERE_1460 | Num | 8 | Total count of exacerbations between 1096 and 1460 days (f, g) |
| 528 | PEX_SEVERE_1825 | Num | 8 | Total count of exacerbations between 1461 and 1825 days (f, g) |
| 529 | GLI_ETHNICITY | Num | 8 | Ethnicity category for GLI spirometric calculations |
| 530 | V1_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 531 | V1_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1 Percent Predicted Pre-Bronchodilator |
| 532 | V1_GLI_FEV1_LLN | Num | 8 | Visit 1 GLI Reference value for FEV1 Lower Limit of Normal |
| 533 | V1_GLI_FVC_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FVC Z-Score Pre-Bronchodilator |
| 534 | V1_GLI_FVC_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FVC Percent Predicted Pre-Bronchodilator |
| 535 | V1_GLI_FVC_LLN | Num | 8 | Visit 1 GLI Reference value for FVC Lower Limit of Normal |


| Num | Variable | Type | Len | Label |
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| 536 | V1_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Z-Score |
| Pre-Bronchodilator |  |  |  |  |,


| Num | Variable | Type | Len | Label |
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| 566 | V3_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Z-Score Pre-Bronchodilator |
| 567 | V3_GLI_FEV1FVC_LLN | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Lower Limit of Normal |
| 568 | V3_GLI_FEV1FVC_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Percent Predicted Pre-Bronchodilator |
| 569 | V3_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 570 | V3_GLI_FEF2575_LLN | Num | 8 | Visit 3 GLI Reference value for FEF2575 Lower Limit of Normal |
| 571 | V3_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 572 | V3_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |
| 573 | V3_GLI_FEF75_LLN | Num | 8 | Visit 3 GLI Reference value for FEF75 Lower Limit of Normal |
| 574 | V3_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEF75 Percent Predicted Pre-Bronchodilator |
| 575 | V4_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 576 | V4_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1 Percent Predicted Pre-Bronchodilator |
| 577 | V4_GLI_FEV1_LLN | Num | 8 | Visit 4 GLI Reference value for FEV1 Lower Limit of Normal |
| 578 | V4_GLI_FVC_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FVC Z-Score Pre-Bronchodilator |
| 579 | V4_GLI_FVC_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FVC Percent Predicted Pre-Bronchodilator |
| 580 | V4_GLI_FVC_LLN | Num | 8 | Visit 4 GLI Reference value for FVC Lower Limit of Normal |
| 581 | V4_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Z-Score Pre-Bronchodilator |
| 582 | V4_GLI_FEV1FVC_LLN | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Lower Limit of Normal |
| 583 | V4_GLI_FEV1FVC_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Percent Predicted Pre-Bronchodilator |
| 584 | V4_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 585 | V4_GLI_FEF2575_LLN | Num | 8 | Visit 4 GLI Reference value for FEF2575 Lower Limit of Normal |
| 586 | V4_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 587 | V4_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |
| 588 | V4_GLI_FEF75_LLN | Num | 8 | Visit 4 GLI Reference value for FEF75 Lower Limit of Normal |
| 589 | V4_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FEF75 Percent Predicted Pre-Bronchodilator |
| 590 | V1_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 591 | V1_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 592 | V1_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 593 | V1_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 594 | V1_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |


| Num | Variable | Type | Len | Label |
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| 595 | V1_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 596 | V1_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 597 | V1_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 598 | V1_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 599 | V1_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |
| 600 | V2_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 601 | V2_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 602 | V2_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 603 | V2_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 604 | V2_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 605 | V2_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 606 | V2_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 607 | V2_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 608 | V2_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 609 | V2_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |
| 610 | V3_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 611 | V3_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 612 | V3_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 613 | V3_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 614 | V3_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 615 | V3_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 616 | V3_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 617 | V3_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 618 | V3_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 619 | V3_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |


| Num | Variable | Type | Len | Label |
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| 620 | V4_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 621 | V4_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEV1 Percent Predicted <br> Post-Bronchodilator |
| 622 | V4_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 623 | V4_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FVC Percent Predicted <br> Post-Bronchodilator |
| 624 | V4_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Z-Score <br> Post-Bronchodilator |
| 625 | V4_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Percent Predicted <br> Post-Bronchodilator |
| 626 | V4_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEF2575 Z-Score <br> Post-Bronchodilator |
| 627 | V4_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEF2575 Percent Predicted <br> Post-Bronchodilator |
| 628 | V4_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEF75 Z-Score <br> Post-Bronchodilator |
| 629 | V4_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEF75 Percent Predicted <br> Post-Bronchodilator |

## Data Set Name: bronch_bcw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BCW0B | Num | 8 | 0b. Code |
| 5 | BCW0C | Num | 8 | 0c. Check here if subject is Male |
| 6 | BCW1 | Num | 8 | 1. O2 Saturation on room air |
| 7 | BCW2A | Char | 1 | 2a. Does your center require lab work prior to bronchoscopy? |
| 8 | BCW2B | Char | 2000 | 2b. If yes, please describe |
| 9 | BCW2C | Char | 1 | 2c. Were the results of the lab work abnormal? |
| 10 | BCW2D | Char | 1 | 2d. Do the results of blood work described in 2 b and 2c make the participant ineligible to proceed with a bronchoscopy? |
| 11 | BCW3A | Char | 1 | 3a. Did the doctor perform a limited physical exam? |
| 12 | BCW3B | Char | 1 | 3b. In the opinion of the investigator, are there any other physical symptoms or conditions that make this participant ineligible for participation in the bronchoscopy substudy? |
| 13 | BCW3C | Char | 2000 | 3c. Please describe |
| 14 | BCW4A | Char | 1 | 4a. Is the participant of child-bearing potential? |
| 15 | BCW4B | Char | 1 | 4b. If yes, what was the result of the pregnancy test? |
| 16 | BCW5 | Num | 8 | 5. Pre-bronchodilator FEV1 (reported/best) |
| 17 | BCW6 | Num | 8 | 6. Post-bronchodilator (4 puffs albuterol) FEV1 (reported/best) |
| 18 | BCW8 | Char | 5 | 8. Collection time |
| 19 | BCW8A | Char | 1 | 8a. AM/PM |
| 20 | BCW9 | Num | 8 | 9. Number of venipuncture attempts: |
| 21 | BCW10 | Char | 1 | 10. Any blood drawing incidents or problems? |
| 22 | BCW11A | Num | 8 | 11a. Sample not drawn |
| 23 | BCW11B | Num | 8 | 11b. Partial sample drawn |
| 24 | BCW11C | Num | 8 | 11c. Tourniquet reapplied |
| 25 | BCW11D | Num | 8 | 11d. Fist Clenching |
| 26 | BCW11E | Num | 8 | 11e. Needle Movement |
| 27 | BCW11F | Num | 8 | 11f. Participant reclining |
| 28 | BCW11G | Num | 8 | 11g. Sample re-drawn |
| 29 | BCW12 | Char | 2000 | 12. If any other blood drawing problems not listed above (e.g., fasting status, etc.), describe incident or problem here: |
| 30 | BCW14 | Char | 1 | 14. Was the tongue scrapping collected? |
| 31 | BCW15 | Char | 5 | 15. Collection time |
| 32 | BCW15A | Char | 1 | 15a. AM/PM |
| 33 | BCW16 | Char | 1 | 16. Was the oral rinse collected? |
| 34 | BCW17 | Char | 5 | 17. Collection time |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 35 | BCW17A | Char | 1 | 17a. AM/PM |
| 36 | BCW18A | Char | 1 | 18a. Was the time between oral rinse and bronchoscopy more than 60 minutes? |
| 37 | BCW18B | Char | 1 | 18b. If yes, was an additional tongue scrapping collected? |
| 38 | BCW19A | Char | 30 | 19a. Lobe: |
| 39 | BCW19B | Num | 8 | 19b. Number collected |
| 40 | BCW20A | Char | 30 | 20a. Lobe: |
| 41 | BCW20B | Num | 8 | 20b. Infused |
| 42 | BCW20C | Num | 8 | 20c. Return |
| 43 | BCW21A | Char | 30 | 21a. Lobe: |
| 44 | BCW21B | Num | 8 | 21b. Infused |
| 45 | BCW21C | Num | 8 | 21c. Return |
| 46 | BCW21D | Char | 5 | 21d. Collection time: |
| 47 | BCW21E | Char | 1 | 21e. AM/PM |
| 48 | BCW22A | Char | 30 | 22a. Lobe: |
| 49 | BCW22B | Num | 8 | 22b. Number of brushes collected |
| 50 | BCW23 | Char | 1 | 23. Side |
| 51 | BCW24A | Char | 1 | 24a. Biopsy 1: Snap Freeze |
| 52 | BCW24B | Char | 1 | 24b. Biopsy 2: Formalin |
| 53 | BCW24C | Char | 1 | 24c. Biopsy 3: Formalin |
| 54 | BCW24D | Char | 1 | 24d. Biopsy 4: Formalin |
| 55 | BCW24E | Char | 1 | 24e. Biopsy 5: Formalin |
| 56 | BCW24F | Char | 1 | 24f. Biopsy 6: Snap Freeze |
| 57 | BCW24G | Char | 1 | 24g. Biopsy 7: Formalin |
| 58 | BCW24H | Char | 1 | 24h. Biopsy 8: Formalin |
| 59 | BCW25A | Num | 8 | 25a. Lidocaine: 1\% |
| 60 | BCW25B | Num | 8 | 25b. 2\% |
| 61 | BCW25C | Num | 8 | 25c. 4\% |
| 62 | BCW26 | Char | 2000 | 26. Comments |
| 63 | BCW27 | Num | 8 | 27. Pre-bronchodilator FEV1 (reported/best) |
| 64 | BCW28 | Char | 1 | 28. Did you administer additional albuterol? |
| 65 | BCW29 | Num | 8 | 29. How many micrograms? |
| 66 | BCW30 | Num | 8 | 30. Post-bronchodilator (4 puffs albuterol) FEV1 (reported/best) |
| 67 | BCW31 | Char | 1 | 31. Did you administer additional albuterol? |
| 68 | BCW32 | Num | 8 | 32. How many micrograms? |
| 69 | BCW33 | Num | 8 | 33. Post-bronchodilator (4 puffs albuterol) FEV1 (reported/best) |
| 70 | BCW34 | Char | 1 | 34. Did the participant experience any adverse events during the bronchoscopy? |
| 71 | BCW35 | Char | 1 | 35. Did the participant need to be admitted for overnight observation post bronchoscopy? |
| 72 | BCW36A | Char | 1 | 36a. No chest discomfort complaints |
| 73 | BCW36B | Char | 1 | 36b. Alert / responsive |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 74 | BCW36C | Char | 1 | 36c. Oriented to time, person, place |
| 75 | BCW36D | Char | 1 | 36d. Heart rate less than 100/min |
| 76 | BCW36E | Char | 1 | 36e. Ambulate w/o difficulty |
| 77 | BCW36F | Char | 1 | 36f. Sips water w/o cough/difficulty |
| 78 | BCW36G | Char | 1 | 36g. FEV1 > 90\% baseline FEV1 |
| 79 | BCW19A_V2 | Num | 8 | 19a. Sterile Saline Sample Collected? |
| 80 | BCW19B_V2 | Num | 8 | 19b. Scope Saline Sample Collected? |
| 81 | BCW22D1 | Char | 1 | 22d1. AM/PM |
| 82 | BCW22E | Num | 8 | 22e. Was BAL stopped because of poor fluid return (Y/N)? |
| 83 | BCW24A_V2 | Num | 8 | 24a. Small airways brush samples collected? (Y/N) |
| 84 | BCW24B_V2 | Char | 30 | 24b. Lobe: |
| 85 | BCW24C_V2 | Num | 8 | 24c. Number of brushes collected |
| 86 | BCW25_V2 | Char | 1 | 25. Side |
| 87 | VERSION | Char | 21 | Version |
| 88 | BCW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 89 | BCW7_DAYS | Num | 8 | Date of blood collection - Days from enrollment |

Data Set Name: bronch_bis_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BIS0B | Num | 8 | 0b. Code |
| 5 | BIS1 | Char | 1 | 1. Erythema |
| 6 | BIS2 | Char | 1 | 2. Edema |
| 7 | BIS3 | Char | 1 | 3. Secretions |
| 8 | BIS4 | Char | 1 | 4. Friability |
| 9 | VERSION | Char | 21 | Version |
| 10 | BIS0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: bronch_bpw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BPW1A | Char | 5 | 1a. Time processed |
| 5 | BPW1A1 | Char | 1 | 1a1. AM/PM |
| 6 | BPW1B | Num | 8 | 1b. Problems Processing? |
| 7 | BPW1B1 | Num | 8 | 1b1. Broken tube |
| 8 | BPW1B2 | Num | 8 | 1b2. Sample re-centrifuged |
| 9 | BPW1B3 | Num | 8 | 1b3. Clotted |
| 10 | BPW1B4 | Num | 8 | 1b4. Hemolyzed |
| 11 | BPW1B5 | Num | 8 | 1b5. Lipemic |
| 12 | BPW1B6 | Num | 8 | 1b6. Other |
| 13 | BPW1B7 | Char | 30 | 1b7. Specify: |
| 14 | BPW1C | Num | 8 | 1c. Number of pre-made blood assay antibody tubes used: |
| 15 | BPW1D | Char | 5 | 1d. Time aliquots placed in refrigerator: |
| 16 | BPW1D1 | Char | 1 | 1d1. AM/PM |
| 17 | BPW2 | Char | 5 | 2. Time processed |
| 18 | BPW2A | Char | 1 | 2a. AM/PM |
| 19 | BPW3 | Num | 8 | 3. Number of 15 mL conical tubes: |
| 20 | BPW4 | Char | 5 | 4. Time 15 mL conical tubes placed in refrigerator |
| 21 | BPW4A | Char | 1 | 4a. AM/PM |
| 22 | BPW6 | Char | 5 | 6. Time 15 mL conical tubes placed in freezer |
| 23 | BPW6A | Char | 1 | 6a. AM/PM |
| 24 | BPW7 | Char | 5 | 7. Time processed |
| 25 | BPW7A | Char | 1 | 7a. AM/PM |
| 26 | BPW8 | Num | 8 | 8. Problems Processing? |
| 27 | BPW8A | Num | 8 | 8a. Blood in the sample |
| 28 | BPW8B | Num | 8 | 8b. Other |
| 29 | BPW8C | Char | 30 | 8c. Specify: |
| 30 | BPW9 | Char | 5 | 9. Time placed in refrigerator: |
| 31 | BPW9A | Char | 1 | 9a. AM/PM |
| 32 | BPW11 | Char | 5 | 11. Time placed in freezer |
| 33 | BPW11A | Char | 1 | 11a. AM/PM |
| 34 | BPW12 | Num | 8 | 12. Was more than 8 mL returned from the first 20 cc airway wash? |
| 35 | BPW13 | Char | 5 | 13. Time processed |
| 36 | BPW13A | Char | 1 | 13a. AM/PM |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BPW14 | Char | 5 | 14. Time placed in refrigerator: |
| 38 | BPW14A | Char | 1 | 14a. AM/PM |
| 39 | BPW16 | Char | 5 | 16. Time placed in freezer |
| 40 | BPW16A | Char | 1 | 16a. AM/PM |
| 41 | BPW17 | Char | 5 | 17. Time processed |
| 42 | BPW17A | Char | 1 | 17a. AM/PM |
| 43 | BPW18 | Num | 8 | 18. Total volume returned: |
| 44 | BPW19 | Num | 8 | 19. Cell Count: |
| 45 | BPW20 | Num | 8 | 20. Total Cell Count: |
| 46 | BPW21 | Num | 8 | 21. Cytospin suspension: |
| 47 | BPW22 | Num | 8 | 22. Volume to resuspend pellet in with PBS: |
| 48 | BPW23 | Num | 8 | 23. Number of cytospin slides created: |
| 49 | BPW24 | Char | 5 | 24. Time processed |
| 50 | BPW24A | Char | 1 | 24a. AM/PM |
| 51 | BPW25 | Num | 8 | 25. Number of aliquots created: |
| 52 | BPW26 | Char | 5 | 26. Time placed in freezer |
| 53 | BPW26A | Char | 1 | 26a. AM/PM |
| 54 | BPW27 | Char | 5 | 27. Time processed |
| 55 | BPW27A | Char | 1 | 27a. AM/PM |
| 56 | BPW28 | Char | 5 | 28. Time placed in freezer |
| 57 | BPW28A | Char | 1 | 28a. AM/PM |
| 58 | BPW29 | Char | 5 | 29. Time processed |
| 59 | BPW29A | Char | 1 | 29a. AM/PM |
| 60 | BPW30 | Num | 8 | 30. Total volume returned: |
| 61 | BPW31 | Num | 8 | 31. Cell Count: |
| 62 | BPW32 | Num | 8 | 32. Total Cell Count: |
| 63 | BPW33 | Num | 8 | 33. Cytospin suspension: |
| 64 | BPW34 | Num | 8 | 34. Volume to resuspend pellet in with PBS: |
| 65 | BPW35 | Char | 5 | 35. Time processed |
| 66 | BPW35A | Char | 1 | 35a. AM/PM |
| 67 | BPW36 | Char | 5 | 36. Time placed in refrigerator: |
| 68 | BPW36A | Char | 1 | 36a. AM/PM |
| 69 | BPW38 | Char | 5 | 38. Time placed in freezer |
| 70 | BPW38A | Char | 1 | 38a. AM/PM |
| 71 | BPW39 | Char | 5 | 39. Time processed |
| 72 | BPW39A | Char | 1 | 39a. AM/PM |
| 73 | BPW40 | Num | 8 | 40. Number of aliquots made: |
| 74 | BPW41 | Char | 5 | 41. Time placed in freezer |
| 75 | BPW41A | Char | 1 | 41a. AM/PM |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BPW42 | Char | 5 | 42. Time processed |
| 77 | BPW42A | Char | 1 | 42a. AM/PM |
| 78 | BPW43 | Num | 8 | 43. Number of cytospin slides: |
| 79 | BPW44 | Char | 5 | 44. Time stained |
| 80 | BPW44A | Char | 1 | 44a. AM/PM |
| 81 | BPW45 | Char | 5 | 45. Time processed |
| 82 | BPW45A | Char | 1 | 45a. AM/PM |
| 83 | BPW46A | Num | 8 | 46a. Is the time processed less than 2 hours after collection? |
| 84 | BPW46B | Num | 8 | 46b. Minutes since collection: |
| 85 | BPW46C | Char | 100 | 46c. Reason processed before 2 hours: |
| 86 | BPW47A | Num | 8 | 47a. Is the time processed more than 2 hours after collection? |
| 87 | BPW47B | Num | 8 | 47b. Minutes since collection: |
| 88 | BPW47C | Char | 100 | 47c. Reason processed after 2 hours: |
| 89 | BPW48 | Char | 5 | 48. Time processing complete |
| 90 | BPW48A | Char | 1 | 48a. AM/PM |
| 91 | BPW49 | Char | 5 | 49. Time placed in freezer |
| 92 | BPW49A | Char | 1 | 49a. AM/PM |
| 93 | BPW50 | Char | 5 | 50. Time processed |
| 94 | BPW50A | Char | 1 | 50a. AM/PM |
| 95 | BPW51 | Num | 8 | 51. Number of pre-made BAL assay antibody tubes used: |
| 96 | BPW52 | Char | 5 | 52. Time placed in refrigerator |
| 97 | BPW52A | Char | 1 | 52a. AM/PM |
| 98 | BPW53 | Num | 8 | 53. Problems Processing? |
| 99 | BPW53A | Num | 8 | 53a. Blood in sample |
| 100 | BPW53B | Num | 8 | 53b. Other |
| 101 | BPW53C | Char | 30 | 53c. Specify: |
| 102 | BPW54 | Char | 5 | 54. Time placed in refrigerator |
| 103 | BPW54A | Char | 1 | 54a. AM/PM |
| 104 | BPW55 | Num | 8 | 55. Cell Count: |
| 105 | BPW56 | Num | 8 | 56. Number of cytospin slides: |
| 106 | BPW57 | Char | 5 | 57. Time processed |
| 107 | BPW57A | Char | 1 | 57a. AM/PM |
| 108 | BPW58 | Char | 5 | 58. Time placed in refrigerator |
| 109 | BPW58A | Char | 1 | 58a. AM/PM |
| 110 | BPW59 | Char | 5 | 59. Time placed in freezer |
| 111 | BPW59A | Char | 1 | 59a. AM/PM |
| 112 | BPW60 | Char | 5 | 60 . Time placed in cold $10 \%$ formalin |
| 113 | BPW60A | Char | 1 | 60a. AM/PM |
| 114 | BPW61 | Char | 5 | 61. Time moved to fresh cold $10 \%$ formalin |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BPW61A | Char | 1 | 61a. AM/PM |
| 116 | BPW62 | Char | 5 | 62. Time placed in 70\% alcohol at 4 degrees: |
| 117 | BPW62A | Char | 1 | 62a. AM/PM |
| 118 | BPW40A | Num | 8 | 40a. Number of 15mL aliquots made: |
| 119 | BPW45B | Num | 8 | 45b. Volume of BAL remaining: |
| 120 | BPW7_V3 | Char | 5 | 7. Time sterile saline placed in freezer |
| 121 | BPW7A_V3 | Char | 1 | 7a. AM/PM |
| 122 | BPW8_V3 | Char | 5 | 8. Time scope saline placed in freezer |
| 123 | BPW8A_V3 | Char | 1 | 8a. AM/PM |
| 124 | BPW39_V3 | Char | 5 | 39. Time transferrred to 15 mL conical |
| 125 | BPW39A_V3 | Char | 1 | 39a. AM/PM |
| 126 | BPW40_V3 | Char | 5 | 40. Time placed in freezer |
| 127 | BPW40A_V3 | Char | 1 | 40a. AM/PM |
| 128 | BPW46 | Num | 8 | 48a. Is the time processed less than 2 hours after collection? |
| 129 | BPW61_V3 | Num | 8 | 61. Were small airways epithelial brushings collected? |
| 130 | BPW62_V3 | Num | 8 | 62. Problems processing? |
| 131 | BPW62A_V3 | Num | 8 | 62a. Blood in the sample |
| 132 | BPW62B_V3 | Num | 8 | 62b. Other |
| 133 | BPW63 | Char | 5 | 63. Time processed |
| 134 | BPW63A | Char | 1 | 63a. AM/PM |
| 135 | BPW64 | Num | 8 | 64. Cell Count: |
| 136 | BPW65 | Num | 8 | 65. Number of cytospin slides: |
| 137 | BPW66 | Char | 5 | 66. Time processed |
| 138 | BPW66A | Char | 1 | 66a. AM/PM |
| 139 | BPW67 | Char | 5 | 67. Time placed in freezer |
| 140 | BPW67A | Char | 1 | 67a. AM/PM |
| 141 | BPW73 | Num | 8 | 73. Number of biospsies moved to 70\% alcohol |
| 142 | BPW74 | Char | 100 | 74. If biopsies were lost between collection and the final step of sample fixation, please describe how and why they were lost: |
| 143 | BPW75 | Char | 1 | 75. Was subsequent biopsy processing and paraffin embedding completed by a core lab? |
| 144 | BPW78 | Num | 8 | 78. Number of paraffin blocks |
| 145 | VERSION | Char | 21 | Version |
| 146 | BPW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 147 | BPW5_DAYS | Num | 8 | Date 15 ml conical tubes moved to freezer - Days from enrollment |
| 148 | BPW10_DAYS | Num | 8 | 10. Date moved to freezer - Days from enrollment |
| 149 | BPW15_DAYS | Num | 8 | 15. Date moved to freezer - Days from enrollment |
| 150 | BPW37_DAYS | Num | 8 | 37. Date moved to freezer - Days from enrollment |
| 151 | BPW72_DAYS | Num | 8 | 72. Date biopsies placed in 70\% alcohol (after formalin fixation) - Days from enrollment |
| 152 | BPW76_DAYS | Num | 8 | 76. Date biopsies sent to pathology lab - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 153 | BPW77_DAYS | Num | 8 | 77. Date biospsies returned from pathology lab - Days from enrollment |

Data Set Name: bronch_bsw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BSW0B | Num | 8 | 0b. Code |
| 5 | BSW1 | Char | 5 | 1. Time processing began: |
| 6 | BSW1A | Char | 1 | 1a. AM/PM |
| 7 | BSW2 | Num | 8 | 2. Weight of Entire Sample |
| 8 | BSW3A1 | Num | 8 | 3a1. Minimal |
| 9 | BSW3A2 | Num | 8 | 3a2. Mild |
| 10 | BSW3A3 | Num | 8 | 3a3. Moderate |
| 11 | BSW3A4 | Num | 8 | 3a4. Excessive |
| 12 | BSW3B1 | Num | 8 | 3b1. Watery |
| 13 | BSW3B2 | Num | 8 | 3b2. Mucoid |
| 14 | BSW3B3 | Num | 8 | 3b3. Purulent (puss) |
| 15 | BSW3C1 | Num | 8 | 3c1. Numerous |
| 16 | BSW3C2 | Num | 8 | 3c2. Moderate number |
| 17 | BSW3C3 | Num | 8 | 3c3. Sparse |
| 18 | BSW3C4 | Num | 8 | 3c4. Large |
| 19 | BSW3C5 | Num | 8 | 3c5. Small |
| 20 | BSW3C6 | Num | 8 | 3c6. Dense/flocculent |
| 21 | BSW3C7 | Num | 8 | 3c7. Diffuse opacity |
| 22 | BSW3D1 | Num | 8 | 3d1. Clear |
| 23 | BSW3D2 | Num | 8 | 3d2. White |
| 24 | BSW3D3 | Num | 8 | 3d3. Yellow/Tan |
| 25 | BSW3D4 | Num | 8 | 3d4. Brown |
| 26 | BSW3D5 | Num | 8 | 3d5. Green |
| 27 | BSW4 | Char | 2000 | 4. General Notes/Comments: |
| 28 | BSW5 | Char | 5 | 5. Time immunophenotyping processing began: |
| 29 | BSW5A | Char | 1 | 5a. AM/PM |
| 30 | BSW6 | Num | 8 | 6. Weight of the 50mL Centrifuge tube |
| 31 | BSW7 | Num | 8 | 7. Weight of the sputum |
| 32 | BSW8 | Num | 8 | 8. Volume of Sputolysin to add (weight of sputum x2) |
| 33 | BSW9 | Num | 8 | 9. Total volume of sputum plus sputolysin |
| 34 | BSW10 | Char | 5 | 10. Time placed in 37 C water bath |
| 35 | BSW10A | Char | 1 | 10a. AM/PM |
| 36 | BSW11 | Num | 8 | 11. Number of times vortexed |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | BSW12 | Char | 5 | 12. Time removed from water bath |
| 38 | BSW12A | Char | 1 | 12a. AM/PM |
| 39 | BSW13 | Num | 8 | 13. Volume of PBS added |
| 40 | BSW14 | Char | 5 | 14. Time placed in centrifuge |
| 41 | BSW14A | Char | 1 | 14a. AM/PM |
| 42 | BSW15 | Num | 8 | 15. Number of pre-made sputum assay antibody tubes used |
| 43 | BSW16 | Char | 5 | 16. Time incubation begin |
| 44 | BSW16A | Char | 1 | 16a. AM/PM |
| 45 | BSW17 | Char | 5 | 17. Time incubation end |
| 46 | BSW17A | Char | 1 | 17a. AM/PM |
| 47 | BSW18 | Char | 5 | 18. Time placed in 4 C storage |
| 48 | BSW18A | Char | 1 | 18a. AM/PM |
| 49 | BSW19 | Char | 2000 | 19. Problems processing: |
| 50 | VERSION | Char | 21 | Version |
| 51 | BSW0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: bronch_derv_cbc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CBC03_DERV | Num | 8 | 3) Total red blood cells |
| 5 | CBC04_DERV | Num | 8 | 4) Hemoglobin |
| 6 | CBC05_DERV | Num | 8 | 5) Hemacrit |
| 7 | CBC06_DERV | Num | 8 | 6) Mean corpuscular volume |
| 8 | CBC07_DERV | Num | 8 | 7) Red blood cell distribution width |
| 9 | CBC08_DERV | Num | 8 | 8) Total white blood cells |
| 10 | CBC09_DERV | Num | 8 | 9) Neutrophil granulocyte |
| 11 | CBC10_DERV | Num | 8 | 10) Lymphocytes |
| 12 | CBC11_DERV | Num | 8 | 11) Monocytes |
| 13 | CBC12_DERV | Num | 8 | 12) Eosinophil granuloctyes |
| 14 | CBC13_DERV | Num | 8 | 13) Basophil granuloctyes |
| 15 | CBC14_DERV | Num | 8 | 14) Platelet Count |
| 16 | CBC15_DERV | Num | 8 | 15) Mean Platelet Volume |
| 17 | CBC16_DERV | Char | 2000 | 16) Comments: |
| 18 | CBC09A_DERV | Num | 8 | 9a) Neutrophil granulocyte \% |
| 19 | CBC10A_DERV | Num | 8 | 10a) Lymphocyte \% |
| 20 | CBC11A_DERV | Num | 8 | 11a) Monocyte \% |
| 21 | CBC12A_DERV | Num | 8 | 12a) Eosinophil granuloctye \% |
| 22 | CBC13A_DERV | Num | 8 | 13a) Basophil granuloctye \% |
| 23 | VERSION | Char | 21 | Version |
| 24 | CBC0A_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 25 | CBC01_DERV_DAYS | Num | 8 | 1. Date Blood Submitted to Lab: - Days from enrollment |
| 26 | CBC02_DERV_DAYS | Num | 8 | 2. Date Results Received: - Days from enrollment |

## Data Set Name: derv_nhlbiv1_180716.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 |  |
| 2 | BMI_AUX_CM01 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) at baseline |
| 3 | HT_CM01 | Num | 8 | Height (cm) (ANT02) at baseline |
| 4 | WT_KG01 | Num | 8 | Weight (kg) (ANT03) at baseline |
| 5 | BMI_AUX_CM02 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year1) |
| 6 | HT_CM02 | Num | 8 | Height (cm) (ANT02) (for visit=Year1) |
| 7 | WT_KG02 | Num | 8 | Weight (kg) (ANT03) (for visit=Year1) |
| 8 | BMI_AUX_CM03 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year2) |
| 9 | HT_CM03 | Num | 8 | Height (cm) (ANT02) (for visit=Year2) |
| 10 | WT_KG03 | Num | 8 | Weight (kg) (ANT03) (for visit=Year2) |
| 11 | BMI_AUX_CM04 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) (for visit=Year3) |
| 12 | HT_CM04 | Num | 8 | Height (cm) (ANT02) (for visit=Year3) |
| 13 | WT_KG04 | Num | 8 | Weight (kg) (ANT03) (for visit=Year3) |
| 14 | BMI_AUX_IN01 | Num | 8 | BMI (computed by SC from imperial units) (from IEC05a,b at BASELINE) |
| 15 | GENDER | Num | 8 | Gender (1=Male,2=Female) (IEC04) |
| 16 | HT_IN01 | Num | 8 | Height (in) (IEC05a) |
| 17 | AGE01 | Num | 8 | Age at Baseline (years) (DEM01a) |
| 18 | ETHNICITY | Num | 8 | Ethnicity (1=Hispanic,0=Non-hispanic) (DEM05 or DEM05a) |
| 19 | RACE | Num | 8 | Race (1=White,2=Black,3=Asian,4=Amer.Ind./Pacif.Isl.,6=Mixed,7=Mis sing)(from DEM06a-e) |
| 20 | AGE_DERV_01 | Num | 8 | Age in years at baseline based on date of birth and date of enrollment |
| 21 | AGE_DERV_02 | Num | 8 | Age in years at year 1 visit based on date of birth and date of visit |
| 22 | AGE_DERV_03 | Num | 8 | Age in years at year 2 visit based on date of birth and date of visit |
| 23 | AGE_DERV_04 | Num | 8 | Age in years at year 3 visit based on date of birth and date of visit |
| 24 | AGECAT_BY05 | Num | 8 | Age at Baseline in 5 year groupings ( $1=40-<45,2=45-<50$, $3=50-<55,4=55-<60,5=60-<65,6=65-<70,7=70-<75,8=75,<80)$ |
| 25 | AGECAT_BY10 | Num | 8 | Age at Baseline in 10 year groupings ( $1=40-<50,2=50-<60$, $3=60-<70,4=70-<80$ ) |
| 26 | AGE02 | Num | 8 | Age at Year 1 (years) |
| 27 | AGE03 | Num | 8 | Age at Year 2 (years) |
| 28 | AGE04 | Num | 8 | Age at Year 3 (years) |
| 29 | PRED_FEV1_V1 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at baseline |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 30 | PRED_FEV1_V2 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 31 | PRED_FEV1_V3 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 32 | PRED_FEV1_V4 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 33 | PRED_FVC_V1 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at baseline |
| 34 | PRED_FVC_V2 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 35 | PRED_FVC_V3 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 36 | PRED_FVC_V4 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 37 | PRED_FEF2575_V1 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at baseline |
| 38 | PRED_FEF2575_V2 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 1 |
| 39 | PRED_FEF2575_V3 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 2 |
| 40 | PRED_FEF2575_V4 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at year 3 |
| 41 | PRED_PEFR_V1 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at baseline |
| 42 | PRED_PEFR_V2 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 1 |
| 43 | PRED_PEFR_V3 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 2 |
| 44 | PRED_PEFR_V4 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at year 3 |
| 45 | PRED_FEV1FVC_V1 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at baseline |
| 46 | PRED_FEV1FVC_V2 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 1 |
| 47 | PRED_FEV1FVC_V3 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 2 |
| 48 | PRED_FEV1FVC_V4 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at year 3 |
| 49 | PCT_PRE_FEV1_V1 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V1)) at baseline |
| 50 | PCT_PRE_FEV1_V2 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V2)) at year 1 |
| 51 | PCT_PRE_FEV1_V3 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V3)) at year 2 |
| 52 | PCT_PRE_FEV1_V4 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V4)) at year 3 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 53 | PCT_PRE_FVC_V1 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted <br> FVC $\left(100^{*}(\right.$ sfv40_Derv/pred_FVC_V1) $)$ at baseline |
| 54 | PCT_PRE_FVC_V2 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted <br> FVC $\left(100^{*}\left(s f v 40 \_D e r v / p r e d \_F V C \_V 2\right)\right) ~ a t ~ y e a r ~$ |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | PCT_POST_FEV1_V2 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V2)) at year 1 |
| 75 | PCT_POST_FEV1_V3 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V3)) at year 2 |
| 76 | PCT_POST_FEV1_V4 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V4)) at year 3 |
| 77 | PCT_POST_FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V1)) at baseline |
| 78 | PCT_POST_FVC_V2 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V2)) at year 1 |
| 79 | PCT_POST_FVC_V3 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V3)) at year 2 |
| 80 | PCT_POST_FVC_V4 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V4)) at year 3 |
| 81 | PCT_POST_FEV1FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V1)) at baseline |
| 82 | PCT_POST_FEV1FVC_V2 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V2)) at year 1 |
| 83 | PCT_POST_FEV1FVC_V3 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V3)) at year 2 |
| 84 | PCT_POST_FEV1FVC_V4 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V4)) at year 3 |
| 85 | PCT_POST_PEFR_V1 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V1)) at baseline |
| 86 | PCT_POST_PEFR_V2 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V2)) at year 1 |
| 87 | PCT_POST_PEFR_V3 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V3)) at year 2 |
| 88 | PCT_POST_PEFR_V4 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V4)) at year 3 |
| 89 | PCT_POST_SVC_V1 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V1)) at baseline |
| 90 | PCT_POST_SVC_V2 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V2)) at year 1 |
| 91 | PCT_POST_SVC_V3 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V3)) at year 2 |
| 92 | PCT_POST_SVC_V4 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V4)) at year 3 |
| 93 | PCT_POST_FEF2575_V1 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V1)) at baseline |
| 94 | PCT_POST_FEF2575_V2 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V2)) at year 1 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 95 | PCT_POST_FEF2575_V3 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of <br> predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V3)) at year <br> 2 |
| 96 | PCT_POST_FEF2575_V4 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of <br> predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V4)) at year <br> 3 |
| 97 | LLN_FEV1_FVC_V1 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, <br> race/ethnicity, age, and height) at baseline |
| 98 | LLN_FEV1_FVC_V2 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 120 | BODE_INDEX02 | Num | 8 | BODE Index at YEAR1 |
| 121 | SIX_MINUTE_WALK_DISTANCE03 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at YEAR2) |
| 122 | BODE_INDEX03 | Num | 8 | BODE Index at YEAR2 |
| 123 | SIX_MINUTE_WALK_DISTANCE04 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at YEAR3) |
| 124 | BODE_INDEX04 | Num | 8 | BODE Index at YEAR3 |
| 125 | BRONCH_ELIGIBLE | Num | 8 | Eligible for bronchoscopy substudy (1=Yes, $0=\mathrm{No}$ ) |
| 126 | BRONCH_AGE01 | Num | 8 | Age when screened for bronchoscopy substudy (BIE3) |
| 127 | PEX_TOT0101 | Num | 8 | Total Exacerbations for baseline |
| 128 | PEX_HCUTOT0101 | Num | 8 | Exacerbations requiring HCU for baseline |
| 129 | PEX_ANTITOT0101 | Num | 8 | Exacerbations treated with antibiotics for baseline |
| 130 | PEX_STEROIDTOT0101 | Num | 8 | Exacerbations treated with steroids for baseline |
| 131 | PEX_DRUGTOT0101 | Num | 8 | Exacerbations treated with medications for baseline |
| 132 | PEX_SEVERETOT0101 | Num | 8 | Exacerbations requiring ED visit or hospitalization for baseline |
| 133 | COPDSCORE0101 | Num | 8 | COPD Assessment Test Score at visit 1 |
| 134 | COPDSCORE0102 | Num | 8 | COPD Assessment Test Score at visit 2 |
| 135 | COPDSCORE0103 | Num | 8 | COPD Assessment Test Score at visit 3 |
| 136 | COPDSCORE0104 | Num | 8 | COPD Assessment Test Score at visit 4 |
| 137 | GOLD_MMRC0101 | Char | 1 | Baseline GOLD status using the revised criteria and mMRC at baseline |
| 138 | GOLD_CAT0101 | Char | 1 | Baseline GOLD status using the revised criteria and CAT at baseline |
| 139 | CB_VISIT1 | Num | 8 | Chronic Bronchitis identified at baseline |
| 140 | ASTHMA_BASELINE | Num | 8 | Baseline Asthma |
| 141 | ASTHMA_EVER_REPORTED | Num | 8 | Ever Reported Asthma |
| 142 | EMPHYSEMA_VISIT1 | Num | 8 | Possible emphysema at visit 1 |
| 143 | PEX_TOT0102 | Num | 8 | Total Exacerbations at year 1 |
| 144 | PEX_SEVERETOT0102 | Num | 8 | Total severe exacerbations at year 1 |
| 145 | PEX_ANTITOT0102 | Num | 8 | Total exacerbations treated with antibiotics at year 1 |
| 146 | PEX_STEROIDTOT0102 | Num | 8 | Total exacerbations treated with steroids at year 1 |
| 147 | PEX_DRUGTOT0102 | Num | 8 | Total exacerbations treated with medications at year 1 |
| 148 | PEX_HCUTOT0102 | Num | 8 | Total exacerbations requiring HCU at year 1 |
| 149 | PEX_TOT0103 | Num | 8 | Total Exacerbations at Year 2 |
| 150 | PEX_SEVERETOT0103 | Num | 8 | Total severe exacerbations at Year 2 |
| 151 | PEX_ANTITOT0103 | Num | 8 | Total exacerbations treated with antibiotics at Year 2 |
| 152 | PEX_STEROIDTOT0103 | Num | 8 | Total exacerbations treated with steroids at Year 2 |
| 153 | PEX_DRUGTOT0103 | Num | 8 | Total exacerbations treated with medications at Year 2 |
| 154 | PEX_HCUTOT0103 | Num | 8 | Total exacerbations requiring HCU at Year 2 |
| 155 | PEX_TOT0104 | Num | 8 | Total Exacerbations at Year 3 |
| 156 | PEX_SEVERETOT0104 | Num | 8 | Total severe exacerbations at Year 3 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 157 | PEX_ANTITOT0104 | Num | 8 | Total exacerbations treated with antibiotics at Year 3 |
| 158 | PEX_STEROIDTOT0104 | Num | 8 | Total exacerbations treated with steroids at Year 3 |
| 159 | PEX_DRUGTOT0104 | Num | 8 | Total exacerbations treated with medications at Year 3 |
| 160 | PEX_HCUTOT0104 | Num | 8 | Total exacerbations requiring HCU at Year 3 |
| 161 | PEX_TOT | Num | 8 | Total count of exacerbations since entering the study |
| 162 | PEX_SEVERE | Num | 8 | Total count of exacerbations requiring ED visit or hospitalization since entering the study |
| 163 | PEX_ANTI | Num | 8 | total count of exacerbations treated with antibiotics since entering the study |
| 164 | PEX_STEROID | Num | 8 | total count of exacerbations treated with steroids since entering the study |
| 165 | PEX_DRUG | Num | 8 | total count of exacerbations treated with medications since entering the study |
| 166 | PEX_HCU | Num | 8 | total count of exacerbations requiring HCU since entering the study |
| 167 | DEATH | Num | 8 | indicator of deceased subject |
| 168 | DAYINSTUDY_DEATH | Num | 8 | Days in study till deceased |
| 169 | CURRENT_SMOKER_BRONCH | Num | 8 |  |
| 170 | FOLLOWUP_DAYS | Num | 8 | Length of follow-up instudy including only main study contacts |
| 171 | EYES_ENT_CONDITION01 | Num | 8 | History of Eyes, Ear, Nose, or Throat condition at baseline |
| 172 | CARDIOVASCULAR_CONDITION01 | Num | 8 | History of Cardiovascular condition at baseline |
| 173 | GI_CONDITION01 | Num | 8 | History of Gastrointestinal condition at baseline |
| 174 | PULMONARY_VASCULAR_CONDITION01 | Num | 8 | History of Pulmonary/vascular condition at baseline |
| 175 | ONCOLOGY_HEMA_CONDITION01 | Num | 8 | History of Oncology/hematology condition at baseline |
| 176 | GENITOURINARY_CONDITION01 | Num | 8 | History of Genitourinary and Reproductive condition at baseline |
| 177 | ENDOCRINE_CONDITION01 | Num | 8 | History of Endocrine condition at baseline |
| 178 | MUSCULAR_SKELETAL_CONDITION01 | Num | 8 | History of Muscular/skeletal condition at baseline |
| 179 | DERMATOLOGY_CONDITION01 | Num | 8 | History of Dermatology condition at baseline |
| 180 | INFECTIOUS_DISEASE_CONDITION01 | Num | 8 | History of Infectious disease condition at baseline |
| 181 | PSYCHIATRIC_CONDITION01 | Num | 8 | History of Psychiatric condition at baseline |
| 182 | CB_FATHER01 | Num | 8 | Father has a reported history of chronic bronchitis at baseline (1=Yes, 2=No, Unknowns treated as missing) |
| 183 | CB_MOTHER01 | Num | 8 | Mother has a reported history of chronic bronchitis |
| 184 | EMPHYSEMA_FATHER01 | Num | 8 | Father has a reported history of Emphysema |
| 185 | EMPHYSEMA_MOTHER01 | Num | 8 | Mother has a reported history of Emphysema |
| 186 | COPD_FATHER01 | Num | 8 | Father has a reported history of COPD |
| 187 | COPD_MOTHER01 | Num | 8 | Mother has a reported history of COPD |
| 188 | ASTHMA_FATHER01 | Num | 8 | Father has a reported history of Asthma |
| 189 | ASTHMA_MOTHER01 | Num | 8 | Mother has a reported history of Asthma |
| 190 | LUNGCA_FATHER01 | Num | 8 | Father has a reported history of Lung Cancer |
| 191 | LUNGCA_MOTHER01 | Num | 8 | Mother has a reported history of Lung Cancer |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 192 | CB_DIAGNOSED01 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at baseline ( $\mathrm{Yes}=1, \mathrm{No}=0$, Unknowns treated as missing) |
| 193 | EMPHYSEMA_DIAGNOSED01 | Num | 8 | Emphysema diagnosed by a health professional reported at baseline |
| 194 | COPD_DIAGNOSED01 | Num | 8 | COPD diagnosed by a health professional reported at baseline |
| 195 | APNEA_DIAGNOSED01 | Num | 8 | Sleep apnea diagnosed by a health professional reported at baseline |
| 196 | MCQ_TOT01 | Num | 8 | Total MCQ score at baseline |
| 197 | VSASCORE01 | Num | 8 | Baseline veteran specific activity score |
| 198 | FEV1_BDRESPONSE_HANKINSON01 | Num | 8 | FEV1 Bronchodilator response, percent Hankinson 1999 |
| 199 | FEV1_BDRESPONSE_PELLERGINO01 | Num | 8 | FEV1 Bronchodilator response, volume (L) Pellergino 2005 (1=True, 0=False) |
| 200 | SMOKER_ECO_RECENT01 | Num | 8 | recent smoking identified on eCO measurement at baseline |
| 201 | COPD_FOUNDATION_RANKING01 | Char | 3 | COPD Foundation disease ranking |
| 202 | SMW_DSAT01 | Num | 8 | Oxygen desaturation with the six minute walk |
| 203 | SMW_HYPOX01 | Num | 8 | Hypoxemia with six minute walk |
| 204 | FAST_SCORE01 | Num | 8 | FAST Alcohol Screening Score (derived from BMH25-28) (NOTE: Did not differentiate between males and females, Used >8 drinks for first screening question) |
| 205 | PREFEV1_LT_LLN01 | Num | 8 | pre-bronchodilator FEV1 less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 206 | PREFVC_LT_LLN01 | Num | 8 | pre-bronchodilator FVC less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 207 | PREFEV1FVC_LT_LLN01 | Num | 8 | pre-bronchodilator FEV1/FVC less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 208 | FVC_BDRESPONSE_PCT01 | Num | 8 | FVC Bronchodilator response, percent baseline at Baseline |
| 209 | FVC_BDRESPONSE_VOL01 | Num | 8 | FVC Bronchodilator response, volume (ml) at Baseline |
| 210 | FVC_BDRESPONSE_HANKINSON01 | Num | 8 | FVC Bronchodilator response, percent Hankinson 1999 at Baseline |
| 211 | FVC_BDRESPONSE_PELLERGINO01 | Num | 8 | FVC Bronchodilator response, volume (L) Pellergino 2005 at Baseline (1=True, 0=False) |
| 212 | POSTFEV1_LT_LLN01 | Num | 8 | post-bronchodilator FEV1 less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 213 | POSTFVC_LT_LLN01 | Num | 8 | post-bronchodilator FVC less than LLN defined by Hankinson 1999 at Baseline (1=True, $0=$ False) |
| 214 | POSTFEV1FVC_LT_LLN01 | Num | 8 | post-bronchodilator FEV1/FVC less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 215 | POSTFEV1FVC_LT_70_01 | Num | 8 | post_bronchodilator FEV1/FVC ratio less than 0.7 at Baseline (1=True, 0=False) |
| 216 | PREFEF2575_LT_LLN01 | Num | 8 | pre-bronchodilator FEF25-75\% less than LLN defined by Hankinson 1999 at Baseline ( $1=$ True, $0=$ False) |
| 217 | POSTFEF2575_LT_LLN01 | Num | 8 | post-bronchodilator FEF25-75\% less than LLN defined by Hankinson 1999 at Baseline (1=True, 0=False) |
| 218 | CURRENT_SMOKER_V1 | Num | 8 | current smoking status at baseline |
| 219 | CURRENT_SMOKER_V2 | Num | 8 | current smoking status at Year 1 |
| 220 | CURRENT_SMOKER_V3 | Num | 8 | current smoking status at Year 2 |
| 221 | CURRENT_SMOKER_V4 | Num | 8 | current smoking status at Year 3 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 222 | BRONCH_DIAGNOSED01 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at baseline (Yes=1; No=0; Unknowns treated as missing) |
| 223 | MENOPAUSE01 | Char | 8 | Participant has reached menopause |
| 224 | SPUTUM_COLLECTED01 | Num | 8 | Sputum sample collected at baseline |
| 225 | SPUTUM_METHOD01 | Num | 8 | Method of specimen processing used for sputum collection at baseline |
| 226 | CBC_NEUTROPHIL_CNT01 | Num | 8 | CBC Neutrophil CNT at baseline |
| 227 | CBC_NEUTROPHIL_PCT01 | Num | 8 | CBC Neutrophil PCT at baseline |
| 228 | CBC_LYMPHOCYTE_CNT01 | Num | 8 | CBC lymphocyte CNT at baseline |
| 229 | CBC_LYMPHOCYTE_PCT01 | Num | 8 | CBC lymphocyte PCT at baseline |
| 230 | CBC_MONOCYTE_CNT01 | Num | 8 | CBC monocyte CNT at baseline |
| 231 | CBC_MONOCYTE_PCT01 | Num | 8 | CBC monocyte PCT at baseline |
| 232 | CBC_EOSINOPHIL_CNT01 | Num | 8 | CBC eosinophil CNT at baseline |
| 233 | CBC_EOSINOPHIL_PCT01 | Num | 8 | CBC eosinophil PCT at baseline |
| 234 | CBC_BASOPHIL_CNT01 | Num | 8 | CBC basophil CNT at baseline |
| 235 | CBC_BASOPHIL_PCT01 | Num | 8 | CBC basophil PCT at baseline |
| 236 | VGDF_EVER01 | Num | 8 | Ever exposed to vapors, gas, dust, or fumes at baseline |
| 237 | VGDF_YEARS01 | Num | 8 | Years exposed to vapors, gas, dust or fumes at baselined |
| 238 | LONGESTJOBDURATION01 | Num | 8 | Duration in years of longest job ever worked at baseline |
| 239 | VGDF_LONGESTJOB01 | Num | 8 | Exposed to vapors, gas, dust, or fumes during longest job |
| 240 | SMOKING_PACK_YEARS01 | Num | 8 | Smoking pack-years at Baseline |
| 241 | SMOKING_PACK_YEARS02 | Num | 8 | Smoking pack-years at Year 1 |
| 242 | SMOKING_PACK_YEARS03 | Num | 8 | Smoking pack-years at Year 2 |
| 243 | SMOKING_PACK_YEARS04 | Num | 8 | Smoking pack-years at Year 3 |
| 244 | PEX_TOT_365 | Num | 8 | total count of exacerbations in 365 days since entering the study |
| 245 | PEX_SEVERE_365 | Num | 8 | total count of exacerbations requiring ED visit or hospitalization in 365 days since entering the study |
| 246 | PEX_ANTI_365 | Num | 8 | total count of exacerbations treated with antibiotics in 365 days since entering the study |
| 247 | PEX_STEROID_365 | Num | 8 | total count of exacerbations treated with steroids in 365 days since entering the study |
| 248 | PEX_DRUG_365 | Num | 8 | total count of exacerbations treated with medications in 365 days since entering the study |
| 249 | PEX_HCU_365 | Num | 8 | total count of exacerbations requiring HCU in 365 days since entering the study |
| 250 | FOLLOWUP_DEATH_DAYS | Num | 8 | Days in study. If deceased, then it is the days in study until death |
| 251 | V1_LAC_R_APEX_BASE_SLP_910DIF | Num | 8 | lac_r_apex_base_slp_910dif |
| 252 | V1_LAC_R_APEX_BASE_SLP_950DIF | Num | 8 | lac_r_apex_base_slp_950dif |
| 253 | V1_LAC_L_APEX_BASE_SLP_910DIF | Num | 8 | lac_l_apex_base_slp_910dif |
| 254 | V1_LAC_L_APEX_BASE_SLP_950DIF | Num | 8 | lac_l_apex_base_slp_950dif |
| 255 | V2_LAC_R_APEX_BASE_SLP_910DIF | Num | 8 | lac_r_apex_base_slp_910dif |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 256 | V2_LAC_R_APEX_BASE_SLP_950DIF | Num | 8 | lac_r_apex_base_slp_950dif |
| 257 | V2_LAC_L_APEX_BASE_SLP_910DIF | Num | 8 | lac_l_apex_base_slp_910dif |
| 258 | V2_LAC_L_APEX_BASE_SLP_950DIF | Num | 8 | lac_l_apex_base_slp_950dif |
| 259 | V1_R_APEX_BASE_PCTBE910_RATIO | Num | 8 | r_apex_base_pctbe910_ratio |
| 260 | V1_R_APEX_BASE_PCTBE950_RATIO | Num | 8 | r_apex_base_pctbe950_ratio |
| 261 | V1_L_APEX_BASE_PCTBE910_RATIO | Num | 8 | l_apex_base_pctbe910_ratio |
| 262 | V1_L_APEX_BASE_PCTBE950_RATIO | Num | 8 | l_apex_base_pctbe950_ratio |
| 263 | V2_R_APEX_BASE_PCTBE910_RATIO | Num | 8 | r_apex_base_pctbe910_ratio |
| 264 | V2_R_APEX_BASE_PCTBE950_RATIO | Num | 8 | r_apex_base_pctbe950_ratio |
| 265 | V2_L_APEX_BASE_PCTBE910_RATIO | Num | 8 | l_apex_base_pctbe910_ratio |
| 266 | V2_L_APEX_BASE_PCTBE950_RATIO | Num | 8 | l_apex_base_pctbe950_ratio |
| 267 | V1_RB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB1+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 268 | V1_RB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB10+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 269 | V1_LB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB1+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 270 | V1_LB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB10+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 271 | V2_RB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB1 +1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 272 | V2_RB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB10+1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 273 | V2_LB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB1 +1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 274 | V2_LB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB10+1 segment average for visit 2 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 275 | V1_PI10_PATH_LEQ20_THICKEST | Num | 8 | Pi10_path_leq20_thickest |
| 276 | V1_PI10_PATH_LEQ20_AVG | Num | 8 | Pi10_path_leq20_avg |
| 277 | V2_PI10_PATH_LEQ20_THICKEST | Num | 8 | Pi10_path_leq20_thickest |
| 278 | V2_PI10_PATH_LEQ20_AVG | Num | 8 | Pi10_path_leq20_avg |
| 279 | BASELINE_ASTHMA_CHILD | Num | 8 | History of childhood asthma diagnosed by a physician reported at baseline |
| 280 | BASELINE_ASTHMA_DX | Num | 8 | History of asthma diagnosed by a physician reported at baseline |
| 281 | EMPH950_HIGH01 | Num | 8 | Emphysema > ULN (defined by reference equation) at baseline |
| 282 | LOG950_VIDA01 | Num | 8 | Log transformed uncorrected percent emphysema 950(VIDA) at baseline |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 283 | EMPH_ULN01 | Num | 8 | Upper limit of normal (defined by reference equation) at baseline |
| 284 | TOTALVOL_ULN_V1 | Num | 8 | Upper limit of normal for total lung volume based on race, age, <br> gender, height, and BMI at baseline |
| 285 | TOTALVOLUME_YES_V1 | Num | 8 | indicator of total volume based total volum (BOTH_TOT_V) and <br> totalvol_ULN at baseline |
| 286 | EMPH950_HIGH02 | Num | 8 | Emphysema > ULN (defined by reference equation) at year1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 304 | PEX_HCUDRUG0101 | Num | 8 | History of HCU exacerbation treated with antibiotics or steroids at baseline |
| 305 | PEX_HCUDRUG | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids since entering the study |
| 306 | PEX_HCUDRUG_365 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids in the 365 days since entering the study (a,b,e1,e2, f1,f2) |
| 307 | PEX_HCUDRUG_730 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 366 and 730 days since entering the study (a,b,e1,e2, f1,f2) |
| 308 | PEX_HCUDRUG_1095 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 731 and 1095 days since entering the study (a,b,e1,e2, f1,f2) |
| 309 | PEX_HCUDRUG_1460 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 1096 and 1460 days since entering the study (a,b,e1,e2, f1,f2) |
| 310 | PEX_HCUDRUG_1825 | Num | 8 | Total number of HCU exacerbation treated with antibiotics or steroids between 1461 and 1825 days since entering the study (a,b,e1,e2, f1,f2) |
| 311 | PEX_HCUDRUG_CAT_365 | Num | 8 | Category of none, 1, or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 365 days |
| 312 | PEX_HCUDRUG_CAT_730 | Num | 8 | Category of none, 1, or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 730 days |
| 313 | PEX_HCUDRUG_CAT_1095 | Num | 8 | Category of none, 1, or 2 or more HCU exacerbation treated with antibiotics or steroids in the first 1095 days |
| 314 | APNEA_DIAGNOSED02 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 315 | BRONCH_DIAGNOSED02 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 2 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 316 | CB_DIAGNOSED02 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 317 | COPD_DIAGNOSED02 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 318 | EMPHYSEMA_DIAGNOSED02 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 319 | CB_VISIT02 | Num | 8 | Chronic bronchitis identified at Visit 2 ( $1=$ Yes, 0=No, 2=Unknown) |
| 320 | APNEA_DIAGNOSED03 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 321 | BRONCH_DIAGNOSED03 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 322 | CB_DIAGNOSED03 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 3 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 323 | COPD_DIAGNOSED03 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 324 | EMPHYSEMA_DIAGNOSED03 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 325 | CB_VISIT03 | Num | 8 | Chronic bronchitis identified at Visit 3 ( $1=\mathrm{Yes} 0=\mathrm{No},, 2=$ Unknown) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 326 | APNEA_DIAGNOSED04 | Num | 8 | Sleep apnea diagnosed by a health professional reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 327 | BRONCH_DIAGNOSED04 | Num | 8 | Attack of bronchitis diagnosed by a health professional reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 328 | CB_DIAGNOSED04 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at Visit 4 (1=Yes, $0=$ No, $2=$ Unknown) |
| 329 | COPD_DIAGNOSED04 | Num | 8 | COPD Diagnosed by a health professional reported at Visit 4 (1=Yes, $0=$ No, 2=Unknown) |
| 330 | EMPHYSEMA_DIAGNOSED04 | Num | 8 | Emphysema diagnosed by a health professional reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 331 | CB_VISIT04 | Num | 8 | Chronic bronchitis identified at Visit $4(1=Y e s, 0=\mathrm{No}, 2=$ Unknown) |
| 332 | CARDIOVASCULAR_CONDITION02 | Num | 8 | Cardiovascular condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 333 | DERMATOLOGY_CONDITION02 | Num | 8 | Dermatological condition reported at Visit $2(1=Y e s, 0=$ No, 2=Unknown) |
| 334 | ENDOCRINE_CONDITION02 | Num | 8 | Endocrine condition reported at Visit 2 ( $1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 335 | EYES_ENT_CONDITION02 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 336 | GENITOURINARY_CONDITION02 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 337 | GI_CONDITION02 | Num | 8 | Gastrointestinal condition at Visit 2 ( $1=$ Yes, 0=No, 2=Unknown) |
| 338 | INFECTIOUS_DISEASE_CONDITION02 | Num | 8 | Infectious disease condition at Visit 2 (1=Yes, 0=No, 2=Unknown) |
| 339 | MUSCULAR_SKELETAL_CONDITION02 | Num | 8 | Muscular/skeletal condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 340 | ONCOLOGY_HEMA_CONDITION02 | Num | 8 | Oncology/hematology condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 341 | PSYCHIATRIC_CONDITION02 | Num | 8 | Psychiatric condition reported at Visit $2(1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 342 | PULMONARY_VASCULAR_CONDITION02 | Num | 8 | Pulmonary/vascular condition reported at Visit 2 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 343 | NEUROLOGIC_CONDITION02 | Num | 8 | History of neurologic condition reported at Visit $2(1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 344 | CARDIOVASCULAR_CONDITION03 | Num | 8 | Cardiovascular condition reported at Visit 3 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 345 | DERMATOLOGY_CONDITION03 | Num | 8 | Dermatological condition reported at Visit $3(1=Y e s, 0=$ No, 2=Unknown) |
| 346 | ENDOCRINE_CONDITION03 | Num | 8 | Endocrine condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 347 | EYES_ENT_CONDITION03 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 348 | GENITOURINARY_CONDITION03 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 349 | GI_CONDITION03 | Num | 8 | Gastrointestinal condition at Visit 3 (1=Yes, 0=No, 2=Unknown) |
| 350 | INFECTIOUS_DISEASE_CONDITION03 | Num | 8 | Infectious disease condition at Visit 3 (1=Yes, 0=No, 2=Unknown) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 351 | MUSCULAR_SKELETAL_CONDITION03 | Num | 8 | Muscular/skeletal condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 352 | ONCOLOGY_HEMA_CONDITION03 | Num | 8 | Oncology/hematology condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 353 | PSYCHIATRIC_CONDITION03 | Num | 8 | Psychiatric condition reported at Visit 3 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 354 | PULMONARY_VASCULAR_CONDITION03 | Num | 8 | Pulmonary/vascular condition reported at Visit 3 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 355 | NEUROLOGIC_CONDITION03 | Num | 8 | History of neurologic condition reported at Visit 3 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 356 | CARDIOVASCULAR_CONDITION04 | Num | 8 | Cardiovascular condition reported at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 357 | DERMATOLOGY_CONDITION04 | Num | 8 | Dermatological condition reported at Visit $4(1=Y e s, 0=$ No, 2=Unknown) |
| 358 | ENDOCRINE_CONDITION04 | Num | 8 | Endocrine condition reported at Visit 4 ( $1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 359 | EYES_ENT_CONDITION04 | Num | 8 | Eyes, Ear, Nose, or Throat condition reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 360 | GENITOURINARY_CONDITION04 | Num | 8 | Genitourinary and Reproductive condition reported at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 361 | GI_CONDITION04 | Num | 8 | Gastrointestinal condition at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 362 | INFECTIOUS_DISEASE_CONDITION04 | Num | 8 | Infectious disease condition at Visit 4 (1=Yes, 0=No, 2=Unknown) |
| 363 | MUSCULAR_SKELETAL_CONDITION04 | Num | 8 | Muscular/skeletal condition reported at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 364 | ONCOLOGY_HEMA_CONDITION04 | Num | 8 | Oncology/hematology condition reported at Visit 4 ( $1=$ Yes, $0=$ No, 2=Unknown) |
| 365 | PSYCHIATRIC_CONDITION04 | Num | 8 | Psychiatric condition reported at Visit $4(1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 366 | PULMONARY_VASCULAR_CONDITION04 | Num | 8 | Pulmonary/vascular condition reported at Visit 4 ( $1=\mathrm{Yes}, 0=$ No, 2=Unknown) |
| 367 | NEUROLOGIC_CONDITION04 | Num | 8 | History of neurologic condition reported at Visit $4(1=\mathrm{Yes}, 0=\mathrm{No}$, 2=Unknown) |
| 368 | INHALEDBRONCHODILATORS01 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 1 (1=Yes, 0=No, 2=Unknown) |
| 369 | NEBULIZEDBRONCHODILATORS01 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 1 (1=Yes, 0=No, 2=Unknown) |
| 370 | INHALEDSTEROIDS01 | Char | 1 | Inhaled steroids used in the last three months at visit 1 ( $1=\mathrm{Yes}$, $0=$ No, 2=Unknown) |
| 371 | INHALEDBRONCHODILATORS02 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 2 (1=Yes, 0=No, 2=Unknown) |
| 372 | NEBULIZEDBRONCHODILATORS02 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 2 (1=Yes, 0=No, 2=Unknown) |
| 373 | INHALEDSTEROIDS02 | Char | 1 | Inhaled steroids used in the last three months at visit $2(1=\mathrm{Yes}$, $0=$ No, 2=Unknown) |
| 374 | INHALEDBRONCHODILATORS03 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 3 (1=Yes, 0=No, 2=Unknown) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 375 | NEBULIZEDBRONCHODILATORS03 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 3 (1=Yes, 0=No, 2=Unknown) |
| 376 | INHALEDSTEROIDS03 | Char | 1 | Inhaled steroids used in the last three months at visit 3 ( $1=$ Yes, $0=$ No, $2=$ Unknown) |
| 377 | INHALEDBRONCHODILATORS04 | Char | 1 | Inhaled bronchodilators used in the last three months at visit 4 (1=Yes, 0=No, 2=Unknown) |
| 378 | NEBULIZEDBRONCHODILATORS04 | Char | 1 | Nebulized bronchodilators usage in the last three months at visit 4 (1=Yes, 0=No, 2=Unknown) |
| 379 | INHALEDSTEROIDS04 | Char | 1 | Inhaled steroids used in the last three months at visit 4 ( $1=\mathrm{Yes}$, $0=$ No, 2=Unknown) |
| 380 | NEUROLOGIC_CONDITION01 | Num | 8 | History of neurologic condition reported at baseline |
| 381 | DAYS_BTW_BASELINE_Y1 | Num | 8 | Number of days between Baseline and Year 1 visit |
| 382 | DAYS_BTW_Y1_Y2 | Num | 8 | Number of days between Year 1 and Year 2 visit |
| 383 | DAYS_BTW_Y2_Y3 | Num | 8 | Number of days between Year 1 and Year 2 visit |
| 384 | FOLLOWUP_DAYS_ALL | Num | 8 | Days of follow-up in study including all study contacts |
| 385 | GOLD_CAT2013_0101 | Char | 1 | Baseline GOLD status revised using the 2013 guidelines and CAT |
| 386 | GOLD_CAT2017_0101 | Char | 1 | Baseline GOLD status using the 2017 guidelines and CAT |
| 387 | GOLD_MMRC2013_0101 | Char | 1 | Baseline GOLD status using the 2013 guidelines and mMRC |
| 388 | GOLD_MMRC2017_0101 | Char | 1 | Baseline GOLD status using the 2017 guidelines and mMRC |
| 389 | PEX_SEVERE_730 | Num | 8 | Total count of exacerbations between 366 and 730 days (f, g) |
| 390 | PEX_SEVERE_1095 | Num | 8 | Total count of exacerbations between 731 and 1095 days (f, g) |
| 391 | PEX_SEVERE_1460 | Num | 8 | Total count of exacerbations between 1096 and 1460 days (f, g) |
| 392 | PEX_SEVERE_1825 | Num | 8 | Total count of exacerbations between 1461 and 1825 days (f, g) |
| 393 | GLI_ETHNICITY | Num | 8 | Ethnicity category for GLI spirometric calculations |
| 394 | V1_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 395 | V1_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1 Percent Predicted Pre-Bronchodilator |
| 396 | V1_GLI_FEV1_LLN | Num | 8 | Visit 1 GLI Reference value for FEV1 Lower Limit of Normal |
| 397 | V1_GLI_FVC_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FVC Z-Score Pre-Bronchodilator |
| 398 | V1_GLI_FVC_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FVC Percent Predicted Pre-Bronchodilator |
| 399 | V1_GLI_FVC_LLN | Num | 8 | Visit 1 GLI Reference value for FVC Lower Limit of Normal |
| 400 | V1_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Z-Score Pre-Bronchodilator |
| 401 | V1_GLI_FEV1FVC_LLN | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Lower Limit of Normal |
| 402 | V1_GLI_FEV1FVC_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Percent Predicted Pre-Bronchodilator |
| 403 | V1_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 404 | V1_GLI_FEF2575_LLN | Num | 8 | Visit 1 GLI Reference value for FEF2575 Lower Limit of Normal |
| 405 | V1_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 406 | V1_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 407 | V1_GLI_FEF75_LLN | Num | 8 | Visit 1 GLI Reference value for FEF75 Lower Limit of Normal |
| 408 | V1_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEF75 Percent Predicted Pre-Bronchodilator |
| 409 | V2_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 2 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 410 | V2_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 2 GLI Reference value for FEV1 Percent Predicted Pre-Bronchodilator |
| 411 | V2_GLI_FEV1_LLN | Num | 8 | Visit 2 GLI Reference value for FEV1 Lower Limit of Normal |
| 412 | V2_GLI_FVC_Z_SCORE_PRE | Num | 8 | Visit 2 GLI Reference value for FVC Z-Score Pre-Bronchodilator |
| 413 | V2_GLI_FVC_PCT_PRED_PRE | Num | 8 | Visit 2 GLI Reference value for FVC Percent Predicted Pre-Bronchodilator |
| 414 | V2_GLI_FVC_LLN | Num | 8 | Visit 2 GLI Reference value for FVC Lower Limit of Normal |
| 415 | V2_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Z-Score Pre-Bronchodilator |
| 416 | V2_GLI_FEV1FVC_LLN | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Lower Limit of Normal |
| 417 | V2_GLI_FEV1FVC_PCT_PRED_PRE | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Percent Predicted Pre-Bronchodilator |
| 418 | V2_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 2 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 419 | V2_GLI_FEF2575_LLN | Num | 8 | Visit 2 GLI Reference value for FEF2575 Lower Limit of Normal |
| 420 | V2_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 2 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 421 | V2_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 2 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |
| 422 | V2_GLI_FEF75_LLN | Num | 8 | Visit 2 GLI Reference value for FEF75 Lower Limit of Normal |
| 423 | V2_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 2 GLI Reference value for FEF75 Percent Predicted Pre-Bronchodilator |
| 424 | V3_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 425 | V3_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1 Percent Predicted Pre-Bronchodilator |
| 426 | V3_GLI_FEV1_LLN | Num | 8 | Visit 3 GLI Reference value for FEV1 Lower Limit of Normal |
| 427 | V3_GLI_FVC_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FVC Z-Score Pre-Bronchodilator |
| 428 | V3_GLI_FVC_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FVC Percent Predicted Pre-Bronchodilator |
| 429 | V3_GLI_FVC_LLN | Num | 8 | Visit 3 GLI Reference value for FVC Lower Limit of Normal |
| 430 | V3_GLI_FEV1FVC_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Z-Score Pre-Bronchodilator |
| 431 | V3_GLI_FEV1FVC_LLN | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Lower Limit of Normal |
| 432 | V3_GLI_FEV1FVC_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Percent Predicted Pre-Bronchodilator |
| 433 | V3_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 434 | V3_GLI_FEF2575_LLN | Num | 8 | Visit 3 GLI Reference value for FEF2575 Lower Limit of Normal |
| 435 | V3_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 436 | V3_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 3 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 437 | V3_GLI_FEF75_LLN | Num | 8 | Visit 3 GLI Reference value for FEF75 Lower Limit of Normal |
| 438 | V3_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 3 GLI Reference value for FEF75 Percent Predicted <br> Pre-Bronchodilator |
| 439 | V4_GLI_FEV1_Z_SCORE_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1 Z-Score Pre-Bronchodilator |
| 440 | V4_GLI_FEV1_PCT_PRED_PRE | Num | 8 | Visit 4 GLI Reference value for FEV1 Percent Predicted |
| Pre-Bronchodilator |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 465 | V2_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 466 | V2_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 467 | V2_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 468 | V2_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 469 | V2_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 470 | V2_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 471 | V2_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 472 | V2_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 2 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 473 | V2_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 2 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |
| 474 | V3_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 475 | V3_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 476 | V3_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 477 | V3_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 478 | V3_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 479 | V3_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 480 | V3_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 481 | V3_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 482 | V3_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 3 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 483 | V3_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 3 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |
| 484 | V4_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 485 | V4_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 486 | V4_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 487 | V4_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 488 | V4_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 489 | V4_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 490 | V4_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEF2575 Z-Score <br> Post-Bronchodilator |
| 491 | V4_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEF2575 Percent Predicted <br> Post-Bronchodilator |
| 492 | V4_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 4 GLI Reference value for FEF75 Z-Score <br> Post-Bronchodilator |
| 493 | V4_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 4 GLI Reference value for FEF75 Percent Predicted <br> Post-Bronchodilator |

## Data Set Name: postv4_fuq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | EVENTNAME | Char | 30 | Event name |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | FUQ01 | Char | 1 | 1) (Do not ask participant) Participant status (choose one): |
| 6 | FUQ01C | Char | 1 | 1c) Do you know if (insert decedent's name) was hospitalized or visited an emergency room for any reason since (date of last contact) and his/her death? |
| 7 | FUQ02 | Char | 1 | 2) Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 8 | FUQ02A | Num | 8 | 2a) How many episodes of chest trouble flare ups have you had since (date)? |
| 9 | FUQ3A | Char | 1 | 3a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 10 | FUQ3B | Char | 1 | 3b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 11 | FUQ3C | Char | 1 | 3c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 12 | FUQ3D | Char | 1 | 3d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 13 | FUQ3E | Char | 1 | 3e) Were you evaluated in a physician's office or urgent care? |
| 14 | FUQ03E1 | Num | 8 | 3e1) An additional antibiotic |
| 15 | FUQ03E2 | Num | 8 | 3e2) Additional steroids |
| 16 | FUQ03E3 | Num | 8 | 3e3) Don't know |
| 17 | FUQ03E4 | Num | 8 | 3e4) Don't remember |
| 18 | FUQ03F | Char | 1 | 3f) Were you evaluated in an Emergency Department? |
| 19 | FUQ03F1 | Num | 8 | 3f1) An additional antibiotic |
| 20 | FUQ03F2 | Num | 8 | 3f2) Additional steroids |
| 21 | FUQ03F3 | Num | 8 | 3f3) Don't know |
| 22 | FUQ03F4 | Num | 8 | 3f4) Don't remember |
| 23 | FUQ03G | Char | 1 | $3 \mathrm{~g})$ Were you admitted to the hospital? |
| 24 | FUQ05 | Char | 1 | 5) (do not ask) Did the participant have a second episode? |
| 25 | FUQ06A | Char | 1 | 6a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 26 | FUQ06B | Char | 1 | 6b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 27 | FUQ06C | Char | 1 | 6c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 28 | FUQ06D | Char | 1 | 6d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 29 | FUQ06E | Char | 1 | 6e) Were you evaluated in a physician's office or urgent care? |
| 30 | FUQ06E1 | Num | 8 | 6e1) An additional antibiotic |
| 31 | FUQ06E2 | Num | 8 | 6e2) Additional steroids |
| 32 | FUQ06E3 | Num | 8 | 6e3) Don't know |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 33 | FUQ06E4 | Num | 8 | 6e4) Don't remember |
| 34 | FUQ06F | Char | 1 | 6f) Were you evaluated in an Emergency Department? |
| 35 | FUQ06F1 | Num | 8 | 6f1) An additional antibiotic |
| 36 | FUQ06F2 | Num | 8 | 6f2) Additional steroids |
| 37 | FUQ06F3 | Num | 8 | 6f3) Don't know |
| 38 | FUQ06F4 | Num | 8 | 6f4) Don't remember |
| 39 | FUQ06G | Char | 1 | $6 \mathrm{~g})$ Were you admitted to the hospital? |
| 40 | FUQ08 | Char | 1 | 8) (do not ask) Did the participant have a third episode? |
| 41 | FUQ09A | Char | 1 | 9a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 42 | FUQ09B | Char | 1 | 9b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 43 | FUQ09C | Char | 1 | 9c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 44 | FUQ09D | Char | 1 | 9d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 45 | FUQ09E | Char | 1 | 9e) Were you evaluated in a physician's office or urgent care? |
| 46 | FUQ09E1 | Num | 8 | 9e1) An additional antibiotic |
| 47 | FUQ09E2 | Num | 8 | 9e2) Additional steroids |
| 48 | FUQ09E3 | Num | 8 | 9e3) Don't know |
| 49 | FUQ09E4 | Num | 8 | 9e4) Don't remember |
| 50 | FUQ09F | Char | 1 | 9f) Were you evaluated in an Emergency Department? |
| 51 | FUQ09F1 | Num | 8 | 9f1) An additional antibiotic |
| 52 | FUQ09F2 | Num | 8 | 9f2) Additional steroids |
| 53 | FUQ09F3 | Num | 8 | 9f3) Don't know |
| 54 | FUQ09F4 | Num | 8 | 9f4) Don't remember |
| 55 | FUQ09G | Char | 1 | 9g) Were you admitted to the hospital? |
| 56 | FUQ11 | Char | 1 | 11) (do not ask) Did the participant have a fourth episode? |
| 57 | FUQ12A | Char | 1 | 12a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 58 | FUQ12B | Char | 1 | 12b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 59 | FUQ12C | Char | 1 | 12c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 60 | FUQ12D | Char | 1 | 12d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 61 | FUQ12E | Char | 1 | 12e) Were you evaluated in a physician's office or urgent care? |
| 62 | FUQ12E1 | Num | 8 | 12e1) An additional antibiotic |
| 63 | FUQ12E2 | Num | 8 | 12e2) Additional steroids |
| 64 | FUQ12E3 | Num | 8 | 12e3) Don't know |
| 65 | FUQ12E4 | Num | 8 | 12e4) Don't remember |
| 66 | FUQ12F | Char | 1 | 12f) Were you evaluated in an Emergency Department? |
| 67 | FUQ12F1 | Num | 8 | 12f1) An additional antibiotic |
| 68 | FUQ12F2 | Num | 8 | 12f2) Additional steroids |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 69 | FUQ12F3 | Num | 8 | 12f3) Don't know |
| 70 | FUQ12F4 | Num | 8 | 12f4) Don't remember |
| 71 | FUQ12G | Char | 1 | 12 g ) Were you admitted to the hospital? |
| 72 | FUQ14 | Char | 1 | 14) (do not ask) Did the participant have a fifth episode? |
| 73 | FUQ15A | Char | 1 | 15a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 74 | FUQ15B | Char | 1 | 15b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 75 | FUQ15C | Char | 1 | 15c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 76 | FUQ15D | Char | 1 | 15d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 77 | FUQ15E | Char | 1 | 15e) Were you evaluated in a physician's office or urgent care? |
| 78 | FUQ15E1 | Num | 8 | 15e1) An additional antibiotic |
| 79 | FUQ15E2 | Num | 8 | 15e2) Additional steroids |
| 80 | FUQ15E3 | Num | 8 | 15e3) Don't know |
| 81 | FUQ15E4 | Num | 8 | 15e4) Don't remember |
| 82 | FUQ15F | Char | 1 | 15f) Were you evaluated in an Emergency Department? |
| 83 | FUQ15F1 | Num | 8 | 15f1) An additional antibiotic |
| 84 | FUQ15F2 | Num | 8 | 15f2) Additional steroids |
| 85 | FUQ15F3 | Num | 8 | 15f3) Don't know |
| 86 | FUQ15F4 | Num | 8 | 15f4) Don't remember |
| 87 | FUQ15G | Char | 1 | 15 g ) Were you admitted to the hospital? |
| 88 | FUQ17 | Char | 1 | 17) (do not ask) Did the participant have a sixth episode? |
| 89 | FUQ18A | Char | 1 | 18a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 90 | FUQ18B | Char | 1 | 18b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 91 | FUQ18C | Char | 1 | 18c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 92 | FUQ18D | Char | 1 | 18d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 93 | FUQ18E | Char | 1 | 18e) Were you evaluated in a physician's office or urgent care? |
| 94 | FUQ18E1 | Num | 8 | 18e1) An additional antibiotic |
| 95 | FUQ18E2 | Num | 8 | 18e2) Additional steroids |
| 96 | FUQ18E3 | Num | 8 | 18e3) Don't know |
| 97 | FUQ18E4 | Num | 8 | 18e4) Don't remember |
| 98 | FUQ18F | Char | 1 | 18f) Were you evaluated in an Emergency Department? |
| 99 | FUQ18F1 | Num | 8 | 18f1) An additional antibiotic |
| 100 | FUQ18F2 | Num | 8 | 18f2) Additional steroids |
| 101 | FUQ18F3 | Num | 8 | 18f3) Don't know |
| 102 | FUQ18F4 | Num | 8 | 18f4) Don't remember |
| 103 | FUQ18G | Char | 1 | 18 g ) Were you admitted to the hospital? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 104 | FUQ20 | Char | 1 | Since your last (center visit or telephone contact) on (date), have you at any time been admitted <br> to a hospital (For COPD Participants: for any reason other than a chest flare up)? |
| 105 | FUQ20A | Num | 8 | 20a) How many hospitalizations have you had since (date)? |
| 106 | FUQ21E | Char | 1 | 21e) Were you admitted to a hospital any other time since your last (center visit or telephone |
| contact)? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 139 | FUQ32A1_MONTHS | Num | 8 | When did you start living here? - Months from enrollment |

## Data Set Name: q3_33_fuq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | EVENTNAME | Char | 30 | Event name |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | FUQ01 | Char | 1 | 1) (Do not ask participant) Participant status (choose one): |
| 6 | FUQ01C | Char | 1 | 1c) Do you know if (insert decedent's name) was hospitalized or visited an emergency room for any reason since (date of last contact) and his/her death? |
| 7 | FUQ02 | Char | 1 | 2) Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 8 | FUQ02A | Num | 8 | 2a) How many episodes of chest trouble flare ups have you had since (date)? |
| 9 | FUQ3A | Char | 1 | 3a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 10 | FUQ3B | Char | 1 | 3b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 11 | FUQ3C | Char | 1 | 3c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 12 | FUQ3D | Char | 1 | 3d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 13 | FUQ3E | Char | 1 | 3e) Were you evaluated in a physician's office or urgent care? |
| 14 | FUQ03E1 | Num | 8 | 3e1) An additional antibiotic |
| 15 | FUQ03E2 | Num | 8 | 3e2) Additional steroids |
| 16 | FUQ03E3 | Num | 8 | 3e3) Don't know |
| 17 | FUQ03E4 | Num | 8 | 3e4) Don't remember |
| 18 | FUQ03F | Char | 1 | 3f) Were you evaluated in an Emergency Department? |
| 19 | FUQ03F1 | Num | 8 | 3f1) An additional antibiotic |
| 20 | FUQ03F2 | Num | 8 | 3f2) Additional steroids |
| 21 | FUQ03F3 | Num | 8 | 3f3) Don't know |
| 22 | FUQ03F4 | Num | 8 | 3f4) Don't remember |
| 23 | FUQ03G | Char | 1 | $3 \mathrm{~g})$ Were you admitted to the hospital? |
| 24 | FUQ05 | Char | 1 | 5) (do not ask) Did the participant have a second episode? |
| 25 | FUQ06A | Char | 1 | 6a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 26 | FUQ06B | Char | 1 | 6b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 27 | FUQ06C | Char | 1 | 6c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 28 | FUQ06D | Char | 1 | 6d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 29 | FUQ06E | Char | 1 | 6e) Were you evaluated in a physician's office or urgent care? |
| 30 | FUQ06E1 | Num | 8 | 6e1) An additional antibiotic |
| 31 | FUQ06E2 | Num | 8 | 6e2) Additional steroids |
| 32 | FUQ06E3 | Num | 8 | 6e3) Don't know |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 33 | FUQ06E4 | Num | 8 | 6e4) Don't remember |
| 34 | FUQ06F | Char | 1 | 6f) Were you evaluated in an Emergency Department? |
| 35 | FUQ06F1 | Num | 8 | 6f1) An additional antibiotic |
| 36 | FUQ06F2 | Num | 8 | 6f2) Additional steroids |
| 37 | FUQ06F3 | Num | 8 | 6f3) Don't know |
| 38 | FUQ06F4 | Num | 8 | 6f4) Don't remember |
| 39 | FUQ06G | Char | 1 | 6 g ) Were you admitted to the hospital? |
| 40 | FUQ08 | Char | 1 | 8) (do not ask) Did the participant have a third episode? |
| 41 | FUQ09A | Char | 1 | 9a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 42 | FUQ09B | Char | 1 | 9b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 43 | FUQ09C | Char | 1 | 9c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 44 | FUQ09D | Char | 1 | 9d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 45 | FUQ09E | Char | 1 | 9e) Were you evaluated in a physician's office or urgent care? |
| 46 | FUQ09E1 | Num | 8 | 9e1) An additional antibiotic |
| 47 | FUQ09E2 | Num | 8 | 9e2) Additional steroids |
| 48 | FUQ09E3 | Num | 8 | 9e3) Don't know |
| 49 | FUQ09E4 | Num | 8 | 9e4) Don't remember |
| 50 | FUQ09F | Char | 1 | 9f) Were you evaluated in an Emergency Department? |
| 51 | FUQ09F1 | Num | 8 | 9f1) An additional antibiotic |
| 52 | FUQ09F2 | Num | 8 | 9f2) Additional steroids |
| 53 | FUQ09F3 | Num | 8 | 9f3) Don't know |
| 54 | FUQ09F4 | Num | 8 | 9f4) Don't remember |
| 55 | FUQ09G | Char | 1 | 9g) Were you admitted to the hospital? |
| 56 | FUQ11 | Char | 1 | 11) (do not ask) Did the participant have a fourth episode? |
| 57 | FUQ12A | Char | 1 | 12a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 58 | FUQ12B | Char | 1 | 12b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 59 | FUQ12C | Char | 1 | 12c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 60 | FUQ12D | Char | 1 | 12d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 61 | FUQ12E | Char | 1 | 12e) Were you evaluated in a physician's office or urgent care? |
| 62 | FUQ12E1 | Num | 8 | 12e1) An additional antibiotic |
| 63 | FUQ12E2 | Num | 8 | 12e2) Additional steroids |
| 64 | FUQ12E3 | Num | 8 | 12e3) Don't know |
| 65 | FUQ12E4 | Num | 8 | 12e4) Don't remember |
| 66 | FUQ12F | Char | 1 | 12f) Were you evaluated in an Emergency Department? |
| 67 | FUQ12F1 | Num | 8 | 12f1) An additional antibiotic |
| 68 | FUQ12F2 | Num | 8 | 12f2) Additional steroids |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 69 | FUQ12F3 | Num | 8 | 12f3) Don't know |
| 70 | FUQ12F4 | Num | 8 | 12f4) Don't remember |
| 71 | FUQ12G | Char | 1 | 12 g ) Were you admitted to the hospital? |
| 72 | FUQ14 | Char | 1 | 14) (do not ask) Did the participant have a fifth episode? |
| 73 | FUQ15A | Char | 1 | 15a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 74 | FUQ15B | Char | 1 | 15b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 75 | FUQ15C | Char | 1 | 15c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 76 | FUQ15D | Char | 1 | 15d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 77 | FUQ15E | Char | 1 | 15e) Were you evaluated in a physician's office or urgent care? |
| 78 | FUQ15E1 | Num | 8 | 15e1) An additional antibiotic |
| 79 | FUQ15E2 | Num | 8 | 15e2) Additional steroids |
| 80 | FUQ15E3 | Num | 8 | 15e3) Don't know |
| 81 | FUQ15E4 | Num | 8 | 15e4) Don't remember |
| 82 | FUQ15F | Char | 1 | 15f) Were you evaluated in an Emergency Department? |
| 83 | FUQ15F1 | Num | 8 | 15f1) An additional antibiotic |
| 84 | FUQ15F2 | Num | 8 | 15f2) Additional steroids |
| 85 | FUQ15F3 | Num | 8 | 15f3) Don't know |
| 86 | FUQ15F4 | Num | 8 | 15f4) Don't remember |
| 87 | FUQ15G | Char | 1 | 15 g ) Were you admitted to the hospital? |
| 88 | FUQ17 | Char | 1 | 17) (do not ask) Did the participant have a sixth episode? |
| 89 | FUQ18A | Char | 1 | 18a) Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 90 | FUQ18B | Char | 1 | 18b) Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 91 | FUQ18C | Char | 1 | 18c) Did you take additional antibiotics but without contacting a healthcare provider? |
| 92 | FUQ18D | Char | 1 | 18d) Did you take additional oral steroids but without contacting a healthcare provider? |
| 93 | FUQ18E | Char | 1 | 18e) Were you evaluated in a physician's office or urgent care? |
| 94 | FUQ18E1 | Num | 8 | 18e1) An additional antibiotic |
| 95 | FUQ18E2 | Num | 8 | 18e2) Additional steroids |
| 96 | FUQ18E3 | Num | 8 | 18e3) Don't know |
| 97 | FUQ18E4 | Num | 8 | 18e4) Don't remember |
| 98 | FUQ18F | Char | 1 | 18f) Were you evaluated in an Emergency Department? |
| 99 | FUQ18F1 | Num | 8 | 18f1) An additional antibiotic |
| 100 | FUQ18F2 | Num | 8 | 18f2) Additional steroids |
| 101 | FUQ18F3 | Num | 8 | 18f3) Don't know |
| 102 | FUQ18F4 | Num | 8 | 18f4) Don't remember |
| 103 | FUQ18G | Char | 1 | 18 g ) Were you admitted to the hospital? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 104 | FUQ20 | Char | 1 | Since your last (center visit or telephone contact) on (date), have you at any time been admitted to a hospital (For COPD Participants: for any reason other than a chest flare up)? |
| 105 | FUQ20A | Num | 8 | 20a) How many hospitalizations have you had since (date)? |
| 106 | FUQ21E | Char | 1 | 21e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 107 | FUQ22E | Char | 1 | 22e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 108 | FUQ23E | Char | 1 | 23e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 109 | FUQ24E | Char | 1 | 24e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 110 | FUQ25E | Char | 1 | 25e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 111 | FUQ26E | Char | 1 | 26e) Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |
| 112 | FUQ27 | Char | 1 | 27) Did your doctor put you on oxygen? |
| 113 | FUQ28 | Char | 1 | 28) Have you been listed for or received a lung transplant? |
| 114 | FUQ29 | Char | 1 | 29) Are you currently smoking cigarettes? |
| 115 | FUQ30 | Char | 1 | 30) Since your last (clinic visit or telephone contact) on (date), have you been diagnosed with other medical problems or been injured? |
| 116 | FUQ31A | Char | 1 | 31a) Lung cancer |
| 117 | FUQ31B | Char | 1 | 31b) Other type of cancer |
| 118 | FUQ31B1 | Char | 20 | If so, what type? |
| 119 | FUQ31C | Char | 1 | 31c) Diabetes |
| 120 | FUQ31D | Char | 1 | 31d) Blood Clots |
| 121 | FUQ31E | Char | 1 | 31e) Osteoporosis |
| 122 | FUQ31F | Char | 1 | 31f) Broken Hip |
| 123 | FUQ31G | Char | 1 | 31g) Heart attack or myocardial infarction |
| 124 | FUQ31H | Char | 1 | 31h) Stroke |
| 125 | FUQ31I | Char | 1 | 31i) Coronary artery disease (atherosclerosis) |
| 126 | FUQ34A | Num | 8 | Morning |
| 127 | FUQ34B | Num | 8 | Afternoon |
| 128 | FUQ34C | Num | 8 | Evening |
| 129 | FUQ36A | Num | 8 | Morning |
| 130 | FUQ36B | Num | 8 | Afternoon |
| 131 | FUQ36C | Num | 8 | Evening |
| 132 | VERSION | Char | 21 | Version |
| 133 | FUQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 134 | FUQ01A_DAYS | Num | 8 | Date of death - Days from enrollment |
| 135 | FUQ04A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 136 | FUQ07A_DAYS | Num | 8 | Event Date - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 137 | FUQ10A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 138 | FUQ13A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 139 | FUQ21A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 140 | FUQ22A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 141 | FUQ23A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 142 | FUQ24A_DAYS | Num | 8 | Event Date - Days from enrollment |
| 143 | FUQ25A_DAYS | Num | 8 | Event Date - Days from enrollment |

Data Set Name: v1_ant_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ANT01 | Char | 1 | ANT01 Assessment of ability to stand |
| 5 | ANT02 | Num | 8 | ANT02 Standing Height (cm) |
| 6 | ANT03 | Num | 8 | ANT03 Weight (kg) |
| 7 | ANT04 | Num | 8 | ANT04 BMI |
| 8 | ANT05 | Num | 8 | ANT05 Arm Span (cm) |
| 9 | ANT06A | Num | 8 | ANT06A Waist (cm) |
| 10 | ANT06B | Num | 8 | ANT06B Hip (cm) |
| 11 | ANT06C | Num | 8 | ANT06C Neck (cm) |
| 12 | VERSION | Char | 21 | Version |
| 13 | ANT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_beq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | BEQ01 | Char | 1 | BEQ01 Breathing Problems last 12 months |
| 5 | BEQ02 | Num | 8 | BEQ02 Number of breathing problem episodes last 12 months |
| 6 | BEQ03A | Char | 1 | BEQ03A First episode: additional antibiotics after contacting healthcare provider |
| 7 | BEQ03B | Char | 1 | BEQ03B First episode: additional oral steroids after contacting healthcare provider |
| 8 | BEQ03C | Char | 1 | BEQ03C First episode: additional antibiotics without contacting healthcare provider |
| 9 | BEQ03D | Char | 1 | BEQ03D First episode: additional oral steroids without contacting healthcare provider |
| 10 | BEQ03E | Char | 1 | BEQ03E First episode: evaluated at physician's office or urgent care |
| 11 | BEQ03E1 | Num | 8 | BEQ03E1 First episode: additional antibiotics after office visit |
| 12 | BEQ03E2 | Num | 8 | BEQ03E2 First episode: additional oral steroids after office visit |
| 13 | BEQ03E3 | Num | 8 | BEQ03E3 First episode: do not know treatment after office visit |
| 14 | BEQ03E4 | Num | 8 | BEQ03E4 First episode: do not remember treatment after office visit |
| 15 | BEQ03F | Char | 1 | BEQ03F First episode: evaluated in an Emergency Department |
| 16 | BEQ03F1 | Num | 8 | BEQ03F1 First episode: additional antibiotics after ED visit |
| 17 | BEQ03F2 | Num | 8 | BEQ03F2 First episode: additional oral steroids after ED visit |
| 18 | BEQ03F3 | Num | 8 | BEQ03F3 First episode: do not know treatment after ED visit |
| 19 | BEQ03F4 | Num | 8 | BEQ03F4 First episode: do not remember treatment after ED visit |
| 20 | BEQ03G | Char | 1 | BEQ03G First episode: admitted to hospital |
| 21 | BEQ04 | Char | 1 | BEQ04 Was there a second episode of breathing problems |
| 22 | BEQ05A | Char | 1 | BEQ05A Second episode: additional antibiotics after contacting healthcare provider |
| 23 | BEQ05B | Char | 1 | BEQ05B Second episode: additional oral steroids after contacting healthcare provider |
| 24 | BEQ05C | Char | 1 | BEQ05C Second episode: additional antibiotics without contacting healthcare provider |
| 25 | BEQ05D | Char | 1 | BEQ05D Second episode: additional oral steroids without contacting healthcare provider |
| 26 | BEQ05E | Char | 1 | BEQ05E Second episode: evaluated at physician's office or urgent care |
| 27 | BEQ05E1 | Num | 8 | BEQ05E1 Second episode: additional antibiotics after office visit |
| 28 | BEQ05E2 | Num | 8 | BEQ05E2 Second episode: additional oral steroids after office visit |
| 29 | BEQ05E3 | Num | 8 | BEQ05E3 Second episode: do not know treatment after office visit |
| 30 | BEQ05E4 | Num | 8 | BEQ05E4 Second episode: do not remember treatment after office visit |
| 31 | BEQ05F | Char | 1 | BEQ05F Second episode: evaluated in an Emergency Department |
| 32 | BEQ05F1 | Num | 8 | BEQ05F1 Second episode: additional antibiotics after ED visit |
| 33 | BEQ05F2 | Num | 8 | BEQ05F2 Second episode: additional oral steroids after ED visit |
| 34 | BEQ05F3 | Num | 8 | BEQ05F3 Second episode: do not know treatment after ED visit |
| 35 | BEQ05F4 | Num | 8 | BEQ05F4 Second episode: do not remember treatment after ED visit |
| 36 | BEQ05G | Char | 1 | BEQ05G Second episode: admitted to hospital |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BEQ06 | Char | 1 | BEQ06 Was there a Third episode of breathing problems |
| 38 | BEQ07A | Char | 1 | BEQ07A Third episode: additional antibiotics after contacting healthcare provider |
| 39 | BEQ07B | Char | 1 | BEQ07B Third episode: additional oral steroids after contacting healthcare provider |
| 40 | BEQ07C | Char | 1 | BEQ07C Third episode: additional antibiotics without contacting healthcare provider |
| 41 | BEQ07D | Char | 1 | BEQ07D Third episode: additional oral steroids without contacting healthcare provider |
| 42 | BEQ07E | Char | 1 | BEQ07E Third episode: evaluated at physician's office or urgent care |
| 43 | BEQ07E1 | Num | 8 | BEQ07E1 Third episode: additional antibiotics after office visit |
| 44 | BEQ07E2 | Num | 8 | BEQ07E2 Third episode: additional oral steroids after office visit |
| 45 | BEQ07E3 | Num | 8 | BEQ07E3 Third episode: do not know treatment after office visit |
| 46 | BEQ07E4 | Num | 8 | BEQ07E4 Third episode: do not remember treatment after office visit |
| 47 | BEQ07F | Char | 1 | BEQ07F Third episode: evaluated in an Emergency Department |
| 48 | BEQ07F1 | Num | 8 | BEQ07F1 Third episode: additional antibiotics after ED visit |
| 49 | BEQ07F2 | Num | 8 | BEQ07F2 Third episode: additional oral steroids after ED visit |
| 50 | BEQ07F3 | Num | 8 | BEQ07F3 Third episode: do not know treatment after ED visit |
| 51 | BEQ07F4 | Num | 8 | BEQ07F4 Third episode: do not remember treatment after ED visit |
| 52 | BEQ07G | Char | 1 | BEQ07G Third episode: admitted to hospital |
| 53 | BEQ08 | Char | 1 | BEQ08 Was there a Fourth episode of breathing problems |
| 54 | BEQ09A | Char | 1 | BEQ09A Fourth episode: additional antibiotics after contacting healthcare provider |
| 55 | BEQ09B | Char | 1 | BEQ09B Fourth episode: additional oral steroids after contacting healthcare provider |
| 56 | BEQ09C | Char | 1 | BEQ09C Fourth episode: additional antibiotics without contacting healthcare provider |
| 57 | BEQ09D | Char | 1 | BEQ09D Fourth episode: additional oral steroids without contacting healthcare provider |
| 58 | BEQ09E | Char | 1 | BEQ09E Fourth episode: evaluated at physician's office or urgent care |
| 59 | BEQ09E1 | Num | 8 | BEQ09E1 Fourth episode: additional antibiotics after office visit |
| 60 | BEQ09E2 | Num | 8 | BEQ09E2 Fourth episode: additional oral steroids after office visit |
| 61 | BEQ09E3 | Num | 8 | BEQ09E3 Fourth episode: do not know treatment after office visit |
| 62 | BEQ09E4 | Num | 8 | BEQ09E4 Fourth episode: do not remember treatment after office visit |
| 63 | BEQ09F | Char | 1 | BEQ09F Fourth episode: evaluated in an Emergency Department |
| 64 | BEQ09F1 | Num | 8 | BEQ09F1 Fourth episode: additional antibiotics after ED visit |
| 65 | BEQ09F2 | Num | 8 | BEQ09F2 Fourth episode: additional oral steroids after ED visit |
| 66 | BEQ09F3 | Num | 8 | BEQ09F3 Fourth episode: do not know treatment after ED visit |
| 67 | BEQ09F4 | Num | 8 | BEQ09F4 Fourth episode: do not remember treatment after ED visit |
| 68 | BEQ09G | Char | 1 | BEQ09G Fourth episode: admitted to hospital |
| 69 | BEQ10 | Char | 1 | BEQ10 Was there a Fifth episode of breathing problems |
| 70 | BEQ11A | Char | 1 | BEQ11A Fifth episode: additional antibiotics after contacting healthcare provider |
| 71 | BEQ11B | Char | 1 | BEQ11B Fifth episode: additional oral steroids after contacting healthcare provider |
| 72 | BEQ11C | Char | 1 | BEQ11C Fifth episode: additional antibiotics without contacting healthcare provider |
| 73 | BEQ11D | Char | 1 | BEQ11D Fifth episode: additional oral steroids without contacting healthcare provider |
| 74 | BEQ11E | Char | 1 | BEQ11E Fifth episode: evaluated at physician's office or urgent care |
| 75 | BEQ11E1 | Num | 8 | BEQ11E1 Fifth episode: additional antibiotics after office visit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BEQ11E2 | Num | 8 | BEQ11E2 Fifth episode: additional oral steroids after office visit |
| 77 | BEQ11E3 | Num | 8 | BEQ11E3 Fifth episode: do not know treatment after office visit |
| 78 | BEQ11E4 | Num | 8 | BEQ11E4 Fifth episode: do not remember treatment after office visit |
| 79 | BEQ11F | Char | 1 | BEQ11F Fifth episode: evaluated in an Emergency Department |
| 80 | BEQ11F1 | Num | 8 | BEQ11F1 Fifth episode: additional antibiotics after ED visit |
| 81 | BEQ11F2 | Num | 8 | BEQ11F2 Fifth episode: additional oral steroids after ED visit |
| 82 | BEQ11F3 | Num | 8 | BEQ11F3 Fifth episode: do not know treatment after ED visit |
| 83 | BEQ11F4 | Num | 8 | BEQ11F4 Fifth episode: do not remember treatment after ED visit |
| 84 | BEQ11G | Char | 1 | BEQ11G Fifth episode: admitted to hospital |
| 85 | BEQ12 | Char | 1 | BEQ12 Was there a Sixth episode of breathing problems |
| 86 | BEQ13A | Char | 1 | BEQ13A Sixth episode: additional antibiotics after contacting healthcare provider |
| 87 | BEQ13B | Char | 1 | BEQ13B Sixth episode: additional oral steroids after contacting healthcare provider |
| 88 | BEQ13C | Char | 1 | BEQ13C Sixth episode: additional antibiotics without contacting healthcare provider |
| 89 | BEQ13D | Char | 1 | BEQ13D Sixth episode: additional oral steroids without contacting healthcare provider |
| 90 | BEQ13E | Char | 1 | BEQ13E Sixth episode: evaluated at physician's office or urgent care |
| 91 | BEQ13E1 | Num | 8 | BEQ13E1 Sixth episode: additional antibiotics after office visit |
| 92 | BEQ13E2 | Num | 8 | BEQ13E2 Sixth episode: additional oral steroids after office visit |
| 93 | BEQ13E3 | Num | 8 | BEQ13E3 Sixth episode: do not know treatment after office visit |
| 94 | BEQ13E4 | Num | 8 | BEQ13E4 Sixth episode: do not remember treatment after office visit |
| 95 | BEQ13F | Char | 1 | BEQ13F Sixth episode: evaluated in an Emergency Department |
| 96 | BEQ13F1 | Num | 8 | BEQ13F1 Sixth episode: additional antibiotics after ED visit |
| 97 | BEQ13F2 | Num | 8 | BEQ13F2 Sixth episode: additional oral steroids after ED visit |
| 98 | BEQ13F3 | Num | 8 | BEQ13F3 Sixth episode: do not know treatment after ED visit |
| 99 | BEQ13F4 | Num | 8 | BEQ13F4 Sixth episode: do not remember treatment after ED visit |
| 100 | BEQ13G | Char | 1 | BEQ13G Sixth episode: admitted to hospital |
| 101 | VERSION | Char | 21 | VERSION |
| 102 | BEQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_bio_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 |  |
| 4 | BIO01 | Char | 1 | BIO01 Fasting before appointment? |
| 5 | BIO02 | Char | 5 | BIO02 Time most recently eaten |
| 6 | BIO02_AMPM | Char | 1 | BIO02_AMPM Recently eaten AM/PM |
| 7 | BIO04 | Char | 5 | BIO04 Collection time |
| 8 | BIO04_AMPM | Char | 1 | BIO04_AMPM Blood collection time AM/PM |
| 9 | BIO05 | Num | 8 | BIO05 Number of venipuncture attempts |
| 10 | BIO06 | Char | 1 | BIO06 Incidents/Problems drawing blood? |
| 11 | BIO07A1 | Num | 8 | BIO07A1 Tube 1 Sample Not Drawn |
| 12 | BIO07A2 | Num | 8 | BIO07A2 Tube 2 Sample Not Drawn |
| 13 | BIO07A3 | Num | 8 | BIO07A3 Tube 3 Sample Not Drawn |
| 14 | BIO07A4 | Num | 8 | BIO07A4 Tube 4 Sample Not Drawn |
| 15 | BIO07A5 | Num | 8 | BIO07A5 Tube 5 Sample Not Drawn |
| 16 | BIO07A6 | Num | 8 | BIO07A6 Tube 6 Sample Not Drawn |
| 17 | BIO07A7 | Num | 8 | BIO07A7 Tube 7 Sample Not Drawn |
| 18 | BIO07A8 | Num | 8 | BIO07A8 Tube 8 Sample Not Drawn |
| 19 | BIO07A9 | Num | 8 | BIO07A9 Tube 9 Sample Not Drawn |
| 20 | BIO07B1 | Num | 8 | BIO07B1 Tube 1 Partial sample drawn |
| 21 | BIO07B2 | Num | 8 | BIO07B2 Tube 2 Partial sample drawn |
| 22 | BIO07B3 | Num | 8 | BIO07B3 Tube 3 Partial sample drawn |
| 23 | BIO07B4 | Num | 8 | BIO07B4 Tube 4 Partial sample drawn |
| 24 | BIO07B5 | Num | 8 | BIO07B5 Tube 5 Partial sample drawn |
| 25 | BIO07B6 | Num | 8 | BIO07B6 Tube 6 Partial sample drawn |
| 26 | BIO07B7 | Num | 8 | BIO07B7 Tube 7 Partial sample drawn |
| 27 | BIO07B8 | Num | 8 | BIO07B8 Tube 8 Partial sample drawn |
| 28 | BIO07B9 | Num | 8 | BIO07B9 Tube 9 Partial sample drawn |
| 29 | BIO07C1 | Num | 8 | BIO07C1 Tube 1 Tourniquet reapplied |
| 30 | BIO07C2 | Num | 8 | BIO07C2 Tube 2 Tourniquet reapplied |
| 31 | BIO07C3 | Num | 8 | BIO07C3 Tube 3 Tourniquet reapplied |
| 32 | BIO07C4 | Num | 8 | BIO07C4 Tube 4 Tourniquet reapplied |
| 33 | BIO07C5 | Num | 8 | BIO07C5 Tube 5 Tourniquet reapplied |
| 34 | BIO07C6 | Num | 8 | BIO07C6 Tube 6 Tourniquet reapplied |
| 35 | BIO07C7 | Num | 8 | BIO07C7 Tube 7 Tourniquet reapplied |
| 36 | BIO07C8 | Num | 8 | BIO07C8 Tube 8 Tourniquet reapplied |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BIO07C9 | Num | 8 | BIO07C9 Tube 9 Tourniquet reapplied |
| 38 | BIO07D1 | Num | 8 | BIO07D1 Tube 1 Fist clenching |
| 39 | BIO07D2 | Num | 8 | BIO07D2 Tube 2 Fist clenching |
| 40 | BIO07D3 | Num | 8 | BIO07D3 Tube 3 Fist clenching |
| 41 | BIO07D4 | Num | 8 | BIO07D4 Tube 4 Fist clenching |
| 42 | BIO07D5 | Num | 8 | BIO07D5 Tube 5 Fist clenching |
| 43 | BIO07D6 | Num | 8 | BIO07D6 Tube 6 Fist clenching |
| 44 | BIO07D7 | Num | 8 | BIO07D7 Tube 7 Fist clenching |
| 45 | BIO07D8 | Num | 8 | BIO07D8 Tube 8 Fist clenching |
| 46 | BIO07D9 | Num | 8 | BIO07D9 Tube 9 Fist clenching |
| 47 | BIO07E1 | Num | 8 | BIO07E1 Tube 1 Needle movement |
| 48 | BIO07E2 | Num | 8 | BIO07E2 Tube 2 Needle movement |
| 49 | BIO07E3 | Num | 8 | BIO07E3 Tube 3 Needle movement |
| 50 | BIO07E4 | Num | 8 | BIO07E4 Tube 4 Needle movement |
| 51 | BIO07E5 | Num | 8 | BIO07E5 Tube 5 Needle movement |
| 52 | BIO07E6 | Num | 8 | BIO07E6 Tube 6 Needle movement |
| 53 | BIO07E7 | Num | 8 | BIO07E7 Tube 7 Needle movement |
| 54 | BIO07E8 | Num | 8 | BIO07E8 Tube 8 Needle movement |
| 55 | BIO07E9 | Num | 8 | BIO07E9 Tube 9 Needle movement |
| 56 | BIO07F1 | Num | 8 | BIO07F1 Tube 1 Participant reclining |
| 57 | BIO07F2 | Num | 8 | BIO07F2 Tube 2 Participant reclining |
| 58 | BIO07F3 | Num | 8 | BIO07F3 Tube 3 Participant reclining |
| 59 | BIO07F4 | Num | 8 | BIO07F4 Tube 4 Participant reclining |
| 60 | BIO07F5 | Num | 8 | BIO07F5 Tube 5 Participant reclining |
| 61 | BIO07F6 | Num | 8 | BIO07F6 Tube 6 Participant reclining |
| 62 | BIO07F7 | Num | 8 | BIO07F7 Tube 7 Participant reclining |
| 63 | BIO07F8 | Num | 8 | BIO07F8 Tube 8 Participant reclining |
| 64 | BIO07F9 | Num | 8 | BIO07F9 Tube 9 Participant reclining |
| 65 | BIO10A | Char | 5 | BIO10A Tube 1: Time processed |
| 66 | BIO10A_AMPM | Char | 1 | BIO10A_AMPM Tube 1: Processed AM/PM |
| 67 | BIO10B | Char | 1 | BIO10B Tube 1: Problems Processing? |
| 68 | BIO10B1 | Num | 8 | BIO10B1 Tube 1: Broken tube |
| 69 | BIO10B2 | Num | 8 | BIO10B2 Tube 1: Sample re-centrifuged |
| 70 | BIO10B3 | Num | 8 | BIO10B3 Tube 1: Clotted |
| 71 | BIO10B4 | Num | 8 | BIO10B4 Tube 1: Hemolyzed |
| 72 | BIO10B5 | Num | 8 | BIO10B5 Tube 1: Lipemic |
| 73 | BIO10B6 | Num | 8 | BIO10B6 Tube 1: Other |
| 74 | BIO10B6A | Char | 30 | BIO10B6A Tube 1:Specify Problem Processing |
| 75 | BIO10C | Num | 8 | BIO10C Tube 1: Number of aliquots |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BIO10D | Num | 8 | BIO10D Tube 1: Volume in last four aliquots |
| 77 | BIO10E | Num | 8 | BIO10E Tube 1: Freezer box number |
| 78 | BIO10F | Char | 5 | BIO10F Tube 1: Time aliquots placed in freezer |
| 79 | BIO10F_AMPM | Char | 1 | BIO10F_AMPM Tube 1: Freezer AM/PM |
| 80 | BIO11A | Char | 5 | BIO11A Tube 2: Time processed |
| 81 | BIO11A_AMPM | Char | 1 | BIO11A_AMPM Tube 2: Processed AM/PM |
| 82 | BIO11B | Char | 1 | BIO11B Tube 2: Problems processing? |
| 83 | BIO11B1 | Num | 8 | BIO11B1 Tube 2: Broken tube |
| 84 | BIO11B2 | Num | 8 | BIO11B2 Tube 2: Sample re-centrifuged |
| 85 | BIO11B3 | Num | 8 | BIO11B3 Tube 2: Clotted |
| 86 | BIO11B4 | Num | 8 | BIO11B4 Tube 2: Hemolyzed |
| 87 | BIO11B5 | Num | 8 | BIO11B5 Tube 2: Lipemic |
| 88 | BIO11B6 | Num | 8 | BIO11B6 Tube 2: Other |
| 89 | BIO11B6A | Char | 30 | BIO11B6A Tube 2:Specify Problem Processing |
| 90 | BIO11C | Num | 8 | BIO11C Tube 2: Number of aliquots |
| 91 | BIO11D | Num | 8 | BIO11D Tube 2: Volume in last four aliquots |
| 92 | BIO11E | Num | 8 | BIO11E Tube 2: Freezer box number |
| 93 | BIO11F | Char | 5 | BIO11F Tube 2: Time aliquots placed in freezer |
| 94 | BIO11F_AMPM | Char | 1 | BIO11F_AMPM Tube 2: Freezer AM/PM |
| 95 | BIO12A | Char | 5 | BIO12A Tube 3: Time processed |
| 96 | BIO12A_AMPM | Char | 1 | BIO12A_AMPM Tube 3: Processed AM/PM |
| 97 | BIO12B | Char | 1 | BIO12B Tube 3: Problems processing? |
| 98 | BIO12B1 | Num | 8 | BIO12B1 Tube 3: Broken tube |
| 99 | BIO12B2 | Num | 8 | BIO12B2 Tube 3: Sample re-centrifuged |
| 100 | BIO12B3 | Num | 8 | BIO12B3 Tube 3: Clotted |
| 101 | BIO12B4 | Num | 8 | BIO12B4 Tube 3: Hemolyzed |
| 102 | BIO12B5 | Num | 8 | BIO12B5 Tube 3: Lipemic |
| 103 | BIO12B6 | Num | 8 | BIO12B6 Tube 3: Other |
| 104 | BIO12B6A | Char | 30 | BIO12B6A Tube 3:Specify Problem Processing |
| 105 | BIO12C | Num | 8 | BIO12C Tube 3: Number of aliquots |
| 106 | BIO12D | Num | 8 | BIO12D Tube 3: Volume in last four aliquots |
| 107 | BIO12E | Num | 8 | BIO12E Tube 3: Freezer box number |
| 108 | BIO12F | Char | 5 | BIO12F Tube 3: Time aliquots placed in freezer |
| 109 | BIO12F_AMPM | Char | 1 | BIO12F_AMPM Tube 3: Freezer AM/PM |
| 110 | BIO13A | Char | 5 | BIO13A Tube 4: Time processed |
| 111 | BIO13A_AMPM | Char | 1 | BIO13A_AMPM Tube 4:Processed AM/PM |
| 112 | BIO13B | Char | 1 | BIO13B Tube 4: Problems processing? |
| 113 | BIO13B1 | Num | 8 | BIO13B1 Tube 4: Broken tube |
| 114 | BIO13B2 | Num | 8 | BIO13B2 Tube 4: Sample re-centrifuged |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BIO13B3 | Num | 8 | BIO13B3 Tube 4: Clotted |
| 116 | BIO13B4 | Num | 8 | BIO13B4 Tube 4: Hemolyzed |
| 117 | BIO13B5 | Num | 8 | BIO13B5 Tube 4: Lipemic |
| 118 | BIO13B6 | Num | 8 | BIO13B6 Tube 4: Other |
| 119 | BIO13B6A | Char | 30 | BIO13B6A Tube 4:Specify Problem Processing |
| 120 | BIO13C | Num | 8 | BIO13C Tube 4: Number of aliquots |
| 121 | BIO13D | Num | 8 | BIO13D Tube 4: Volume in last four aliquots |
| 122 | BIO13E | Num | 8 | BIO13E Tube 4: Freezer box number |
| 123 | BIO13F | Char | 5 | BIO13F Tube 4: Time aliquots placed in freezer |
| 124 | BIO13F_AMPM | Char | 1 | BIO13F_AMPM Tube 4:Freezer AM/PM |
| 125 | BIO14A | Char | 5 | BIO14A Tube 5: Time processed |
| 126 | BIO14A_AMPM | Char | 1 | BIO14A_AMPM Tube 5:Processed AM/PM |
| 127 | BIO14B | Char | 1 | BIO14B Tube 5: Problems processing? |
| 128 | BIO14B1 | Num | 8 | BIO14B1 Tube 5: Broken tube |
| 129 | BIO14B2 | Num | 8 | BIO14B2 Tube 5: Sample re-centrifuged |
| 130 | BIO14B3 | Num | 8 | BIO14B3 Tube 5: Clotted |
| 131 | BIO14B4 | Num | 8 | BIO14B4 Tube 5: Hemolyzed |
| 132 | BIO14B5 | Num | 8 | BIO14B5 Tube 5: Lipemic |
| 133 | BIO14B6 | Num | 8 | BIO14B6 Tube 5: Other |
| 134 | BIO14B6A | Char | 30 | BIO14B6A Tube 5:Specify Problem Processing |
| 135 | BIO14C | Num | 8 | BIO14C Tube 5: Number of aliquots |
| 136 | BIO14D | Num | 8 | BIO14D Tube 5: Volume in last four aliquots |
| 137 | BIO14E | Num | 8 | BIO14E Tube 5: Freezer box number |
| 138 | BIO14F | Char | 5 | BIO14F Tube 5: Time aliquots placed in freezer |
| 139 | BIO14F_AMPM | Char | 1 | BIO14F_AMPM Tube 5:Freezer AM/PM |
| 140 | BIO15A | Char | 5 | BIO15A Tube 6: Time processed |
| 141 | BIO15A_AMPM | Char | 1 | BIO15A_AMPM Tube 6:Processed AM/PM |
| 142 | BIO15B | Char | 1 | BIO15B Tube 6: Problems processing? |
| 143 | BIO15B1 | Num | 8 | BIO15B1 Tube 6: Broken tube |
| 144 | BIO15B2 | Num | 8 | BIO15B2 Tube 6: Sample re-centrifuged |
| 145 | BIO15B3 | Num | 8 | BIO15B3 Tube 6: Clotted |
| 146 | BIO15B4 | Num | 8 | BIO15B4 Tube 6: Hemolyzed |
| 147 | BIO15B5 | Num | 8 | BIO15B5 Tube 6: Lipemic |
| 148 | BIO15B6 | Num | 8 | BIO15B6 Tube 6: Other |
| 149 | BIO15C | Num | 8 | BIO15C Tube 6: Number of aliquots |
| 150 | BIO15D | Num | 8 | BIO15D Tube 6: Volume in last four aliquots |
| 151 | BIO15E | Num | 8 | BIO15E Tube 6: Freezer box number |
| 152 | BIO15F | Char | 5 | BIO15F Tube 6: Time aliquots placed in freezer |
| 153 | BIO15F_AMPM | Char | 1 | BIO15F_AMPM Tube 6:Freezer AM/PM |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | BIO16A | Char | 5 | BIO16A Tube 7: Time sent to clinical center lab: |
| 155 | BIO16A_AMPM | Char | 1 | BIO16A_AMPM Tube 7: Sent to clinical lab AM/PM |
| 156 | BIO17A | Char | 5 | BIO17A Tube 8: Time processed |
| 157 | BIO17A_AMPM | Char | 1 | BIO17A_AMPM Tube 8:Processed AM/PM |
| 158 | BIO17B | Char | 1 | BIO17B Tube 8: Problems processing? |
| 159 | BIO17B1 | Num | 8 | BIO17B1 Tube 8: Broken tube |
| 160 | BIO17B2 | Num | 8 | BIO17B2 Tube 8: Sample re-centrifuged |
| 161 | BIO17B3 | Num | 8 | BIO17B3 Tube 8: Clotted |
| 162 | BIO17B4 | Num | 8 | BIO17B4 Tube 8: Hemolyzed |
| 163 | BIO17B5 | Num | 8 | BIO17B5 Tube 8: Lipemic |
| 164 | BIO17B6 | Num | 8 | BIO17B6 Tube 8: Other |
| 165 | BIO17B6A | Char | 30 | BIO17B6A Tube 8:Specify Problem Processing |
| 166 | BIO17C | Num | 8 | BIO17C Tube 8: Number of aliquots |
| 167 | BIO17D | Num | 8 | BIO17D Tube 8: Volume in last four aliquots |
| 168 | BIO17E | Num | 8 | BIO17E Tube 8: Freezer box number |
| 169 | BIO17F | Char | 5 | BIO17F Tube 8: Time aliquots placed in freezer |
| 170 | BIO17F_AMPM | Char | 1 | BIO17F_AMPM Tube 8:Freezer AM/PM |
| 171 | BIO18B | Char | 5 | BIO18B Tube 9: Time placed in freezer |
| 172 | BIO18B_AMPM | Char | 1 | BIO18B_AMPM Tube 9:Freezer AM/PM |
| 173 | BIO18C | Char | 1 | BIO18C Tube 9: Problems processing? |
| 174 | BIO18C1 | Num | 8 | BIO18C1 Tube 9: Broken tube |
| 175 | BIO18C2 | Num | 8 | BIO18C2 Tube 9: Sample re-centrifuged |
| 176 | BIO18C3 | Num | 8 | BIO18C3 Tube 9: Clotted |
| 177 | BIO18C4 | Num | 8 | BIO18C4 Tube 9: Hemolyzed |
| 178 | BIO18C5 | Num | 8 | BIO18C5 Tube 9: Lipemic |
| 179 | BIO18C6 | Num | 8 | BIO18C6 Tube 9: Other |
| 180 | BIO18C6A | Char | 30 | BIO18C6A Tube 9:Specify Problem Processing |
| 181 | BIO18D | Num | 8 | BIO18D Tube 9: Freezer box number |
| 182 | BIO19 | Char | 1 | BIO19 Urine sample collected |
| 183 | BIO21 | Char | 5 | BIO21 Time urine sample collected |
| 184 | BIO21_AMPM | Char | 1 | BIO21_AMPM urine sample collected AM/PM |
| 185 | BIO22 | Char | 5 | BIO22 Time urine sample processed |
| 186 | BIO22_AMPM | Char | 1 | BIO22 AMPM urine sample processed AM/PM |
| 187 | BIO23 | Num | 8 | BIO23 Number of aliquots with preservative: |
| 188 | BIO24 | Num | 8 | BIO24 Number of aliquots without preservative: |
| 189 | BIO25 | Char | 1 | BIO25 Able to become pregnant? |
| 190 | BIO26 | Char | 1 | BIO26 Pregnancy test requested? |
| 191 | BIO26A | Char | 1 | BIO26A Pregnant? |
| 192 | BIO24A | Char | 5 | BIO24A Time urine sample entered freezer |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 193 | BIO24A_AMPM | Char | 1 | BIO24A_AMPM |
| 194 | VERSION | Char | 21 |  |
| 195 | BIO0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 196 | BIO03_DAYS | Num | 8 | BIO03 Date of blood collection - Days from enrollment |
| 197 | BIO18A_DAYS | Num | 8 | BIO18A Tube 9: Date placed in freezer - Days from enrollment |
| 198 | BIO20_DAYS | Num | 8 | BIO20 Date of urine sample: - Days from enrollment |

## Data Set Name: v1_bmh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | BMH01 | Char | 1 | BMH01 Recent hospitalizations |
| 5 | BMH01C | Char | 2000 | BMH01C Describe Hosp 3 |
| 6 | BMH01D | Char | 2000 | BMH01D Describe Hosp 4 |
| 7 | BMH01E | Char | 2000 | BMH01E Describe Hosp 5 |
| 8 | BMH01F | Char | 2000 | BMH01F Describe Hosp 6 |
| 9 | BMH01G | Char | 2000 | BMH01G Describe Hosp 7 |
| 10 | BMH02 | Char | 1 | BMH02 Recent emergency care visit |
| 11 | BMH02D | Char | 2000 | BMH02D Describe Emergency Visit 4 |
| 12 | BMH02E | Char | 2000 | BMH02E Describe Emergency Visit 5 |
| 13 | BMH02F | Char | 2000 | BMH02F Describe Emergency Visit 6 |
| 14 | BMH02G | Char | 2000 | BMH02G Describe Emergency Visit 7 |
| 15 | BMH02H | Char | 2000 | BMH02H Describe Emergency Visit 8 |
| 16 | BMH02I | Char | 2000 | BMH02I Describe Emergency Visit 9 |
| 17 | BMH02J | Char | 2000 | BMH02J Describe Emergency Visit 10 |
| 18 | BMH03 | Char | 1 | BMH03 Any surgeries? |
| 19 | BMH04 | Char | 1 | BMH04 Yearly flu shot |
| 20 | BMH05 | Char | 1 | BMH05 Date of most recent pneumoia vaccine |
| 21 | BMH06 | Char | 1 | BMH06 Alpha-1 anti-trypsin deficiency |
| 22 | BMH07A | Char | 1 | BMH07A Vision problems |
| 23 | BMH07B | Char | 1 | BMH07B Hearing problems |
| 24 | BMH07C | Char | 1 | BMH07C Dizziness |
| 25 | BMH07D | Char | 1 | BMH07D Ears ringing |
| 26 | BMH07E | Char | 1 | BMH07E Sinusitis / Rhinitis |
| 27 | BMH07F | Char | 1 | BMH07F Other |
| 28 | BMH08A | Char | 1 | BMH08A High blood pressure |
| 29 | BMH08B | Char | 1 | BMH08B Coronary artery disease |
| 30 | BMH08C | Char | 1 | BMH08C Angina |
| 31 | BMH08D | Char | 1 | BMH08D Heart attack |
| 32 | BMH08E | Char | 1 | BMH08E Murmur |
| 33 | BMH08F | Char | 1 | BMH08F Palpitations/irregular heartbeat |
| 34 | BMH08G | Char | 1 | BMH08G Valve disease |
| 35 | BMH08H | Char | 1 | BMH08H Congestive heart failure |
| 36 | BMH08I | Char | 1 | BMH08I Blood clots |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BMH08J | Char | 1 | BMH08J Poor circulation/claudication |
| 38 | BMH08K | Char | 1 | BMH08K Other |
| 39 | BMH09A | Char | 1 | BMH09A Esophageal condition or disease |
| 40 | BMH09B | Char | 1 | BMH09B Ulcers |
| 41 | BMH09C | Char | 1 | BMH09C Hepatitis or jaundice |
| 42 | BMH09D | Char | 1 | BMH09D Crohn's disease or colitis |
| 43 | BMH09E | Char | 1 | BMH09E Gallstones |
| 44 | BMH09F | Char | 1 | BMH09F Cirrhosis |
| 45 | BMH09G | Char | 1 | BMH09G GERD/heart burn |
| 46 | BMH09H | Char | 1 | BMH09H Hiatal hernia |
| 47 | BMH09I | Char | 1 | BMH09I Other |
| 48 | BMH10A | Char | 1 | BMH10A Intubation or respirator |
| 49 | BMH10B | Char | 1 | BMH10B Pneumothorax/collapsed lung |
| 50 | BMH10C | Char | 1 | BMH10C Tuberculosis |
| 51 | BMH10D | Char | 1 | BMH10D Pulmonary fibrosis |
| 52 | BMH10D1 | Char | 75 | BMH10D1 Explain: Pulmonary fibrosis |
| 53 | BMH10E | Char | 1 | BMH10E Lung nodules |
| 54 | BMH10F | Char | 1 | BMH10F Pulmonary embolism |
| 55 | BMH10G | Char | 1 | BMH10G Other |
| 56 | BMH11A | Char | 1 | BMH11A Cancer except basal cell skin cancer |
| 57 | BMH11B | Char | 1 | BMH11B Anemia |
| 58 | BMH11C | Char | 1 | BMH11C Other |
| 59 | BMH12A | Char | 1 | BMH12A Menstrual symptoms |
| 60 | BMH12B | Char | 1 | BMH12B Enlarged prostate or BPH |
| 61 | BMH12C | Char | 1 | BMH12C Bladder or kidney problems/kidney stones |
| 62 | BMH12D | Char | 1 | BMH12D Other |
| 63 | BMH13A | Char | 1 | BMH13A Diabetes |
| 64 | BMH13B | Char | 1 | BMH13B Thyroid |
| 65 | BMH13C | Char | 1 | BMH13C Other |
| 66 | BMH14A | Char | 1 | BMH14A Stroke |
| 67 | BMH14B | Char | 1 | BMH14B Headaches |
| 68 | BMH14C | Char | 1 | BMH14C Seizure |
| 69 | BMH14D | Char | 1 | BMH14D Other |
| 70 | BMH15A | Char | 1 | BMH15A Rheumatoid arthritis |
| 71 | BMH15B | Char | 1 | BMH15B Gout |
| 72 | BMH15C | Char | 1 | BMH15C Osteoporosis |
| 73 | BMH15D | Char | 1 | BMH15D Fractures |
| 74 | BMH15E | Char | 1 | BMH15E Joint pain |
| 75 | BMH15F | Char | 1 | BMH15F Osteoarthritis |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BMH15G | Char | 1 | BMH15G Other |
| 77 | BMH16A | Char | 1 | BMH16A Rashes/hives/eczema |
| 78 | BMH16B | Char | 1 | BMH16B Psoriasis |
| 79 | BMH16C | Char | 1 | BMH16C Shingles |
| 80 | BMH16D | Char | 1 | BMH16D Other |
| 81 | BMH17A | Char | 1 | BMH17A Atypical mycobacteria/MAC/MAI |
| 82 | BMH17B | Char | 1 | BMH17B Fungal disease |
| 83 | BMH17C | Char | 1 | BMH17C Other |
| 84 | BMH18A | Char | 1 | BMH18A Anxiety |
| 85 | BMH18B | Char | 1 | BMH18B Depression |
| 86 | BMH18C | Char | 1 | BMH18C Other |
| 87 | BMH19 | Char | 1 | BMH19 Other significant problems |
| 88 | BMH20A | Char | 1 | BMH20A Fever/ cold/flu/ sore throat in the last two weeks |
| 89 | BMH20B | Char | 1 | BMH20B UTI in the last two weeks |
| 90 | BMH20C | Char | 1 | BMH20C Seasonal allergies in the last two weeks |
| 91 | BMH20D | Char | 1 | BMH20D Sinus infection/sinusitis in the last two weeks |
| 92 | BMH20E | Char | 1 | BMH20E Tooth infection in the last two weeks |
| 93 | BMH20F | Char | 1 | BMH20F Flare up of gout in the last two weeks |
| 94 | BMH20G | Char | 1 | BMH20G Flare up of arthritis in the last two weeks |
| 95 | BMH20H | Char | 1 | BMH20H Other illness in the last two weeks |
| 96 | BMH21 | Char | 1 | BMH21 Allergies to medication/substances |
| 97 | BMH21A | Char | 50 | BMH21A Allergy 1 |
| 98 | BMH21A1 | Char | 50 | BMH21A1 Reaction 1 |
| 99 | BMH21B | Char | 50 | BMH21B Allergy 2 |
| 100 | BMH21B1 | Char | 50 | BMH21B1 Reaction 2 |
| 101 | BMH21C | Char | 50 | BMH21C Allergy 3 |
| 102 | BMH21C1 | Char | 50 | BMH21C1 Reaction 3 |
| 103 | BMH21D | Char | 50 | BMH21D Allergy 4 |
| 104 | BMH21D1 | Char | 50 | BMH21D1 Reaction 4 |
| 105 | BMH21E | Char | 50 | BMH21D Allergy 5 |
| 106 | BMH21E1 | Char | 50 | BMH21D1 Reaction 5 |
| 107 | BMH22 | Char | 1 | BMH22 Alcoholic beverages frequency |
| 108 | BMH23 | Char | 1 | BMH23 Number of drinks per sitting |
| 109 | BMH24_1 | Num | 8 | BMH24_1 Beer |
| 110 | BMH24_2 | Num | 8 | BMH24_2 Wine |
| 111 | BMH24_3 | Num | 8 | BMH24_3 Drinks containing liquor |
| 112 | BMH25 | Char | 1 | BMH25 Frequency of 8+ drinks |
| 113 | BMH26 | Char | 1 | BMH26 Frequency of memory lapse |
| 114 | BMH27 | Char | 1 | BMH27 Frequency of failing expectations |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BMH28 | Char | 1 | BMH28 Concerns about alcohol consumption |
| 116 | BMH29 | Num | 8 | BMH29 Age of starting monthly menstruation |
| 117 | ВMH30 | Char | 1 | BMH30 Reached menopause |
| 118 | BMH31 | Num | 8 | BMH31 Age of reaching menopause |
| 119 | BMH32 | Char | 1 | BMH32 Usage of oral contraceptive medications |
| 120 | ВMH33 | Num | 8 | BMH33 Years of oral contraceptive usage |
| 121 | BMH34 | Char | 1 | BMH34 Usage of hormone replacement therapy? |
| 122 | BMH35 | Num | 8 | BMH35 Years of hormone replacement therapy usage |
| 123 | BMH36 | Char | 1 | BMH36 Any pregnancies |
| 124 | BMH37 | Num | 8 | BMH37 Age at first pregnancy |
| 125 | BMH38 | Num | 8 | BMH38 Number of pregnancies |
| 126 | BMH39 | Char | 1 | BMH39 Breastfeeding |
| 127 | BMH40 | Num | 8 | BMH40 Total months breastfeeding |
| 128 | BMH41 | Char | 1 | BMH41 Ovary removal |
| 129 | BMH42 | Char | 1 | BMH42 One or both ovaries removed |
| 130 | BMH43 | Num | 8 | BMH43 Age of ovary removal |
| 131 | BMH03A1Y | Num | 8 | Year of Appx date: |
| 132 | BMH03B1Y | Num | 8 | Year of Appx date: |
| 133 | BMH03C1Y | Num | 8 | Year of Appx date: |
| 134 | BMH03D1Y | Num | 8 | Year of Appx date: |
| 135 | BMH03E1Y | Num | 8 | Year of Appx date: |
| 136 | BMH03F1Y | Num | 8 | Year of Appx date: |
| 137 | BMH03G1Y | Num | 8 | Year of Appx date: |
| 138 | BMH03H1Y | Num | 8 | Year of Appx date: |
| 139 | BMH03I1Y | Num | 8 | Year of Appx date: |
| 140 | BMH03J1Y | Num | 8 | Year of Appx date: |
| 141 | BMH04AY | Num | 8 | Year of a) When was your most recent influenza vaccination? (month/year) |
| 142 | BMH04B | Char | 1 | 4b) Did you get an influenza vaccination (flu shot) in the last 12 months? |
| 143 | BMH10H | Char | 1 | h) Wedge resection |
| 144 | VERSION | Char | 21 | VERSION |
| 145 | BMH0A_DAYS | Num | 8 | BMH0A Form Date - Days from enrollment |
| 146 | BMH01A1_DAYS | Num | 8 | BMH01A1 Approximate date Hosp 1 - Days from enrollment |
| 147 | BMH01B1_DAYS | Num | 8 | BMH01B1 Approximate date Hosp 2 - Days from enrollment |
| 148 | BMH01C1_DAYS | Num | 8 | BMH01C1 Approximate date Hosp 3 - Days from enrollment |
| 149 | BMH01D1_DAYS | Num | 8 | BMH01D1 Approximate date Hosp 4 - Days from enrollment |
| 150 | BMH01E1_DAYS | Num | 8 | BMH01E1 Approximate date Hosp 5 - Days from enrollment |
| 151 | BMH01G1_DAYS | Num | 8 | BMH01G1 Approximate date Hosp 7 - Days from enrollment |
| 152 | BMH02A1_DAYS | Num | 8 | BMH02A1 Approximate date Emergency Visit 1 - Days from enrollment |
| 153 | BMH02B1_DAYS | Num | 8 | BMH02B1 Approximate date Emergency Visit 2 - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 154 | BMH02C1_DAYS | Num | 8 | BMH02C1 Approximate date Emergency Visit 3 - Days from enrollment |
| 155 | BMH02D1_DAYS | Num | 8 | BMH02D1 Approximate date Emergency Visit 4 - Days from enrollment |
| 156 | BMH02E1_DAYS | Num | 8 | BMH02E1 Approximate date Emergency Visit 5 - Days from enrollment |
| 157 | BMH02F1_DAYS | Num | 8 | BMH02F1 Approximate date Emergency Visit 6 - Days from enrollment |

Data Set Name: v1_bpf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BPF01 | Char | 1 | BPF01 Right arm blood pressure |
| 5 | BPF01A | Char | 2000 | BPF01A Explain if left arm used |
| 6 | BPF02 | Num | 8 | BPF02 Arm circumference |
| 7 | BPF03 | Char | 1 | BPF03 Cuff size |
| 8 | BPF04 | Num | 8 | BPF04 Respiration Rate |
| 9 | BPF05 | Char | 5 | BPF05 Time first blood pressure taken |
| 10 | BPF05_AMPM | Char | 1 | BPF05_AMPM first bp measurement AM/PM |
| 11 | BPF05A | Num | 8 | BPF05A First Systolic |
| 12 | BPF05B | Num | 8 | BPF05B First Diastolic |
| 13 | BPF05C | Num | 8 | BPF05C First Heart Rate |
| 14 | BPF06 | Char | 5 | BPF06 Time second blood pressure taken: |
| 15 | BPF06_AMPM | Char | 1 | BPF06_AMPM second BP measurement AM/PM |
| 16 | BPF06A | Num | 8 | BPF05A Second Systolic |
| 17 | BPF06B | Num | 8 | BPF05B Second Diastolic |
| 18 | BPF06C | Num | 8 | BPF05C Second Heart Rate |
| 19 | BPF07 | Char | 5 | BPF07 Time third blood pressure taken: |
| 20 | BPF07_AMPM | Char | 1 | BPF07_AMPM third BP measurement AM/PM |
| 21 | BPF07A | Num | 8 | BPF05A Third Systolic |
| 22 | BPF07B | Num | 8 | BPF05B Third Diastolic |
| 23 | BPF07C | Num | 8 | BPF05C Third Heart Rate |
| 24 | BPF08A | Num | 8 | BPF08A Average Systolic |
| 25 | BPF08B | Num | 8 | BPF08B Average Diastolic |
| 26 | BPF08C | Num | 8 | BPF08C Average Heart Rate |
| 27 | VERSION | Char | 21 | Version |
| 28 | BPF0A_DAYS | Num | 8 | BPF0A Form Date - Days from enrollment |

## Data Set Name: v1_bsq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BSQ01 | Char | 1 | BSQ01 Snore |
| 5 | BSQ02 | Num | 8 | BSQ02 Describe snore |
| 6 | BSQ03 | Num | 8 | BSQ03 Snoring frequency |
| 7 | BSQ04 | Char | 1 | BSQ04 Bothersome snoring |
| 8 | BSQ05 | Num | 8 | BSQ05 Breathing during sleep |
| 9 | BSQ06 | Char | 1 | BSQ06 Fatigue after sleep |
| 10 | BSQ07 | Char | 1 | BSQ07 Fatigue during waking time |
| 11 | BSQ08 | 1 | BSQ08 Fatigue while driving |  |
| 12 | BSQ09 | Char | 1 | BSQ09 Frequency of fatigue while driving |
| 13 | BSQ10 | Char | 1 | BSQ10 High blood pressure |
| 14 | VERSION | Char | 21 | Version |
| 15 | BSQ_APNEARISK01 | Char | 5 | Baseline Berlin Sleep apnea risk |
| 16 | BSQ0A_DAYS | Num | 8 | FORM Date - Days from enrollment |

Data Set Name: v1_cat_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CAT01 | Char | 1 | CAT01 Never cough |
| 5 | CAT02 | Char | 1 | CAT02 No phlegm |
| 6 | CAT03 | Char | 1 | CAT03 No chest tightness |
| 7 | CAT04 | Char | 1 | CAT04 Not out of breath |
| 8 | CAT05 | Char | 1 | CAT05 Not limited at home |
| 9 | CAT06 | Char | 1 | CAT06 Confidence leaving home |
| 10 | CAT07 | Char | 1 | CAT07 Sound sleeping |
| 11 | CAT08 | Char | 1 | CAT08 Energy level |
| 12 | VERSION | Char | 21 | Version |
| 13 | CAT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_ct_airtlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 |  |
| 3 | MANUFACTURER | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |  |
| 4 | MODEL | Char | 24 | Model of scanner - (0008,1090) ManufacturersModelName |
| 5 | KERNEL | Char | 13 | Convolution kernel used when reconstructing this scan - (0018,1210) <br> ConvolutionKernel |
| 6 | AIRWAY_ISSUE | Char | 12 | Denotes whether or not there was any issue detected when analyzing the |
| airway |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 27 | AVGMAJORINNERDIAM | Num | 8 | The greatest inner (lumen) diameter is measured at each centerline-voxel position. The average major inner diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 28 | AVGINNERAREA | Num | 8 | The lumen area is measured at each centerline voxel position. The average inner (lumen) area represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 29 | AVGAVGWALLTHICKNESS | Num | 8 | At every centerline voxel position the wall thickness at every every half-degree, for total of 720 measurements. These average values are averaged along the middle $1 / 3$ of the airway segment to obtain the Average Average Wall Thickness. |
| 30 | AVGMINOROUTERDIAM | Num | 8 | The smallest outer diameter ismeasured at each centerline voxel position. The average minor outer diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 31 | AVGMAJOROUTERDIAM | Num | 8 | The greatest outer diameter is measured at each centerline voxel position. The average major outer diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 32 | AVGOUTERAREA | Num | 8 | The area enclosed by the outer airway border is measured at each centerline voxel position. The average outer area represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 33 | WALL_AREA | Num | 8 | Wall area (avgouterarea - avginnerarea) |
| 34 | WALL_AREA_PERC | Num | 8 | Wall area \% ((avgouterarea - avginnerarea)/avgouterarea) |
| 35 | AVGINNERPERIMETER | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the inner perimeter is measured. These measurements are then averaged into Average Inner Perimeter. |
| 36 | AVGOUTERPERIMETER | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the Average Outer Perimeter measurement. These measurements are then averaged into Average Outer Perimeter. |
| 37 | AVGWALLAREAFRACTION | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the wall area fraction is determined. These measurements are then averaged into Average Wall Area Fraction. |
| 38 | MINORINNERDIAM_30 | Num | 8 | The smallest lumen diameter at the $30 \%$ point within the segment. |
| 39 | MAJORINNERDIAM_30 | Num | 8 | The largest lumen diameter at the $30 \%$ point within the segment. |
| 40 | INNERCROSSSECAREA_30 | Num | 8 | The lumen area at the $30 \%$ point within the segment. |
| 41 | MINOROUTERDIAM_30 | Num | 8 | The smallest diameter measured at the outer airway wall at the $30 \%$ point within the segment. |
| 42 | MAJOROUTERDIAM_30 | Num | 8 | The largest diameter measured at the outer airway wall at the $30 \%$ point within the segment. |
| 43 | OUTERCROSSSECAREA_30 | Num | 8 | The area enclosed by the outer airway wall at the $30 \%$ point within the segment. |
| 44 | AVGWALLTHICKNESS_30 | Num | 8 | The average wall thickness at the $30 \%$ point within the segment. |
| 45 | INNERPERIMETER_30 | Num | 8 | The lumen perimeter at the $30 \%$ point within the segment. |
| 46 | OUTERPERIMETER_30 | Num | 8 | The perimeter of the outer airway wall at the $30 \%$ point within the segment. |
| 47 | MINORINNERDIAM_40 | Num | 8 | The smallest lumen diameter at the $40 \%$ point within the segment. |
| 48 | MAJORINNERDIAM_40 | Num | 8 | The largest lumen diameter at the $40 \%$ point within the segment. |
| 49 | INNERCROSSSECAREA_40 | Num | 8 | The lumen area at the $40 \%$ point within the segment. |
| 50 | MINOROUTERDIAM_40 | Num | 8 | The smallest diameter measured at the outer airway wall at the $40 \%$ point within the segment. |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 51 | MAJOROUTERDIAM_40 | Num | 8 | The largest diameter measured at the outer airway wall at the $40 \%$ point <br> within the segment. |
| 52 | OUTERCROSSSECAREA_40 | Num | 8 | The area enclosed by the outer airway wall at the $40 \%$ point within the <br> segment. |
| 53 | AVGWALLTHICKNESS_40 | Num | 8 | The average wall thickness at the $40 \%$ point within the segment. |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | ---: | :--- | :--- |
| 83 | INEQCIRDIA_50 | Num | 8 | innerequivalentcirclediameter_50 |  |
| 84 | STDDEVINNERAREA | Num | 8 | Standard deviation of the inner area measurements along the middle $1 / 3$ of <br> the segment. |  |
| 85 | STDDEVOUTERAREA | Num | 8 | Standard deviation of the Outer Area measurements along the middle $1 / 3$ of <br> the airway segment. |  |
| 86 | TAPER_RATIO | Num | 8 | Tapering ratio (comparing lumen area or diameter at 30\% and 70\% distances <br> along a segment) |  |
| 87 | ASPECT_RATIO | Num | 8 | Aspect ratio calculated by float(float(float(i['centerLineLength'])/ <br> (float(float(i['avgMajorInnerDiam'])+ float(i['avgMinorInnerDiam']))/2))) $)$ |  |
| 89 | AVGINNERAREA_ECCENTRICITY | Num | 8 | Calculated by float(float(i['avgMinorInnerDiam']) / <br> float(i['avgMajorInnerDiam'])) |  |
| 90 | CENTERPOINT_Y | Num | 8 | The x-component of the respective center-line voxel coordinate. If the value <br> is in integers then the unit is voxels, if the value is in floating point numbers <br> then the unit is millimeters |  |
| 91 | CENTERPOINT_Z | Num | 8 | The y-component of the respective center-line voxel coordinate. If the value <br> is in integers then the unit is voxels, if the value is in floating point numbers <br> then the unit is millimeters |  |
| 92 | STUDY_DATE_DAYS | Num | 8 | The z-component of the respective center-line voxel coordinate. If the value <br> is in integers then the unit is voxels, if the value is in floating point numbers <br> then the unit is millimeters |  |
| 93 | SESSION_ID_VERSION | Num | 8 | Char | 15 |

## Data Set Name: v1_ct_corepeelrv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 27 | B_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for both lungs at residual volume (RV) |
| 28 | B_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for both lungs at residual volume (RV) |
| 29 | B_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for both lungs at residual volume (RV) |
| 30 | B_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for both lungs at residual volume (RV) |
| 31 | B_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for both lungs at residual volume (RV) |
| 32 | B_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for both lungs at residual volume (RV) |
| 33 | B_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for both lungs at residual volume (RV) |
| 34 | B_BE_250 | Num | 8 | Number of voxels below or equal to - 250 hounsfield units for both lungs at residual volume (RV) |
| 35 | B_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for both lungs at residual volume (RV) |
| 36 | B_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for both lungs at residual volume (RV) |
| 37 | B_AE_150 | Num | 8 | Number of voxels above or equal to - 150 hounsfield units for both lungs at residual volume (RV) |
| 38 | B_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for both lungs at residual volume (RV) |
| 39 | B_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for both lungs at residual volume (RV) |
| 40 | B_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for both lungs at residual volume (RV) |
| 41 | B_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for both lungs at residual volume (RV) |
| 42 | B_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for both lungs at residual volume (RV) |
| 43 | B_MEAN | Num | 8 | Average pixel values within both lungs (HU) at residual volume (RV) |
| 44 | B_MED | Num | 8 | Median pixel values within both lungs (HU) at residual volume (RV) |
| 45 | B_VAR | Num | 8 | Variance of pixel values within both lungs at residual volume (RV) |
| 46 | B_SD | Num | 8 | Standard deviation of pixel values within both lungs at residual volume (RV) |
| 47 | B_SKEW | Num | 8 | Skewness of pixel values in both lungs at residual volume (RV) |
| 48 | B_KURT | Num | 8 | Kurtosis of pixel values in both lungs at residual volume (RV) |
| 49 | B_FWHM | Num | 8 | Full width, half max (HU) for both lungs at residual volume (RV) |
| 50 | B_AIR_V | Num | 8 | Total volume of air in both lungs (milliliters) at residual volume (RV) |
| 51 | B_TIS_V | Num | 8 | Total volume of tissue in both lungs (ml) at residual volume (RV) |
| 52 | B_TOT_V | Num | 8 | Total volume of both lungs (ml) at residual volume (RV) |
| 53 | B_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for both lungs at residual volume (RV) |
| 54 | B_A_SLP | Num | 8 | The slope of the line at the ankle for both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 55 | B_A_INT | Num | 8 | The interecept of the line at the ankle for both lungs at residual volume (RV) |$|$| 56 | B_KNEE | Num | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for both lungs at residual volume (RV) |
| ---: | :--- | ---: | :--- | :--- |
| 57 | B_K_SLP | 8 | The slope of the line at the knee for both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 80 | BC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for core section of both lungs at residual volume (RV) |
| 81 | BC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for core section of both lungs at residual volume (RV) |
| 82 | BC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for core section of both lungs at residual volume (RV) |
| 83 | BC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for core section of both lungs at residual volume (RV) |
| 84 | BC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for core section of both lungs at residual volume (RV) |
| 85 | BC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for core section of both lungs at residual volume (RV) |
| 86 | BC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for core section of both lungs at residual volume (RV) |
| 87 | BC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for core section of both lungs at residual volume (RV) |
| 88 | BC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for core section of both lungs at residual volume (RV) |
| 89 | BC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for core section of both lungs at residual volume (RV) |
| 90 | BC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for core section of both lungs at residual volume (RV) |
| 91 | BC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for core section of both lungs at residual volume (RV) |
| 92 | BC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for core section of both lungs at residual volume (RV) |
| 93 | BC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for core section of both lungs at residual volume (RV) |
| 94 | BC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for core section of both lungs at residual volume (RV) |
| 95 | BC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for core section of both lungs at residual volume (RV) |
| 96 | BC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for core section of both lungs at residual volume (RV) |
| 97 | BC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of both lungs at residual volume (RV) |
| 98 | BC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for core section of both lungs at residual volume (RV) |
| 99 | BC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for core section of both lungs at residual volume (RV) |
| 100 | BC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for core section of both lungs at residual volume (RV) |
| 101 | BC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for core section of both lungs at residual volume (RV) |
| 102 | BC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for core section of both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 103 | BC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for core section of both lungs at residual volume (RV) |
| 104 | BC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for core section of both lungs at residual volume (RV) |
| 105 | BC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for core section of both lungs at residual volume (RV) |
| 106 | BC_MEAN | Num | 8 | Average pixel values within core section of both lungs (HU) at residual volume (RV) |
| 107 | BC_MED | Num | 8 | Median pixel values within core region of both lungs (HU) at residual volume (RV) |
| 108 | BC_VAR | Num | 8 | Variance of pixel values within core region of both lungs at residual volume (RV) |
| 109 | BC_SD | Num | 8 | Standard deviation of pixel values within core region of both lungs at residual volume (RV) |
| 110 | BC_SKEW | Num | 8 | Skewness of pixel values in core region of both lungs at residual volume (RV) |
| 111 | BC_KURT | Num | 8 | Kurtosis of pixel values in core section of both lungs at residual volume (RV) |
| 112 | BC_FWHM | Num | 8 | Full width, half max (HU) for core section of both lungs at residual volume (RV) |
| 113 | BC_AIR_V | Num | 8 | Total volume of air in core section of both lungs (milliliters) at residual volume (RV) |
| 114 | BC_TIS_V | Num | 8 | Total volume of tissue in core region of both lungs (ml) at residual volume (RV) |
| 115 | BC_TOT_V | Num | 8 | Total volume of core region of both lungs (ml) at residual volume (RV) |
| 116 | BC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of both lungs at residual volume (RV) |
| 117 | BC_A_SLP | Num | 8 | The slope of the line at the ankle for core section of both lungs at residual volume (RV) |
| 118 | BC_A_INT | Num | 8 | The interecept of the line at the ankle for core section of both lungs at residual volume (RV) |
| 119 | BC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of both lungs at residual volume (RV) |
| 120 | BC_K_SLP | Num | 8 | The slope of the line at the knee for core section of both lungs at residual volume (RV) |
| 121 | BC_K_INT | Num | 8 | The intercept of the line at the knee for core section of both lungs at residual volume (RV) |
| 122 | BC_C_CUTOFF_HU | Num | 8 | Core section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 123 | BC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 124 | BC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels. at residual volume (RV) |
| 125 | BC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels. at residual volume (RV) |
| 126 | BC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 127 | BC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 128 | BC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 129 | BC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 130 | BC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 131 | BC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 132 | BC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 133 | BC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 134 | BC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core region of both lungs at residual volume (RV) |
| 135 | BC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / $\operatorname{TotVx} * 100$ ) for core region of both lungs at residual volume (RV) |
| 136 | BP_TOT_VX | Num | 8 | Total number of voxels in peel region of both lungs at residual volume (RV) |
| 137 | BP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for peel section of both lungs at residual volume (RV) |
| 138 | BP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs at residual volume (RV) |
| 139 | BP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs at residual volume (RV) |
| 140 | BP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for peel section of both lungs at residual volume (RV) |
| 141 | BP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for peel section of both lungs at residual volume (RV) |
| 142 | BP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for peel section of both lungs at residual volume (RV) |
| 143 | BP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for peel section of both lungs at residual volume (RV) |
| 144 | BP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for peel section of both lungs at residual volume (RV) |
| 145 | BP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for peel section of both lungs at residual volume (RV) |
| 146 | BP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for peel section of both lungs at residual volume (RV) |
| 147 | BP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for peel section of both lungs at residual volume (RV) |
| 148 | BP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for peel section of both lungs at residual volume (RV) |
| 149 | BP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for peel section of both lungs at residual volume (RV) |
| 150 | BP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for peel section of both lungs at residual volume (RV) |
| 151 | BP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for peel section of both lungs at residual volume (RV) |
| 152 | BP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for peel section of both lungs at residual volume (RV) |
| 153 | BP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of both lungs at residual volume (RV) |
| 154 | BP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 155 | BP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 156 | BP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 157 | BP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 158 | BP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 159 | BP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 160 | BP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 161 | BP_AE_50 | Num | Num | 8 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 182 | BP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for peel section of both lungs at residual volume (RV) |
| 183 | BP_K_SLP | Num | 8 | The slope of the line at the knee for peel section of both lungs at residual volume (RV) |
| 184 | BP_K_INT | Num | 8 | The intercept of the line at the knee for peel section of both lungs at residual volume (RV) |
| 185 | BP_C_CUTOFF_HU | Num | 8 | Peel section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema at residual volume (RV) |
| 186 | BP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 187 | BP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels. at residual volume (RV) |
| 188 | BP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels. at residual volume (RV) |
| 189 | BP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 190 | BP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 191 | BP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 192 | BP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 193 | BP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at residual volume (RV) |
| 194 | BP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for peel section of both lungs at residual volume (RV) |
| 195 | BP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for peel section of both lungs at residual volume (RV) |
| 196 | BP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for peel section of both lungs at residual volume (RV) |
| 197 | BP_VESSEL_VX | Num | 8 | Total number of vessel voxels in peel region of both lungs at residual volume (RV) |
| 198 | BP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for peel region of both lungs at residual volume (RV) |
| 199 | L_TOT_VX | Num | 8 | Total number of voxels in left lung at residual volume (RV) |
| 200 | L_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for left lung at residual volume (RV) |
| 201 | L_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for left lung at residual volume (RV) |
| 202 | L_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for left lung at residual volume (RV) |
| 203 | L_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for left lung at residual volume (RV) |
| 204 | L_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for left lung at residual volume (RV) |
| 205 | L_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 206 | L_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for left lung at residual volume (RV) |
| 207 | L_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for left lung at residual volume (RV) |
| 208 | L_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for left lung at residual volume (RV) |
| 209 | L_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for left lung at residual volume (RV) |
| 210 | L_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for left lung at residual volume (RV) |
| 211 | L_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for left lung at residual volume (RV) |
| 212 | L_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for left lung at residual volume (RV) |
| 213 | L_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for left lung at residual volume (RV) |
| 214 | L_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for left lung at residual volume (RV) |
| 215 | L_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for left lung at residual volume (RV) |
| 216 | L_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for left lung at residual volume (RV) |
| 217 | L_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for left lung at residual volume (RV) |
| 218 | L_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for left lung at residual volume (RV) |
| 219 | L_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for left lung at residual volume (RV) |
| 220 | L_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for left lung at residual volume (RV) |
| 221 | L_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for left lung at residual volume (RV) |
| 222 | L_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for left lung at residual volume (RV) |
| 223 | L_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for left lung at residual volume (RV) |
| 224 | L_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for left lung at residual volume (RV) |
| 225 | L_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for left lung at residual volume (RV) |
| 226 | L_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for left lung at residual volume (RV) |
| 227 | L_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for left lung at residual volume (RV) |
| 228 | L_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 229 | L_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for left lung at residual <br> volume (RV) |
| 230 | L_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for left lung at residual <br> volume (RV) |
| 231 | L_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for left lung at residual <br> volume (RV) |
| 232 | L_MEAN | Num | 8 | Average pixel values within left lung (HU) at residual volume (RV) |
| 233 | L_MED | Num | 8 | Median pixel values within left lung (HU) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 258 | L_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for left lung at residual <br> volume (RV) |
| 259 | L_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for left lung at residual <br> volume (RV) |
| 260 | L_VESSEL_VX | Num | 8 | Total number of vessel voxels in left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 282 | LC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for core section of left lung at residual volume (RV) |
| 283 | LC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for core section of left lung at residual volume (RV) |
| 284 | LC_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for core section of left lung at residual volume (RV) |
| 285 | LC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for core section of left lung at residual volume (RV) |
| 286 | LC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of left lung at residual volume (RV) |
| 287 | LC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for core section of left lung at residual volume (RV) |
| 288 | LC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for core section of left lung at residual volume (RV) |
| 289 | LC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for core section of left lung at residual volume (RV) |
| 290 | LC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for core section of left lung at residual volume (RV) |
| 291 | LC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for core section of left lung at residual volume (RV) |
| 292 | LC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for core section of left lung at residual volume (RV) |
| 293 | LC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for core section of left lung at residual volume (RV) |
| 294 | LC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for core section of left lung at residual volume (RV) |
| 295 | LC_MEAN | Num | 8 | Average pixel values within core section of left lung (HU) at residual volume (RV) |
| 296 | LC_MED | Num | 8 | Median pixel values within of core section of left lung (HU) at residual volume (RV) |
| 297 | LC_VAR | Num | 8 | Variance of pixel values within core section of left lung at residual volume (RV) |
| 298 | LC_SD | Num | 8 | Standard deviation of pixel values within core section of left lung at residual volume (RV) |
| 299 | LC_SKEW | Num | 8 | Skewness of pixel values in core section of left lung at residual volume (RV) |
| 300 | LC_KURT | Num | 8 | Kurtosis of pixel values in core section of left lung at residual volume (RV) |
| 301 | LC_FWHM | Num | 8 | Full width, half max (HU) for core section of left lung at residual volume (RV) |
| 302 | LC_AIR_V | Num | 8 | Total volume of air in core section of left lung (milliliters) at residual volume (RV) |
| 303 | LC_TIS_V | Num | 8 | Total volume of tissue in core section of left lung (ml) at residual volume (RV) |
| 304 | LC_TOT_V | Num | 8 | Total volume of core section of left lung (ml) at residual volume (RV) |
| 305 | LC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of left lung at residual volume (RV) |
| 306 | LC_A_SLP | Num | 8 | The slope of the line at the ankle for core section of left lung at residual volume (RV) |
| 307 | LC_A_INT | Num | 8 | The interecept of the line at the ankle for core section of left lung at residual volume (RV) |
| 308 | LC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of left lung at residual volume (RV) |
| 309 | LC_K_SLP | Num | 8 | The slope of the line at the knee for core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | LC_K_INT | Num | 8 | The intercept of the line at the knee for core section of left lung at residual volume (RV) |
| 311 | LC_C_CUTOFF_HU | Num | 8 | Core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 312 | LC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 313 | LC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of core section of left lung to emphysema voxels. at residual volume (RV) |
| 314 | LC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels. at residual volume (RV) |
| 315 | LC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 316 | LC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 317 | LC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 318 | LC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 319 | LC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 320 | LC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of left lung at residual volume (RV) |
| 321 | LC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of left lung at residual volume (RV) |
| 322 | LC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of left lung at residual volume (RV) |
| 323 | LC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core section of left lung at residual volume (RV) |
| 324 | LC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) core section of left lung at residual volume (RV) |
| 325 | LL_TOT_VX | Num | 8 | Total number of voxels in lower part of left lung at residual volume (RV) |
| 326 | LL_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of left lung at residual volume (RV) |
| 327 | LL_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of left lung at residual volume (RV) |
| 328 | LL_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of left lung at residual volume (RV) |
| 329 | LL_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of left lung at residual volume (RV) |
| 330 | LL_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of left lung at residual volume (RV) |
| 331 | LL_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of left lung at residual volume (RV) |
| 332 | LL_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of left lung at residual volume (RV) |
| 333 | LL_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 334 | LL_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of left lung at residual volume (RV) |
| 335 | LL_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of left lung at residual volume (RV) |
| 336 | LL_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of left lung at residual volume (RV) |
| 337 | LL_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for lower part of left lung at residual volume (RV) |
| 338 | LL_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for lower part of left lung at residual volume (RV) |
| 339 | LL_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for lower part of left lung at residual volume (RV) |
| 340 | LL_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for lower part of left lung at residual volume (RV) |
| 341 | LL_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for lower part of left lung at residual volume (RV) |
| 342 | LL_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for lower part of left lung at residual volume (RV) |
| 343 | LL_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for lower part of left lung at residual volume (RV) |
| 344 | LL_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for lower part of left lung at residual volume (RV) |
| 345 | LL_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for lower part of left lung at residual volume (RV) |
| 346 | LL_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for lower part of left lung at residual volume (RV) |
| 347 | LL_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for lower part of left lung at residual volume (RV) |
| 348 | LL_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for lower part of left lung at residual volume (RV) |
| 349 | LL_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for lower part of left lung at residual volume (RV) |
| 350 | LL_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of left lung at residual volume (RV) |
| 351 | LL_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for lower part of left lung at residual volume (RV) |
| 352 | LL_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for lower part of left lung at residual volume (RV) |
| 353 | LL_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for lower part of left lung at residual volume (RV) |
| 354 | LL_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of left lung at residual volume (RV) |
| 355 | LL_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of left lung at residual volume (RV) |
| 356 | LL_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 357 | LL_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of left lung at <br> residual volume (RV) |
| 358 | LL_MEAN | Num | 8 | Average pixel values within lower part of left lung (HU) at residual volume (RV) |
| 359 | LL_MED | Num | 8 | Median pixel values within lower part of left lung (HU) at residual volume (RV) |
| 360 | LL_VAR | Num | 8 | Variance of pixel values within lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 386 | LL_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of left lung at residual volume (RV) |
| 387 | LL_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of left lung at residual volume (RV) |
| 388 | LLC_TOT_VX | Num | 8 | Total number of voxels in lower part of core section of left lung at residual volume (RV) |
| 389 | LLC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 390 | LLC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 391 | LLC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 392 | LLC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 393 | LLC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 394 | LLC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 395 | LLC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 396 | LLC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 397 | LLC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 398 | LLC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 399 | LLC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 400 | LLC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 401 | LLC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 402 | LLC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 403 | LLC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 404 | LLC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 405 | LLC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 406 | LLC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 407 | LLC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 408 | LLC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for lower part of core section of left lung at residual volume (RV) |
| 409 | LLC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for lower part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 410 | LLC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 411 | LLC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 412 | LLC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 413 | LLC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of <br> left lung at residual volume (RV) |
| 414 | LLC_AE_100 | Num | 8 | Num |
| 415 | LLC_AE_150 | Number of voxels above or equal to -100 hounsfield units for lower part of core section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 434 | LLC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of left lung at residual volume (RV) |
| 435 | LLC_K_SLP | Num | 8 | The slope of the line at the knee for lower part of core section of left lung at residual volume (RV) |
| 436 | LLC_K_INT | Num | 8 | The intercept of the line at the knee for lower part of core section of left lung at residual volume (RV) |
| 437 | LLC_C_CUTOFF_HU | Num | 8 | Lower part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 438 | LLC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 439 | LLC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 440 | LLC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 441 | LLC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 442 | LLC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 443 | LLC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 444 | LLC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 445 | LLC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 446 | LLC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 447 | LLC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 448 | LLC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 449 | LLC_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of core section of left lung at residual volume (RV) |
| 450 | LLC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) lower part of core section of left lung at residual volume (RV) |
| 451 | LLP_TOT_VX | Num | 8 | Total number of voxels in lower part of peel section of left lung at residual volume (RV) |
| 452 | LLP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 453 | LLP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 454 | LLP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 455 | LLP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 456 | LLP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 457 | LLP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 458 | LLP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 459 | LLP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 460 | LLP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 461 | LLP_BE_856 | Num | 8 | Num |
| 462 | LLP_BE_850 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 480 | LLP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 481 | LLP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 482 | LLP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 483 | LLP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 484 | LLP_MEAN | Num | 8 | Average pixel values within lower part of peel section of left lung (HU) at residual volume (RV) |
| 485 | LLP_MED | Num | 8 | Median pixel values within lower part of peel section of left lung (HU) at residual volume (RV) |
| 486 | LLP_VAR | Num | 8 | Variance of pixel values within lower part of peel section of left lung at residual volume (RV) |
| 487 | LLP_SD | Num | 8 | Standard deviation of pixel values within lower part of peel section of left lung at residual volume (RV) |
| 488 | LLP_SKEW | Num | 8 | Skewness of pixel values in lower part of peel section of left lung at residual volume (RV) |
| 489 | LLP_KURT | Num | 8 | Kurtosis of pixel values in lower part of peel section of left lung at residual volume (RV) |
| 490 | LLP_FWHM | Num | 8 | Full width, half max (HU) for lower part of peel section of left lung at residual volume (RV) |
| 491 | LLP_AIR_V | Num | 8 | Total volume of air in lower part of peel section of left lung (milliliters) at residual volume (RV) |
| 492 | LLP_TIS_V | Num | 8 | Total volume of tissue in lower part of peel section of left lung (ml) at residual volume (RV) |
| 493 | LLP_TOT_V | Num | 8 | Total volume of lower part of peel section of left lung (ml) at residual volume (RV) |
| 494 | LLP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of left lung at residual volume (RV) |
| 495 | LLP_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of peel section of left lung at residual volume (RV) |
| 496 | LLP_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of peel section of left lung at residual volume (RV) |
| 497 | LLP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of left lung at residual volume (RV) |
| 498 | LLP_K_SLP | Num | 8 | The slope of the line at the knee for lower part of peel section of left lung at residual volume (RV) |
| 499 | LLP_K_INT | Num | 8 | The intercept of the line at the knee for lower part of peel section of left lung at residual volume (RV) |
| 500 | LLP_C_CUTOFF_HU | Num | 8 | Lower part of peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 501 | LLP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 502 | LLP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 503 | LLP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels. at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 504 | LLP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 505 | LLP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 506 | LLP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 507 | LLP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 508 | LLP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 509 | LLP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 510 | LLP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 511 | LLP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 512 | LLP_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of peel section of left lung at residual volume (RV) |
| 513 | LLP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of left lung at residual volume (RV) |
| 514 | LM_TOT_VX | Num | 8 | Total number of voxels in middle part of left lung at residual volume (RV) |
| 515 | LM_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of left lung at residual volume (RV) |
| 516 | LM_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of left lung at residual volume (RV) |
| 517 | LM_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of left lung at residual volume (RV) |
| 518 | LM_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of left lung at residual volume (RV) |
| 519 | LM_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of left lung at residual volume (RV) |
| 520 | LM_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of left lung at residual volume (RV) |
| 521 | LM_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of left lung at residual volume (RV) |
| 522 | LM_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of left lung at residual volume (RV) |
| 523 | LM_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of left lung at residual volume (RV) |
| 524 | LM_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of left lung at residual volume (RV) |
| 525 | LM_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of left lung at residual volume (RV) |
| 526 | LM_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of left lung at residual volume (RV) |
| 527 | LM_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 528 | LM_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of left lung at residual volume (RV) |
| 529 | LM_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of left lung at residual volume (RV) |
| 530 | LM_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of left lung at residual volume (RV) |
| 531 | LM_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of left lung at residual volume (RV) |
| 532 | LM_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of left lung at residual volume (RV) |
| 533 | LM_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of left lung at residual volume (RV) |
| 534 | LM_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of left lung at residual volume (RV) |
| 535 | LM_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of left lung at residual volume (RV) |
| 536 | LM_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for middle part of left lung at residual volume (RV) |
| 537 | LM_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of left lung at residual volume (RV) |
| 538 | LM_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of left lung at residual volume (RV) |
| 539 | LM_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of left lung at residual volume (RV) |
| 540 | LM_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of left lung at residual volume (RV) |
| 541 | LM_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of left lung at residual volume (RV) |
| 542 | LM_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of left lung at residual volume (RV) |
| 543 | LM_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of left lung at residual volume (RV) |
| 544 | LM_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of left lung at residual volume (RV) |
| 545 | LM_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of left lung at residual volume (RV) |
| 546 | LM_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of left lung at residual volume (RV) |
| 547 | LM_MEAN | Num | 8 | Average pixel values within middle part of left lung (HU) at residual volume (RV) |
| 548 | LM_MED | Num | 8 | Median pixel values within middle part of left lung (HU) at residual volume (RV) |
| 549 | LM_VAR | Num | 8 | Variance of pixel values within middle part of left lung at residual volume (RV) |
| 550 | LM_SD | Num | 8 | Standard deviation of pixel values within middle part of left lung at residual volume (RV) |
| 551 | LM_SKEW | Num | 8 | Skewness of pixel values in middle part of left lung at residual volume (RV) |
| 552 | LM_KURT | Num | 8 | Kurtosis of pixel values in middle part of left lung at residual volume (RV) |
| 553 | LM_FWHM | Num | 8 | Full width, half max (HU) for middle part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 554 | LM_AIR_V | Num | 8 | Total volume of air in middle part of left lung (milliliters) at residual volume (RV) |
| 555 | LM_TIS_V | Num | 8 | Total volume of tissue in middle part of left lung (ml) at residual volume (RV) |
| 556 | LM_TOT_V | Num | 8 | Total volume of middle part of left lung (ml) at residual volume (RV) |
| 557 | LM_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of left lung at residual volume (RV) |
| 558 | LM_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of left lung at residual volume (RV) |
| 559 | LM_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of left lung at residual volume (RV) |
| 560 | LM_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of left lung at residual volume (RV) |
| 561 | LM_K_SLP | Num | 8 | The slope of the line at the knee for middle part of left lung at residual volume (RV) |
| 562 | LM_K_INT | Num | 8 | The intercept of the line at the knee for middle part of left lung at residual volume (RV) |
| 563 | LM_C_CUTOFF_HU | Num | 8 | Middle part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 564 | LM_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 565 | LM_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of left lung to emphysema voxels. at residual volume (RV) |
| 566 | LM_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels. at residual volume (RV) |
| 567 | LM_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 568 | LM_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 569 | LM_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 570 | LM_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 571 | LM_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 572 | LM_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 573 | LM_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 574 | LM_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 575 | LM_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of left lung at residual volume (RV) |
| 576 | LM_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of left lung at residual volume (RV) |
| 577 | LMC_TOT_VX | Num | 8 | Total number of voxels in middle part of core section of left lung at residual volume (RV) |
| 578 | LMC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 579 | LMC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 580 | LMC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 581 | LMC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 582 | LMC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 583 | LMC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 584 | LMC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 585 | LMC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 586 | LMC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 587 | LMC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 588 | LMC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 589 | LMC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 590 | LMC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 591 | LMC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 592 | LMC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 593 | LMC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 594 | LMC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 595 | LMC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 596 | LMC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 597 | LMC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 598 | LMC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 599 | LMC_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 600 | LMC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 601 | LMC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 602 | LMC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 603 | LMC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 604 | LMC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 605 | LMC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 606 | LMC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 607 | LMC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 608 | LMC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 609 | LMC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 610 | LMC_MEAN | Num | 8 | Average pixel values within middle part of core section of left lung (HU) at residual volume (RV) |
| 611 | LMC_MED | Num | 8 | Median pixel values within middle part of core section of left lung (HU) at residual volume (RV) |
| 612 | LMC_VAR | Num | 8 | Variance of pixel values within middle part of core section of left lung at residual volume (RV) |
| 613 | LMC_SD | Num | 8 | Standard deviation of pixel values within middle part of core section of left lung at residual volume (RV) |
| 614 | LMC_SKEW | Num | 8 | Skewness of pixel values in middle part of core section of left lung at residual volume (RV) |
| 615 | LMC_KURT | Num | 8 | Kurtosis of pixel values in middle part of core section of left lung at residual volume (RV) |
| 616 | LMC_FWHM | Num | 8 | Full width, half max (HU) for middle part of core section of left lung at residual volume (RV) |
| 617 | LMC_AIR_V | Num | 8 | Total volume of air in middle part of core section of left lung (milliliters) at residual volume (RV) |
| 618 | LMC_TIS_V | Num | 8 | Total volume of tissue in middle part of core section of left lung (ml) at residual volume (RV) |
| 619 | LMC_TOT_V | Num | 8 | Total volume of middle part of core section of left lung (ml) at residual volume (RV) |
| 620 | LMC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of core section of left lung at residual volume (RV) |
| 621 | LMC_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of core section of left lung at residual volume (RV) |
| 622 | LMC_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of core section of left lung at residual volume (RV) |
| 623 | LMC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of core section of left lung at residual volume (RV) |
| 624 | LMC_K_SLP | Num | 8 | The slope of the line at the knee for middle part of core section of left lung at residual volume (RV) |
| 625 | LMC_K_INT | Num | 8 | The intercept of the line at the knee for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 626 | LMC_C_CUTOFF_HU | Num | 8 | Middle part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 627 | LMC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 628 | LMC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 629 | LMC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 630 | LMC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 631 | LMC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 632 | LMC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 633 | LMC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 634 | LMC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 635 | LMC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 636 | LMC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 637 | LMC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 638 | LMC_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of core section of left lung at residual volume (RV) |
| 639 | LMC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of core section of left lung at residual volume (RV) |
| 640 | LMP_TOT_VX | Num | 8 | Total number of voxels in middle part of peel section of left lung at residual volume (RV) |
| 641 | LMP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 642 | LMP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 643 | LMP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 644 | LMP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 645 | LMP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 646 | LMP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 647 | LMP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 648 | LMP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 649 | LMP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of peel section <br> of left lung at residual volume (RV) |
| 650 | LMP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of peel section <br> of left lung at residual volume (RV) |
| 651 | LMP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of peel section <br> of left lung at residual volume (RV) |
| 652 | LMP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of peel section <br> of left lung at residual volume (RV) |
| 653 | LMP_BE_810 | Num | 8 | Num |
| 654 | LMP_BE_660 | Number of voxels below or equal to -810 hounsfield units for middle part of peel section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 672 | LMP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 673 | LMP_MEAN | Num | 8 | Average pixel values within middle part of peel section of left lung (HU) at residual volume (RV) |
| 674 | LMP_MED | Num | 8 | Median pixel values within middle part of peel section of left lung (HU) at residual volume (RV) |
| 675 | LMP_VAR | Num | 8 | Variance of pixel values within middle part of peel section of left lung at residual volume (RV) |
| 676 | LMP_SD | Num | 8 | Standard deviation of pixel values within middle part of peel section of left lung at residual volume (RV) |
| 677 | LMP_SKEW | Num | 8 | Skewness of pixel values in middle part of peel section of left lung at residual volume (RV) |
| 678 | LMP_KURT | Num | 8 | Kurtosis of pixel values in middle part of peel section of left lung at residual volume (RV) |
| 679 | LMP_FWHM | Num | 8 | Full width, half max (HU) for middle part of peel section of left lung at residual volume (RV) |
| 680 | LMP_AIR_V | Num | 8 | Total volume of air in middle part of peel section of left lung (milliliters) at residual volume (RV) |
| 681 | LMP_TIS_V | Num | 8 | Total volume of tissue in middle part of peel section of left lung (ml) at residual volume (RV) |
| 682 | LMP_TOT_V | Num | 8 | Total volume of middle part of peel section of left lung (ml) at residual volume (RV) |
| 683 | LMP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of left lung at residual volume (RV) |
| 684 | LMP_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of peel section of left lung at residual volume (RV) |
| 685 | LMP_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of peel section of left lung at residual volume (RV) |
| 686 | LMP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of left lung at residual volume (RV) |
| 687 | LMP_K_SLP | Num | 8 | The slope of the line at the knee for middle part of peel section of left lung at residual volume (RV) |
| 688 | LMP_K_INT | Num | 8 | The intercept of the line at the knee for middle part of peel section of left lung at residual volume (RV) |
| 689 | LMP_C_CUTOFF_HU | Num | 8 | Middle part of peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 690 | LMP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 691 | LMP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 692 | LMP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 693 | LMP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 694 | LMP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 695 | LMP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 696 | LMP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 697 | LMP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 698 | LMP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 699 | LMP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 700 | LMP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 701 | LMP_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of peel section of left lung at residual volume (RV) |
| 702 | LMP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of peel section of left lung at residual volume (RV) |
| 703 | LP_TOT_VX | Num | 8 | Total number of voxels in peel section of left lung at residual volume (RV) |
| 704 | LP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for peel section of left lung at residual volume (RV) |
| 705 | LP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at residual volume (RV) |
| 706 | LP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at residual volume (RV) |
| 707 | LP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for peel section of left lung at residual volume (RV) |
| 708 | LP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for peel section of left lung at residual volume (RV) |
| 709 | LP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for peel section of left lung at residual volume (RV) |
| 710 | LP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for peel section of left lung at residual volume (RV) |
| 711 | LP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for peel section of left lung at residual volume (RV) |
| 712 | LP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for peel section of left lung at residual volume (RV) |
| 713 | LP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for peel section of left lung at residual volume (RV) |
| 714 | LP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for peel section of left lung at residual volume (RV) |
| 715 | LP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for peel section of left lung at residual volume (RV) |
| 716 | LP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for peel section of left lung at residual volume (RV) |
| 717 | LP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for peel section of left lung at residual volume (RV) |
| 718 | LP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 719 | LP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for peel section of left lung at residual volume (RV) |
| 720 | LP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of left lung at residual volume (RV) |
| 721 | LP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of left lung at residual volume (RV) |
| 722 | LP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of left lung at residual volume (RV) |
| 723 | LP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of left lung at residual volume (RV) |
| 724 | LP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of left lung at residual volume (RV) |
| 725 | LP_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for peel section of left lung at residual volume (RV) |
| 726 | LP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for peel section of left lung at residual volume (RV) |
| 727 | LP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for peel section of left lung at residual volume (RV) |
| 728 | LP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for peel section of left lung at residual volume (RV) |
| 729 | LP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for peel section of left lung at residual volume (RV) |
| 730 | LP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for peel section of left lung at residual volume (RV) |
| 731 | LP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for peel section of left lung at residual volume (RV) |
| 732 | LP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for peel section of left lung at residual volume (RV) |
| 733 | LP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for peel section of left lung at residual volume (RV) |
| 734 | LP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for peel section of left lung at residual volume (RV) |
| 735 | LP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for peel section of left lung at residual volume (RV) |
| 736 | LP_MEAN | Num | 8 | Average pixel values within peel section of left lung (HU) at residual volume (RV) |
| 737 | LP_MED | Num | 8 | Median pixel values within peel section of left lung (HU) at residual volume (RV) |
| 738 | LP_VAR | Num | 8 | Variance of pixel values within peel section of left lung at residual volume (RV) |
| 739 | LP_SD | Num | 8 | Standard deviation of pixel values within peel section of left lung at residual volume (RV) |
| 740 | LP_SKEW | Num | 8 | Skewness of pixel values in peel section of left lung at residual volume (RV) |
| 741 | LP_KURT | Num | 8 | Kurtosis of pixel values in peel section of left lung at residual volume (RV) |
| 742 | LP_FWHM | Num | 8 | Full width, half max (HU) for peel section of left lung at residual volume (RV) |
| 743 | LP_AIR_V | Num | 8 | Total volume of air in peel section of left lung (milliliters) at residual volume (RV) |
| 744 | LP_TIS_V | Num | 8 | Total volume of tissue in peel section of left lung (ml) at residual volume (RV) |
| 745 | LP_TOT_V | Num | 8 | Total volume of peel section of left lung (ml) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 746 | LP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for peel section of left lung at residual volume (RV) |
| 747 | LP_A_SLP | Num | 8 | The slope of the line at the ankle for peel section of left lung at residual volume (RV) |
| 748 | LP_A_INT | Num | 8 | The interecept of the line at the ankle for peel section of left lung at residual volume <br> (RV) |
| 749 | LP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of left lung at residual volume (RV) |
| 750 | LP_K_SLP | Num | 8 | Num |
| 751 | LP_K_INT | Num slope of the line at the knee for peel section of left lung at residual volume (RV) | 8 | 8 |
| 752 | LP_C_CUTOFF_HU | Num | 8 | The intercept of the line at the knee for peel section of left lung at residual volume (RV) <br> Number <br> residual volume (RV) |
| 767 | LP_C_V_M | Num section of left lung: definition of emphysema cutoff value (HU) values less than this |  |  |
| are considered emphysema at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 771 | LU_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of left lung at <br> residual volume (RV) |
| 772 | LU_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of left lung at <br> residual volume (RV) |
| 773 | LU_BE_900 | Num | 8 | n |
| 774 | LU_BE_890 |  | Number of voxels below or equal to -900 hounsfield units for upper part of left lung at |  |
| residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 794 | LU_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of left lung at residual volume (RV) |
| 795 | LU_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of left lung at residual volume (RV) |
| 796 | LU_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of left lung at residual volume (RV) |
| 797 | LU_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of left lung at residual volume (RV) |
| 798 | LU_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of left lung at residual volume (RV) |
| 799 | LU_MEAN | Num | 8 | Average pixel values within upper part of left lung (HU) at residual volume (RV) |
| 800 | LU_MED | Num | 8 | Median pixel values within upper part of left lung (HU) at residual volume (RV) |
| 801 | LU_VAR | Num | 8 | Variance of pixel values within upper part of left lung at residual volume (RV) |
| 802 | LU_SD | Num | 8 | Standard deviation of pixel values within upper part of left lung at residual volume (RV) |
| 803 | LU_SKEW | Num | 8 | Skewness of pixel values in upper part of left lung at residual volume (RV) |
| 804 | LU_KURT | Num | 8 | Kurtosis of pixel values in upper part of left lung at residual volume (RV) |
| 805 | LU_FWHM | Num | 8 | Full width, half max (HU) for upper part of left lung at residual volume (RV) |
| 806 | LU_AIR_V | Num | 8 | Total volume of air in upper part of left lung (milliliters) at residual volume (RV) |
| 807 | LU_TIS_V | Num | 8 | Total volume of tissue in upper part of left lung (ml) at residual volume (RV) |
| 808 | LU_TOT_V | Num | 8 | Total volume of upper part of left lung (ml) at residual volume (RV) |
| 809 | LU_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of left lung at residual volume (RV) |
| 810 | LU_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of left lung at residual volume (RV) |
| 811 | LU_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of left lung at residual volume (RV) |
| 812 | LU_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of left lung at residual volume (RV) |
| 813 | LU_K_SLP | Num | 8 | The slope of the line at the knee for upper part of left lung at residual volume (RV) |
| 814 | LU_K_INT | Num | 8 | The intercept of the line at the knee for upper part of left lung at residual volume (RV) |
| 815 | LU_C_CUTOFF_HU | Num | 8 | Upper part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 816 | LU_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 817 | LU_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of left lung to emphysema voxels. at residual volume (RV) |
| 818 | LU_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels. at residual volume (RV) |
| 819 | LU_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 820 | LU_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 821 | LU_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 822 | LU_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 823 | LU_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 824 | LU_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for upper part of left lung at residual volume (RV) |
| 825 | LU_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for upper part of left lung at residual volume (RV) |
| 826 | LU_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for upper part of left lung at residual volume (RV) |
| 827 | LU_VESSEL_VX | Num | 8 | Total number of vessel voxels in upper part of left lung at residual volume (RV) |
| 828 | LU_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of left lung at residual volume (RV) |
| 829 | LUC_TOT_VX | Num | 8 | Total number of voxels in upper part of core section of left lung at residual volume (RV) |
| 830 | LUC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 831 | LUC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 832 | LUC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 833 | LUC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 834 | LUC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 835 | LUC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 836 | LUC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 837 | LUC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 838 | LUC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 839 | LUC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 840 | LUC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 841 | LUC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 842 | LUC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 843 | LUC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 844 | LUC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 845 | LUC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 846 | LUC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 847 | LUC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 848 | LUC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 849 | LUC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 850 | LUC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 851 | LUC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 852 | LUC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 853 | LUC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 854 | LUC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 855 | LUC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 856 | LUC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 857 | LUC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 858 | LUC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 859 | LUC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 860 | LUC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 861 | LUC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of core section of left lung at residual volume (RV) |
| 862 | LUC_MEAN | Num | 8 | Average pixel values within upper part of core section of left lung (HU) at residual volume (RV) |
| 863 | LUC_MED | Num | 8 | Median pixel values within upper part of core section of left lung (HU) at residual volume (RV) |
| 864 | LUC_VAR | Num | 8 | Variance of pixel values within upper part of core section of left lung at residual volume (RV) |
| 865 | LUC_SD | Num | 8 | Standard deviation of pixel values within upper part of core section of left lung at residual volume (RV) |
| 866 | LUC_SKEW | Num | 8 | Skewness of pixel values in upper part of core section of left lung at residual volume (RV) |
| 867 | LUC_KURT | Num | 8 | Kurtosis of pixel values in upper part of core section of left lung at residual volume (RV) |
| 868 | LUC_FWHM | Num | 8 | Full width, half max (HU) for upper part of core section of left lung at residual volume (RV) |
| 869 | LUC_AIR_V | Num | 8 | Total volume of air in upper part of core section of left lung (milliliters) at residual volume (RV) |
| 870 | LUC_TIS_V | Num | 8 | Total volume of tissue in upper part of core section of left lung (ml) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 871 | LUC_TOT_V | Num | 8 | Total volume of upper part of core section of left lung (ml) at residual volume (RV) |
| 872 | LUC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of core section of left lung at residual volume (RV) |
| 873 | LUC_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of core section of left lung at residual volume (RV) |
| 874 | LUC_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of core section of left lung at residual volume (RV) |
| 875 | LUC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of core section of left lung at residual volume (RV) |
| 876 | LUC_K_SLP | Num | 8 | The slope of the line at the knee for upper part of core section of left lung at residual volume (RV) |
| 877 | LUC_K_INT | Num | 8 | The intercept of the line at the knee for upper part of core section of left lung at residual volume (RV) |
| 878 | LUC_C_CUTOFF_HU | Num | 8 | Upper part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 879 | LUC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 880 | LUC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 881 | LUC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 882 | LUC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 883 | LUC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 884 | LUC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 885 | LUC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 886 | LUC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at residual volume (RV) |
| 887 | LUC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for upper part of core section of left lung at residual volume (RV) |
| 888 | LUC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for upper part of core section of left lung at residual volume (RV) |
| 889 | LUC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for upper part of core section of left lung at residual volume (RV) |
| 890 | LUC_VESSEL_VX | Num | 8 | Total number of vessel voxels in upper part of core section of left lung at residual volume (RV) |
| 891 | LUC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of core section of left lung at residual volume (RV) |
| 892 | LUP_TOT_VX | Num | 8 | Total number of voxels in upper part of peel section of left lung at residual volume (RV) |
| 893 | LUP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 894 | LUP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section <br> of left lung at residual volume (RV) |
| 895 | LUP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section <br> of left lung at residual volume (RV) |
| 896 | LUP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section <br> of left lung at residual volume (RV) |
| 897 | LUP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section <br> of left lung at residual volume (RV) |
| 998 | LUP_BE_910 | Num | 8 | Num |
| 999 | LUP_BE_900 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 917 | LUP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 918 | LUP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 919 | LUP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 920 | LUP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 921 | LUP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 922 | LUP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 923 | LUP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 924 | LUP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 925 | LUP_MEAN | Num | 8 | Average pixel values within upper part of peel section of left lung (HU) at residual volume (RV) |
| 926 | LUP_MED | Num | 8 | Median pixel values within upper part of peel section of left lung (HU) at residual volume (RV) |
| 927 | LUP_VAR | Num | 8 | Variance of pixel values within upper part of peel section of left lung at residual volume (RV) |
| 928 | LUP_SD | Num | 8 | Standard deviation of pixel values within upper part of peel section of left lung at residual volume (RV) |
| 929 | LUP_SKEW | Num | 8 | Skewness of pixel values in upper part of peel section of left lung at residual volume (RV) |
| 930 | LUP_KURT | Num | 8 | Kurtosis of pixel values in upper part of peel section of left lung at residual volume (RV) |
| 931 | LUP_FWHM | Num | 8 | Full width, half max (HU) for upper part of peel section of left lung at residual volume (RV) |
| 932 | LUP_AIR_V | Num | 8 | Total volume of air in upper part of peel section of left lung (milliliters) at residual volume (RV) |
| 933 | LUP_TIS_V | Num | 8 | Total volume of tissue in upper part of peel section of left lung (ml) at residual volume (RV) |
| 934 | LUP_TOT_V | Num | 8 | Total volume of upper part of peel section of left lung (ml) at residual volume (RV) |
| 935 | LUP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at residual volume (RV) |
| 936 | LUP_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of peel section of left lung at residual volume (RV) |
| 937 | LUP_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of peel section of left lung at residual volume (RV) |
| 938 | LUP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at residual volume (RV) |
| 939 | LUP_K_SLP | Num | 8 | The slope of the line at the knee for upper part of peel section of left lung at residual volume (RV) |
| 940 | LUP_K_INT | Num | 8 | The intercept of the line at the knee for upper part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 941 | LUP_C_CUTOFF_HU | Num | 8 | Upper part of peel section of left lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 942 | LUP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of peel section of left lung <br> to emphysema voxels at residual volume (RV) |
| 943 | LUP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of left lung to emphysema voxels. at residual volume (RV) |
| 944 | LUP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of upper part of peel <br> section of left lung to emphysema voxels. at residual volume (RV) |
| 945 | LUP_C_V_X_SD | Num | 8 | Num |
| 964 | Num X component of the standard deviation of the vectors from the centroid of upper part |  |  |  |
| of peel section of left lung to emphysema voxels at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 965 | R_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for right lung at residual volume (RV) |
| 966 | R_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for right lung at residual volume (RV) |
| 967 | R_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for right lung at residual volume (RV) |
| 968 | R_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for right lung at residual volume (RV) |
| 969 | R_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for right lung at residual volume (RV) |
| 970 | R_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for right lung at residual volume (RV) |
| 971 | R_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for right lung at residual volume (RV) |
| 972 | R_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for right lung at residual volume (RV) |
| 973 | R_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for right lung at residual volume (RV) |
| 974 | R_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for right lung at residual volume (RV) |
| 975 | R_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for right lung at residual volume (RV) |
| 976 | R_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for right lung at residual volume (RV) |
| 977 | R_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for right lung at residual volume (RV) |
| 978 | R_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for right lung at residual volume (RV) |
| 979 | R_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for right lung at residual volume (RV) |
| 980 | R_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for right lung at residual volume (RV) |
| 981 | R_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for right lung at residual volume (RV) |
| 982 | R_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for right lung at residual volume (RV) |
| 983 | R_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for right lung at residual volume (RV) |
| 984 | R_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for right lung at residual volume (RV) |
| 985 | R_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for right lung at residual volume (RV) |
| 986 | R_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for right lung at residual volume (RV) |
| 987 | R_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for right lung at residual volume (RV) |
| 988 | R_MEAN | Num | 8 | Average pixel values within right lung (HU) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 989 | R_MED | Num | 8 | Median pixel values within right lung (HU) at residual volume (RV) |
| 990 | R_VAR | Num | 8 | Variance of pixel values within right lung at residual volume (RV) |
| 991 | R_SD | Num | 8 | Standard deviation of pixel values within right lung at residual volume (RV) |
| 992 | R_SKEW | Num | 8 | Skewness of pixel values in right lung at residual volume (RV) |
| 993 | R_KURT | Num | 8 | Kurtosis of pixel values in right lung at residual volume (RV) |
| 994 | R_FWHM | Num | 8 | Full width, half max (HU) for right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1018 | RC_TOT_VX | Num | 8 | Total number of voxels in core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1042 | RC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of right lung at residual volume (RV) |
| 1043 | RC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for core section of right lung at residual volume (RV) |
| 1044 | RC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for core section of right lung at residual volume (RV) |
| 1045 | RC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for core section of right lung at residual volume (RV) |
| 1046 | RC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for core section of right lung at residual volume (RV) |
| 1047 | RC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for core section of right lung at residual volume (RV) |
| 1048 | RC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for core section of right lung at residual volume (RV) |
| 1049 | RC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for core section of right lung at residual volume (RV) |
| 1050 | RC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for core section of right lung at residual volume (RV) |
| 1051 | RC_MEAN | Num | 8 | Average pixel values within core section of right lung (HU) at residual volume (RV) |
| 1052 | RC_MED | Num | 8 | Median pixel values within core section of right lung (HU) at residual volume (RV) |
| 1053 | RC_VAR | Num | 8 | Variance of pixel values within core section of right lung at residual volume (RV) |
| 1054 | RC_SD | Num | 8 | Standard deviation of pixel values within core section of right lung at residual volume (RV) |
| 1055 | RC_SKEW | Num | 8 | Skewness of pixel values in core section of right lung at residual volume (RV) |
| 1056 | RC_KURT | Num | 8 | Kurtosis of pixel values in core section of right lung at residual volume (RV) |
| 1057 | RC_FWHM | Num | 8 | Full width, half max (HU) for core section of right lung at residual volume (RV) |
| 1058 | RC_AIR_V | Num | 8 | Total volume of air in core section of right lung (milliliters) at residual volume (RV) |
| 1059 | RC_TIS_V | Num | 8 | Total volume of tissue in core section of right lung (ml) at residual volume (RV) |
| 1060 | RC_TOT_V | Num | 8 | Total volume of core section of right lung (ml) at residual volume (RV) |
| 1061 | RC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of right lung at residual volume (RV) |
| 1062 | RC_A_SLP | Num | 8 | The slope of the line at the ankle for core section of right lung at residual volume (RV) |
| 1063 | RC_A_INT | Num | 8 | The interecept of the line at the ankle for core section of right lung at residual volume (RV) |
| 1064 | RC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of right lung at residual volume (RV) |
| 1065 | RC_K_SLP | Num | 8 | The slope of the line at the knee for core section of right lung at residual volume (RV) |
| 1066 | RC_K_INT | Num | 8 | The intercept of the line at the knee for core section of right lung at residual volume (RV) |
| 1067 | RC_C_CUTOFF_HU | Num | 8 | Core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1068 | RC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1069 | RC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of core section of right lung to emphysema voxels. at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1070 | RC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1071 | RC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1072 | RC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1073 | RC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1074 | RC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1075 | RC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1076 | RC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1077 | RC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1078 | RC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1079 | RC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core section of right lung at residual volume (RV) |
| 1080 | RC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for core section of right lung at residual volume (RV) |
| 1081 | RL_TOT_VX | Num | 8 | Total number of voxels in lower part of right lung at residual volume (RV) |
| 1082 | RL_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of right lung at residual volume (RV) |
| 1083 | RL_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at residual volume (RV) |
| 1084 | RL_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at residual volume (RV) |
| 1085 | RL_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of right lung at residual volume (RV) |
| 1086 | RL_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of right lung at residual volume (RV) |
| 1087 | RL_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of right lung at residual volume (RV) |
| 1088 | RL_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of right lung at residual volume (RV) |
| 1089 | RL_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of right lung at residual volume (RV) |
| 1090 | RL_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of right lung at residual volume (RV) |
| 1091 | RL_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of right lung at residual volume (RV) |
| 1092 | RL_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of right lung at residual volume (RV) |
| 1093 | RL_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for lower part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1094 | RL_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for lower part of right lung at <br> residual volume (RV) |
| 1095 | RL_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for lower part of right lung at <br> residual volume (RV) |
| 1096 | RL_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for lower part of right lung at <br> residual volume (RV) |
| 1097 | RL_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for lower part of right lung at <br> residual volume (RV) |
| 1098 | RL_BE_600 | Num | Num | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1119 | RL_KURT | Num | 8 | Kurtosis of pixel values in lower part of right lung at residual volume (RV) |
| 1120 | RL_FWHM | Num | 8 | Full width, half max (HU) for lower part of right lung at residual volume (RV) |
| 1121 | RL_AIR_V | Num | 8 | Total volume of air in lower part of right lung (milliliters) at residual volume (RV) |
| 1122 | RL_TIS_V | Num | 8 | Total volume of tissue in lower part of right lung (ml) at residual volume (RV) |
| 1123 | RL_TOT_V | Num | 8 | Total volume of lower part of right lung (ml) at residual volume (RV) |
| 1124 | RL_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of right lung at residual volume (RV) |
| 1125 | RL_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of right lung at residual volume (RV) |
| 1126 | RL_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of right lung at residual volume (RV) |
| 1127 | RL_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of right lung at residual volume (RV) |
| 1128 | RL_K_SLP | Num | 8 | The slope of the line at the knee for lower part of right lung at residual volume (RV) |
| 1129 | RL_K_INT | Num | 8 | The intercept of the line at the knee for lower part of right lung at residual volume (RV) |
| 1130 | RL_C_CUTOFF_HU | Num | 8 | Lower part of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1131 | RL_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1132 | RL_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of right lung to emphysema voxels. at residual volume (RV) |
| 1133 | RL_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of right lung to emphysema voxels. at residual volume (RV) |
| 1134 | RL_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1135 | RL_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1136 | RL_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1137 | RL_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1138 | RL_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of right lung to emphysema voxels at residual volume (RV) |
| 1139 | RL_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of right lung at residual volume (RV) |
| 1140 | RL_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of right lung at residual volume (RV) |
| 1141 | RL_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of right lung at residual volume (RV) |
| 1142 | RL_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of right lung at residual volume (RV) |
| 1143 | RL_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of right lung at residual volume (RV) |
| 1144 | RLC_TOT_VX | Num | 8 | Total number of voxels in lower part of core section of right lung at residual volume (RV) |
| 1145 | RLC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 1146 | RLC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1147 | RLC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1148 | RLC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1149 | RLC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1150 | RLC_BE_910 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1169 | RLC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1170 | RLC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1171 | RLC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1172 | RLC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1173 | RLC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1174 | RLC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1175 | RLC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1176 | RLC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1177 | RLC_MEAN | Num | 8 | Average pixel values within lower part of core section of right lung (HU) at residual volume (RV) |
| 1178 | RLC_MED | Num | 8 | Median pixel values within lower part of core section of right lung (HU) at residual volume (RV) |
| 1179 | RLC_VAR | Num | 8 | Variance of pixel values within lower part of core section of right lung at residual volume (RV) |
| 1180 | RLC_SD | Num | 8 | Standard deviation of pixel values within lower part of core section of right lung at residual volume (RV) |
| 1181 | RLC_SKEW | Num | 8 | Skewness of pixel values in lower part of core section of right lung at residual volume (RV) |
| 1182 | RLC_KURT | Num | 8 | Kurtosis of pixel values in lower part of core section of right lung at residual volume (RV) |
| 1183 | RLC_FWHM | Num | 8 | Full width, half max (HU) for lower part of core section of right lung at residual volume (RV) |
| 1184 | RLC_AIR_V | Num | 8 | Total volume of air in lower part of core section of right lung (milliliters) at residual volume (RV) |
| 1185 | RLC_TIS_V | Num | 8 | Total volume of tissue in lower part of core section of right lung (ml) at residual volume (RV) |
| 1186 | RLC_TOT_V | Num | 8 | Total volume of lower part of core section of right lung (ml) at residual volume (RV) |
| 1187 | RLC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at residual volume (RV) |
| 1188 | RLC_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of core section of right lung at residual volume (RV) |
| 1189 | RLC_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of core section of right lung at residual volume (RV) |
| 1190 | RLC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at residual volume (RV) |
| 1191 | RLC_K_SLP | Num | 8 | The slope of the line at the knee for lower part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1192 | RLC_K_INT | Num | 8 | The intercept of the line at the knee for lower part of core section of right lung at residual volume (RV) |
| 1193 | RLC_C_CUTOFF_HU | Num | 8 | Lower part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1194 | RLC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1195 | RLC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1196 | RLC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1197 | RLC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1198 | RLC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1199 | RLC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1200 | RLC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1201 | RLC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1202 | RLC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1203 | RLC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1204 | RLC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1205 | RLC_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of core section of right lung at residual volume (RV) |
| 1206 | RLC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of core section of right lung at residual volume (RV) |
| 1207 | RLP_TOT_VX | Num | 8 | Total number of voxels in lower part of peel section of right lung at residual volume (RV) |
| 1208 | RLP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1209 | RLP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1210 | RLP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1211 | RLP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1212 | RLP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1213 | RLP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1214 | RLP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 1215 | RLP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1216 | RLP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1217 | RLP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1218 | RLP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1219 | RLP_BE_830 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1238 | RLP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1239 | RLP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1240 | RLP_MEAN | Num | 8 | Average pixel values within lower part of peel section of right lung (HU) at residual volume (RV) |
| 1241 | RLP_MED | Num | 8 | Median pixel values within lower part of peel section of right lung (HU) at residual volume (RV) |
| 1242 | RLP_VAR | Num | 8 | Variance of pixel values within lower part of peel section of right lung at residual volume (RV) |
| 1243 | RLP_SD | Num | 8 | Standard deviation of pixel values within lower part of peel section of right lung at residual volume (RV) |
| 1244 | RLP_SKEW | Num | 8 | Skewness of pixel values in lower part of peel section of right lung at residual volume (RV) |
| 1245 | RLP_KURT | Num | 8 | Kurtosis of pixel values in lower part of peel section of right lung at residual volume (RV) |
| 1246 | RLP_FWHM | Num | 8 | Full width, half max (HU) for lower part of peel section of right lung at residual volume (RV) |
| 1247 | RLP_AIR_V | Num | 8 | Total volume of air in lower part of peel section of right lung (milliliters) at residual volume (RV) |
| 1248 | RLP_TIS_V | Num | 8 | Total volume of tissue in lower part of peel section of right lung (ml) at residual volume (RV) |
| 1249 | RLP_TOT_V | Num | 8 | Total volume of lower part of peel section of right lung (ml) at residual volume (RV) |
| 1250 | RLP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at residual volume (RV) |
| 1251 | RLP_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of peel section of right lung at residual volume (RV) |
| 1252 | RLP_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of peel section of right lung at residual volume (RV) |
| 1253 | RLP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at residual volume (RV) |
| 1254 | RLP_K_SLP | Num | 8 | The slope of the line at the knee for lower part of peel section of right lung at residual volume (RV) |
| 1255 | RLP_K_INT | Num | 8 | The intercept of the line at the knee for lower part of peel section of right lung at residual volume (RV) |
| 1256 | RLP_C_CUTOFF_HU | Num | 8 | Lower part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1257 | RLP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1258 | RLP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1259 | RLP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1260 | RLP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1261 | RLP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1262 | RLP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1263 | RLP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1264 | RLP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1265 | RLP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1266 | RLP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1267 | RLP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1268 | RLP_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of peel section of right lung at residual volume (RV) |
| 1269 | RLP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of right lung at residual volume (RV) |
| 1270 | RM_TOT_VX | Num | 8 | Total number of voxels in middle part of right lung at residual volume (RV) |
| 1271 | RM_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of right lung at residual volume (RV) |
| 1272 | RM_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of right lung at residual volume (RV) |
| 1273 | RM_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of right lung at residual volume (RV) |
| 1274 | RM_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of right lung at residual volume (RV) |
| 1275 | RM_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of right lung at residual volume (RV) |
| 1276 | RM_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of right lung at residual volume (RV) |
| 1277 | RM_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of right lung at residual volume (RV) |
| 1278 | RM_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of right lung at residual volume (RV) |
| 1279 | RM_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of right lung at residual volume (RV) |
| 1280 | RM_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of right lung at residual volume (RV) |
| 1281 | RM_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of right lung at residual volume (RV) |
| 1282 | RM_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of right lung at residual volume (RV) |
| 1283 | RM_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of right lung at residual volume (RV) |
| 1284 | RM_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1285 | RM_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1286 | RM_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1287 | RM_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1288 | RM_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1289 | RM_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1290 | RM_BE_450 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1311 | RM_TIS_V | Num | 8 | Total volume of tissue in middle part of right lung (ml) at residual volume (RV) |
| 1312 | RM_TOT_V | Num | 8 | Total volume of middle part of right lung (ml) at residual volume (RV) |
| 1313 | RM_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of right lung at residual volume (RV) |
| 1314 | RM_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of right lung at residual volume (RV) |
| 1315 | RM_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of right lung at residual volume (RV) |
| 1316 | RM_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of right lung at residual volume (RV) |
| 1317 | RM_K_SLP | Num | 8 | The slope of the line at the knee for middle part of right lung at residual volume (RV) |
| 1318 | RM_K_INT | Num | 8 | The intercept of the line at the knee for middle part of right lung at residual volume (RV) |
| 1319 | RM_C_CUTOFF_HU | Num | 8 | Middle part of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1320 | RM_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1321 | RM_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of right lung to emphysema voxels. at residual volume (RV) |
| 1322 | RM_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels. at residual volume (RV) |
| 1323 | RM_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1324 | RM_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1325 | RM_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1326 | RM_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1327 | RM_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1328 | RM_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1329 | RM_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1330 | RM_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1331 | RM_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of right lung at residual volume (RV) |
| 1332 | RM_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of right lung at residual volume (RV) |
| 1333 | RMC_TOT_VX | Num | 8 | Total number of voxels in middle part of core section of right lung at residual volume (RV) |
| 1334 | RMC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1335 | RMC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1336 | RMC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1337 | RMC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1338 | RMC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1339 | RMC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1340 | RMC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1341 | RMC_BE_890 | Num | 8 | Num |
| 1342 | RMC_BE_870 | Number of voxels below or equal to -890 hounsfield units for middle part of core section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1360 | RMC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1361 | RMC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1362 | RMC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1363 | RMC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1364 | RMC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1365 | RMC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1366 | RMC_MEAN | Num | 8 | Average pixel values within middle part of core section of right lung (HU) at residual volume (RV) |
| 1367 | RMC_MED | Num | 8 | Median pixel values within middle part of core section of right lung (HU) at residual volume (RV) |
| 1368 | RMC_VAR | Num | 8 | Variance of pixel values within middle part of core section of right lung at residual volume (RV) |
| 1369 | RMC_SD | Num | 8 | Standard deviation of pixel values within middle part of core section of right lung at residual volume (RV) |
| 1370 | RMC_SKEW | Num | 8 | Skewness of pixel values in middle part of core section of right lung at residual volume (RV) |
| 1371 | RMC_KURT | Num | 8 | Kurtosis of pixel values in middle part of core section of right lung at residual volume (RV) |
| 1372 | RMC_FWHM | Num | 8 | Full width, half max (HU) for middle part of core section of right lung at residual volume (RV) |
| 1373 | RMC_AIR_V | Num | 8 | Total volume of air in middle part of core section of right lung (milliliters) at residual volume (RV) |
| 1374 | RMC_TIS_V | Num | 8 | Total volume of tissue in middle part of core section of right lung (ml) at residual volume (RV) |
| 1375 | RMC_TOT_V | Num | 8 | Total volume of middle part of core section of right lung (ml) at residual volume (RV) |
| 1376 | RMC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at residual volume (RV) |
| 1377 | RMC_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of core section of right lung at residual volume (RV) |
| 1378 | RMC_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of core section of right lung at residual volume (RV) |
| 1379 | RMC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at residual volume (RV) |
| 1380 | RMC_K_SLP | Num | 8 | The slope of the line at the knee for middle part of core section of right lung at residual volume (RV) |
| 1381 | RMC_K_INT | Num | 8 | The intercept of the line at the knee for middle part of core section of right lung at residual volume (RV) |
| 1382 | RMC_C_CUTOFF_HU | Num | 8 | Middle part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1383 | RMC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1384 | RMC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1385 | RMC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1386 | RMC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1387 | RMC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1388 | RMC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1389 | RMC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1390 | RMC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1391 | RMC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1392 | RMC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1393 | RMC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1394 | RMC_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of core section of right lung at residual volume (RV) |
| 1395 | RMC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of core section of right lung at residual volume (RV) |
| 1396 | RMP_TOT_VX | Num | 8 | Total number of voxels in middle part of peel section of right lung at residual volume (RV) |
| 1397 | RMP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1398 | RMP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1399 | RMP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1400 | RMP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1401 | RMP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1402 | RMP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1403 | RMP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1404 | RMP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1405 | RMP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 1406 | RMP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of peel section <br> of right lung at residual volume (RV) |
| 1407 | RMP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of peel section <br> of right lung at residual volume (RV) |
| 1408 | RMP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of peel section <br> of right lung at residual volume (RV) |
| 1409 | RMP_BE_810 | Num | 8 | Number |
| 1410 | RMP_BE_660 | Number of voxels below or equal to -810 hounsfield units for middle part of peel section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1429 | RMP_MEAN | Num | 8 | Average pixel values within middle part of peel section of right lung (HU) at residual volume (RV) |
| 1430 | RMP_MED | Num | 8 | Median pixel values within middle part of peel section of right lung (HU) at residual volume (RV) |
| 1431 | RMP_VAR | Num | 8 | Variance of pixel values within middle part of peel section of right lung at residual volume (RV) |
| 1432 | RMP_SD | Num | 8 | Standard deviation of pixel values within middle part of peel section of right lung at residual volume (RV) |
| 1433 | RMP_SKEW | Num | 8 | Skewness of pixel values in middle part of peel section of right lung at residual volume (RV) |
| 1434 | RMP_KURT | Num | 8 | Kurtosis of pixel values in middle part of peel section of right lung at residual volume (RV) |
| 1435 | RMP_FWHM | Num | 8 | Full width, half max (HU) for middle part of peel section of right lung at residual volume (RV) |
| 1436 | RMP_AIR_V | Num | 8 | Total volume of air in middle part of peel section of right lung (milliliters) at residual volume (RV) |
| 1437 | RMP_TIS_V | Num | 8 | Total volume of tissue in middle part of peel section of right lung (ml) at residual volume (RV) |
| 1438 | RMP_TOT_V | Num | 8 | Total volume of middle part of peel section of right lung (ml) at residual volume (RV) |
| 1439 | RMP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at residual volume (RV) |
| 1440 | RMP_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of peel section of right lung at residual volume (RV) |
| 1441 | RMP_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of peel section of right lung at residual volume (RV) |
| 1442 | RMP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at residual volume (RV) |
| 1443 | RMP_K_SLP | Num | 8 | The slope of the line at the knee for middle part of peel section of right lung at residual volume (RV) |
| 1444 | RMP_K_INT | Num | 8 | The intercept of the line at the knee for middle part of peel section of right lung at residual volume (RV) |
| 1445 | RMP_C_CUTOFF_HU | Num | 8 | Middle part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1446 | RMP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1447 | RMP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1448 | RMP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1449 | RMP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1450 | RMP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1451 | RMP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 1452 | RMP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of peel <br> section of right lung to emphysema voxels at residual volume (RV) |
| 1453 | RMP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1454 | RMP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel <br> section of right lung at residual volume (RV) |
| 1455 | RMP_HU15 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1476 | RP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1477 | RP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1478 | RP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1479 | RP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1480 | RP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1482 | RP_BE_350 | Num | Num | Num |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1503 | RP_A_SLP | Num | 8 | The slope of the line at the ankle for peel section of right lung at residual volume (RV) |
| 1504 | RP_A_INT | Num | 8 | The interecept of the line at the ankle for peel section of right lung at residual volume <br> (RV) |
| 1505 | RP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of right lung at residual volume (RV) |
| 1506 | RP_K_SLP | Num | 8 | The slope of the line at the knee for peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1528 | RU_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of right lung at residual volume (RV) |
| 1529 | RU_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of right lung at residual volume (RV) |
| 1530 | RU_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of right lung at residual volume (RV) |
| 1531 | RU_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of right lung at residual volume (RV) |
| 1532 | RU_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of right lung at residual volume (RV) |
| 1533 | RU_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of right lung at residual volume (RV) |
| 1534 | RU_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of right lung at residual volume (RV) |
| 1535 | RU_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of right lung at residual volume (RV) |
| 1536 | RU_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of right lung at residual volume (RV) |
| 1537 | RU_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of right lung at residual volume (RV) |
| 1538 | RU_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of right lung at residual volume (RV) |
| 1539 | RU_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of right lung at residual volume (RV) |
| 1540 | RU_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of right lung at residual volume (RV) |
| 1541 | RU_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of right lung at residual volume (RV) |
| 1542 | RU_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of right lung at residual volume (RV) |
| 1543 | RU_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of right lung at residual volume (RV) |
| 1544 | RU_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of right lung at residual volume (RV) |
| 1545 | RU_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of right lung at residual volume (RV) |
| 1546 | RU_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of right lung at residual volume (RV) |
| 1547 | RU_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of right lung at residual volume (RV) |
| 1548 | RU_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of right lung at residual volume (RV) |
| 1549 | RU_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of right lung at residual volume (RV) |
| 1550 | RU_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1551 | RU_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of right lung at <br> residual volume (RV) |
| 1552 | RU_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of right lung at <br> residual volume (RV) |
| 1553 | RU_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of right lung at <br> residual volume (RV) |
| 1554 | RU_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of right lung at <br> residual volume (RV) |
| 1555 | RU_MEAN | Num | 8 | Num |
| 1556 | RU_MED | Num | 8 | 8 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1579 | RU_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |
| 1580 | RU_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for upper part of right lung at residual volume (RV) |
| 1581 | RU_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for upper part of right lung at residual volume (RV) |
| 1582 | RU_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for upper part of right lung at residual volume (RV) |
| 1583 | RU_VESSEL_VX | Num | 8 | Total number of vessel voxels in upper part of right lung at residual volume (RV) |
| 1584 | RU_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of right lung at residual volume (RV) |
| 1585 | RUC_TOT_VX | Num | 8 | Total number of voxels in upper part of core section of right lung at residual volume (RV) |
| 1586 | RUC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1587 | RUC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1588 | RUC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1589 | RUC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1590 | RUC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1591 | RUC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1592 | RUC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1593 | RUC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1594 | RUC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1595 | RUC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1596 | RUC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1597 | RUC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1598 | RUC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1599 | RUC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1600 | RUC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1601 | RUC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1602 | RUC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1603 | RUC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1604 | RUC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1605 | RUC_BE_450 | Num | 8 | Number of voxels below or equal to - 450 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1606 | RUC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1607 | RUC_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1608 | RUC_BE_300 | Num | 8 | Number of voxels below or equal to - 300 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1609 | RUC_BE_250 | Num | 8 | Number of voxels below or equal to - 250 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1610 | RUC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1611 | RUC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1612 | RUC_AE_150 | Num | 8 | Number of voxels above or equal to - 150 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1613 | RUC_AE_200 | Num | 8 | Number of voxels above or equal to - 200 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1614 | RUC_AE_250 | Num | 8 | Number of voxels above or equal to - 250 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1615 | RUC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1616 | RUC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1617 | RUC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of core section of right lung at residual volume (RV) |
| 1618 | RUC_MEAN | Num | 8 | Average pixel values within upper part of core section of right lung (HU) at residual volume (RV) |
| 1619 | RUC_MED | Num | 8 | Median pixel values within upper part of core section of right lung (HU) at residual volume (RV) |
| 1620 | RUC_VAR | Num | 8 | Variance of pixel values within upper part of core section of right lung at residual volume (RV) |
| 1621 | RUC_SD | Num | 8 | Standard deviation of pixel values within upper part of core section of right lung at residual volume (RV) |
| 1622 | RUC_SKEW | Num | 8 | Skewness of pixel values in upper part of core section of right lung at residual volume (RV) |
| 1623 | RUC_KURT | Num | 8 | Kurtosis of pixel values in upper part of core section of right lung at residual volume (RV) |
| 1624 | RUC_FWHM | Num | 8 | Full width, half max (HU) for upper part of core section of right lung at residual volume (RV) |
| 1625 | RUC_AIR_V | Num | 8 | Total volume of air in upper part of core section of right lung (milliliters) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1626 | RUC_TIS_V | Num | 8 | Total volume of tissue in upper part of core section of right lung (ml) at residual volume <br> (RV) |
| 1627 | RUC_TOT_V | Num | 8 | Total volume of upper part of core section of right lung (ml) at residual volume (RV) |
| 1628 | RUC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for upper part of core section of right lung at residual volume (RV) |
| 1629 | RUC_A_SLP | Num | 8 <br> 8he slope of the line at the ankle for upper part of core section of right lung at residual <br> volume (RV) |  |
| 1630 | RUC_A_INT |  |  |  |
| residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1649 | RUP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1650 | RUP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1651 | RUP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1652 | RUP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1653 | RUP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1654 | RUP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1655 | RUP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1656 | RUP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1657 | RUP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1658 | RUP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1659 | RUP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1660 | RUP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1661 | RUP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1662 | RUP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1663 | RUP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1664 | RUP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1665 | RUP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1666 | RUP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1667 | RUP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1668 | RUP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1669 | RUP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1670 | RUP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1671 | RUP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1672 | RUP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of peel section <br> of right lung at residual volume (RV) |
| 1673 | RUP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of <br> right lung at residual volume (RV) |
| 1674 | RUP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section <br> of right lung at residual volume (RV) |
| 1675 | RUP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section <br> of right lung at residual volume (RV) |
| 1676 | RUP_AE_200 | Num | 8 | Num |

$\left.\begin{array}{|c|l|l|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\ \hline 1695 & \text { RUP_K_SLP } & \text { Num } & 8 & \begin{array}{l}\text { The slope of the line at the knee for upper part of peel section of right lung at residual } \\ \text { volume (RV) }\end{array} \\ \hline 1696 & \text { RUP_K_INT } & \text { Num } & 8 & \begin{array}{l}\text { The intercept of the line at the knee for upper part of peel section of right lung at residual } \\ \text { volume (RV) }\end{array} \\ \hline 1697 & \text { RUP_C_CUTOFF_HU } & \text { Num } & 8 & \begin{array}{l}\text { Upper part of peel section of right lung: definition of emphysema cutoff value (HU) } \\ \text { values less than this are considered emphysema }\end{array} \\ \hline 1698 & \text { RUP_C_V_M } & \text { Num } & 8 & \begin{array}{l}\text { Mean length of vectors drawn from the centroid of upper part of peel section of right } \\ \text { lung to emphysema voxels at residual volume (RV) }\end{array} \\ \hline 1699 & \text { RUP_C_V_SD } & \text { Num } & 8 & \begin{array}{l}\text { Standard deviation of the length of vectors drawn from the centroid of upper part of } \\ \text { peel section of right lung to emphysema voxels. at residual volume (RV) }\end{array} \\ \hline 1700 & \text { RUP_C_V_X_M } & \text { Num } & 8 & \begin{array}{l}\text { The X component of the mean vector drawn from the centroid of upper part of peel } \\ \text { section of right lung to emphysema voxels. at residual volume (RV) }\end{array} \\ \hline 1702 & \text { RUP_C_V_X_SD } & \text { RUP_C_V_Y_M } & \text { Num } & 8\end{array} \begin{array}{l}\text { The X component of the standard deviation of the vectors from the centroid of upper part } \\ \text { of peel section of right lung to emphysema voxels at residual volume (RV) }\end{array}\right]$

## Data Set Name: v1_ct_corepeeltlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |
| 3 | STUDY_TIME | Char | 20 | Time of scan - (0008,0030) StudyTime at Total Lung Capacity (TLC) |
| 4 | SERIES_NAME | Char | 20 | Time the series was reconstructed - (0008, <br> (TLC) |
| 5 | SERIES_TIME | Char | 20 | Manufacturer of scanner - (0008,0070) Manufacturer |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 27 | B_BE810 | Char | 20 | Number of voxels below or equal to - 810 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 28 | B_BE660 | Char | 20 | Number of voxels below or equal to - 660 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 29 | B_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 30 | B_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 31 | B_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 32 | Char | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 53 | B_KURT | Char | 20 | Kurtosis of pixel values in both lungs at Total Lung Capacity (TLC) |
| 54 | B_FWHM | Char | 20 | Full width, half max (HU) for both lungs at Total Lung Capacity (TLC) |
| 55 | B_AIRV | Char | 20 | Total volume of air in both lungs (milliliters) at Total Lung Capacity (TLC) |
| 56 | B_TISV | Char | 20 | Total volume of both lungs (ml) at Total Lung Capacity (TLC) |


$\left.$| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 82 | BC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 83 | BC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section both lungs |
| 84 | BC_B1000 | 20 | Number of voxels below or equal to -1000 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |  |
| 85 | BC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of both lungs |
| 86 | BC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 87 | BC_BE950 | Char | 20 | 20 | | Number of voxels below or equal to -950 hounsfield units for core section of both |
| :--- |
| lungs at Total Lung Capacity (TLC) | \right\rvert\, | Number of voxels below or equal to -940 hounsfield units for core section of both |
| :--- |
| lungs at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 106 | BC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 107 | BC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 108 | BC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 109 | BC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 110 | BC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 111 | BC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 112 | BC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 113 | BC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 114 | BC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 115 | BC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 116 | BC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 117 | BC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for core section of both lungs at Total Lung Capacity (TLC) |
| 118 | BC_MEAN | Char | 20 | Average pixel values within core section of both lungs (HU) at Total Lung Capacity (TLC) |
| 119 | BC_MED | Char | 20 | Median pixel values within core region of both lungs (HU) at Total Lung Capacity (TLC) |
| 120 | BC_VAR | Char | 20 | Variance of pixel values within core region of both lungs at Total Lung Capacity (TLC) |
| 121 | BC_SDEV | Char | 20 | Standard deviation of pixel values within core section of both lungs |
| 122 | BC_ADEV | Char | 20 | Average deviation of pixel values within core section of both lungs |
| 123 | BC_SKEW | Char | 20 | Skewness of pixel values in core region of both lungs at Total Lung Capacity (TLC) |
| 124 | BC_KURT | Char | 20 | Kurtosis of pixel values in core section of both lungs at Total Lung Capacity (TLC) |
| 125 | BC_FWHM | Char | 20 | Full width, half max (HU) for core section of both lungs at Total Lung Capacity (TLC) |
| 126 | BC_AIRV | Char | 20 | Total volume of air in core section of both lungs (milliliters) at Total Lung Capacity (TLC) |
| 127 | BC_TISV | Char | 20 | Total volume of tissue in core region of both lungs (ml) at Total Lung Capacity (TLC) |
| 128 | BC_TOTV | Char | 20 | Total volume of core region of both lungs (ml) at Total Lung Capacity (TLC) |
| 129 | BC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of both lungs at Total Lung Capacity (TLC) |
| 130 | BC_ASLP | Char | 20 | The slope of the line at the ankle for core section of both lungs at Total Lung Capacity (TLC) |
| 131 | BC_AINT | Char | 20 | The interecept of the line at the ankle for core section of both lungs at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 132 | BC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of both lungs at Total Lung Capacity (TLC) |
| 133 | BC_KSLP | Char | 20 | The slope of the line at the knee for core section of both lungs at Total Lung Capacity (TLC) |
| 134 | BC_KINT | Char | 20 | The intercept of the line at the knee for core section of both lungs at Total Lung Capacity (TLC) |
| 135 | BC_CCUTOFF | Char | 20 | Core section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 136 | BC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 137 | BC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 138 | BC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 139 | BC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 140 | BC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 141 | BC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 142 | BC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 143 | BC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 144 | BC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 145 | BC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 146 | BC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 147 | BC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of both lungs |
| 148 | BC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of both lungs |
| 149 | BC_VESSELVX | Char | 20 | Total number of vessel voxels in core region of both lungs at Total Lung Capacity (TLC) |
| 150 | BC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for core region of both lungs at Total Lung Capacity (TLC) |
| 151 | BP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of both lungs |
| 152 | BP_TOTVX | Char | 20 | Total number of voxels in peel region of both lungs at Total Lung Capacity (TLC) |
| 153 | BP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 154 | BP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of both lungs |
| 155 | BP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 156 | BP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of both lungs |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 157 | BP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 158 | BP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 159 | BP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 160 | BP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 161 | BP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 162 | BP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 163 | BP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 164 | BP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 165 | BP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 166 | BP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 167 | BP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 168 | BP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 169 | BP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 170 | BP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 171 | BP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 172 | BP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 173 | BP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 174 | BP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 175 | BP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 176 | BP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 177 | BP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 178 | BP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 179 | BP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 180 | BP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 181 | BP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 182 | BP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 183 | BP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 184 | BP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 185 | BP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 186 | BP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 187 | BP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 188 | BP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 189 | BP_MEAN | Char | 20 | Average pixel values within peel section of both lungs (HU) at Total Lung Capacity (TLC) |
| 190 | BP_MED | Char | 20 | Median pixel values within peel region of both lungs (HU) at Total Lung Capacity (TLC) |
| 191 | BP_VAR | Char | 20 | Variance of pixel values within peel region of both lungs at Total Lung Capacity (TLC) |
| 192 | BP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of both lungs |
| 193 | BP_ADEV | Char | 20 | Average deviation of pixel values within peel section of both lungs |
| 194 | BP_SKEW | Char | 20 | Skewness of pixel values in peel region of both lungs at Total Lung Capacity (TLC) |
| 195 | BP_KURT | Char | 20 | Kurtosis of pixel values in peel section of both lungs at Total Lung Capacity (TLC) |
| 196 | BP_FWHM | Char | 20 | Full width, half max (HU) for peel section of both lungs at Total Lung Capacity (TLC) |
| 197 | BP_AIRV | Char | 20 | Total volume of air in peel section of both lungs (milliliters) at Total Lung Capacity (TLC) |
| 198 | BP_TISV | Char | 20 | Total volume of tissue in peel region of both lungs (ml) at Total Lung Capacity (TLC) |
| 199 | BP_TOTV | Char | 20 | Total volume of peel region of both lungs (ml) at Total Lung Capacity (TLC) |
| 200 | BP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for peel section of both lungs at Total Lung Capacity (TLC) |
| 201 | BP_ASLP | Char | 20 | The slope of the line at the ankle for peel section of both lungs at Total Lung Capacity (TLC) |
| 202 | BP_AINT | Char | 20 | The interecept of the line at the ankle for peel section of both lungs at Total Lung Capacity (TLC) |
| 203 | BP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for peel section of both lungs at Total Lung Capacity (TLC) |
| 204 | BP_KSLP | Char | 20 | The slope of the line at the knee for peel section of both lungs at Total Lung Capacity (TLC) |
| 205 | BP_KINT | Char | 20 | The intercept of the line at the knee for peel section of both lungs at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 206 | BP_CCUTOFF | Char | 20 | Peel section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema at Total Lung Capacity (TLC) |
| 207 | BP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 208 | BP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 209 | BP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 210 | BP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 211 | BP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 212 | BP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 213 | BP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 214 | BP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 215 | BP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 216 | BP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 217 | BP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 218 | BP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of both lungs |
| 219 | BP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of both lungs |
| 220 | BP_VESSELVX | Char | 20 | Total number of vessel voxels in peel region of both lungs at Total Lung Capacity (TLC) |
| 221 | BP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for peel region of both lungs at Total Lung Capacity (TLC) |
| 222 | L_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in left lung |
| 223 | L_TOTVX | Char | 20 | Total number of voxels in left lung at Total Lung Capacity (TLC) |
| 224 | L_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 225 | L_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for left lung |
| 226 | L_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 227 | L_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for left lung |
| 228 | L_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 229 | L_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 230 | L_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 231 | L_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | L_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 233 | L_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 234 | L_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 235 | L_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 236 | L_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 237 | L_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 238 | L_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 239 | L_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 240 | L_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 241 | L_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 242 | L_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 243 | L_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 244 | L_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 245 | L_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 246 | L_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 247 | L_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 248 | L_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 249 | L_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 250 | L_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 251 | L_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 252 | L_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 253 | L_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 254 | L_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 255 | L_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 256 | L_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 257 | L_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 258 | L_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 259 | L_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 260 | L_MEAN | Char | 20 | Average pixel values within left lung (HU) at Total Lung Capacity (TLC) |
| 261 | L_MED | Char | 20 | Median pixel values within left lung (HU) at Total Lung Capacity (TLC) |
| 262 | L_VAR | Char | 20 | Variance of pixel values within left lung at Total Lung Capacity (TLC) |
| 263 | L_SDEV | Char | 20 | Standard deviation of pixel values within left lung |
| 264 | L_ADEV | Char | 20 | Average deviation of pixel values within left lung |
| 265 | L_SKEW | Char | 20 | Skewness of pixel values in left lung at Total Lung Capacity (TLC) |
| 266 | L_KURT | Char | 20 | Kurtosis of pixel values in left lung at Total Lung Capacity (TLC) |
| 267 | L_FWHM | Char | 20 | Full width, half max (HU) for left lung at Total Lung Capacity (TLC) |
| 268 | L_AIRV | Char | 20 | Total volume of air in left lung (milliliters) at Total Lung Capacity (TLC) |
| 269 | L_TISV | Char | 20 | Total volume of tissue in left lung (ml) at Total Lung Capacity (TLC) |
| 270 | L_TOTV | Char | 20 | Total volume of left lung (ml) at Total Lung Capacity (TLC) |
| 271 | L_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for left lung at Total Lung Capacity (TLC) |
| 272 | L_ASLP | Char | 20 | The slope of the line at the ankle for left lung at Total Lung Capacity (TLC) |
| 273 | L_AINT | Char | 20 | The interecept of the line at the ankle for left lung at Total Lung Capacity (TLC) |
| 274 | L_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for left lung at Total Lung Capacity (TLC) |
| 275 | L_KSLP | Char | 20 | The slope of the line at the knee for left lung at Total Lung Capacity (TLC) |
| 276 | L_KINT | Char | 20 | The intercept of the line at the knee for left lung at Total Lung Capacity (TLC) |
| 277 | L_CCUTOFF | Char | 20 | Left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 278 | L_CVM | Char | 20 | Mean length of vectors drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 279 | L_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 280 | L_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 281 | L_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 282 | L_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 283 | L_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 284 | L_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 285 | L_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 286 | L_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 287 | L_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 288 | L_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 289 | L_AIRWAYVX | Char | 20 | Total number of airway voxels in left lung |
| 290 | L_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the left lung |
| 291 | L_VESSELVX | Char | 20 | Total number of vessel voxels in left lung at Total Lung Capacity (TLC) |
| 292 | L_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for left lung at Total Lung Capacity (TLC) |
| 293 | LC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of left lung |
| 294 | LC_TOTVX | Char | 20 | Total number of voxels in core section of left lung at Total Lung Capacity (TLC) |
| 295 | LC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 296 | LC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of left lung |
| 297 | LC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 298 | LC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of left lung |
| 299 | LC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 300 | LC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 301 | LC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 302 | LC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 303 | LC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 304 | LC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 305 | LC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 306 | LC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 307 | LC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 308 | LC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 309 | LC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 310 | LC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for core section of left lung <br> at Total Lung Capacity (TLC) |
| 311 | LC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for core section of left lung <br> at Total Lung Capacity (TLC) |
| 312 | LC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for core section of left lung <br> at Total Lung Capacity (TLC) |
| 313 | LC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for core section of left lung <br> at Total Lung Capacity (TLC) |
| 314 | LC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for core section of left lung <br> at Total Lung Capacity (TLC) |
| 315 | LC_BE600 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 334 | LC_SDEV | Char | 20 | Standard deviation of pixel values within core section of left lung |
| 335 | LC_ADEV | Char | 20 | Average deviation of pixel values within core section of left lung |
| 336 | LC_SKEW | Char | 20 | Skewness of pixel values in core section of left lung at Total Lung Capacity (TLC) |
| 337 | LC_KURT | Char | 20 | Kurtosis of pixel values in core section of left lung at Total Lung Capacity (TLC) |
| 338 | LC_FWHM | Char | 20 | Total volume of air in core section of left lung (milliliters) at Total Lung Capacity <br> (TLC) |
| 339 | LC_AIRV | Char | 20 | Total volume of tissue in core section of left lung (ml) at Total Lung Capacity (TLC) |
| 340 | LC_TISV | Char | 20 | Total volume of core section of left lung (ml) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 360 | LC_AIRWAYVX | Char | 20 | Total number of airway voxels in the core section of left lung |
| 361 | LC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of left lung |
| 362 | LC_VESSELVX | Char | 20 | Total number of vessel voxels in core section of left lung at Total Lung Capacity (TLC) |
| 363 | LC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) core section of left lung at Total Lung Capacity (TLC) |
| 364 | LP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of left lung |
| 365 | LP_TOTVX | Char | 20 | Total number of voxels in peel section of left lung at Total Lung Capacity (TLC) |
| 366 | LP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 367 | LP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of left lung |
| 368 | LP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 369 | LP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of left lung |
| 370 | LP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 371 | LP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 372 | LP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 373 | LP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 374 | LP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 375 | LP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 376 | LP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 377 | LP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 378 | LP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 379 | LP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 380 | LP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 381 | LP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 382 | LP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 383 | LP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 384 | LP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 385 | LP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 386 | LP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 387 | LP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 388 | LP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 389 | LP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 390 | LP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 391 | LP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 392 | LP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 393 | LP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 394 | LP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 395 | LP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 396 | LP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 397 | LP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 398 | LP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 399 | LP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 400 | LP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 401 | LP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 402 | LP_MEAN | Char | 20 | Average pixel values within peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 403 | LP_MED | Char | 20 | Median pixel values within peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 404 | LP_VAR | Char | 20 | Variance of pixel values within peel section of left lung at Total Lung Capacity (TLC) |
| 405 | LP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of left lung |
| 406 | LP_ADEV | Char | 20 | Average deviation of pixel values within peel section of left lung |
| 407 | LP_SKEW | Char | 20 | Skewness of pixel values in peel section of left lung at Total Lung Capacity (TLC) |
| 408 | LP_KURT | Char | 20 | Kurtosis of pixel values in peel section of left lung at Total Lung Capacity (TLC) |
| 409 | LP_FWHM | Char | 20 | Full width, half max (HU) for peel section of left lung at Total Lung Capacity (TLC) |
| 410 | LP_AIRV | Char | 20 | Total volume of air in peel section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 411 | LP_TISV | Char | 20 | Total volume of tissue in peel section of left lung (ml) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 412 | LP_TOTV | Char | 20 | Total volume of peel section of left lung (ml) at Total Lung Capacity (TLC) | Char 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number |
| :--- |
| of voxels versus HU for peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 437 | LU_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 438 | LU_E1024 | Char | 20 | Char |
| 439 | LU_B1000 | 20 | Number of voxels equal to -1024 hounsfield units for upper left lung below or equal to -1000 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |  |
| 440 | LU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 461 | LU_BE400 | Char | 20 | Number of voxels below or equal to - 400 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 462 | LU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 463 | LU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 464 | LU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 465 | LU_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 466 | LU_AE100 | Char | 20 | 20 | | Number of voxels above or equal to -100 hounsfield units for upper part of left lung at |
| :--- |
| Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 488 | LU_KSLP | Char | 20 | The slope of the line at the knee for upper part of left lung at Total Lung Capacity <br> (TLC) |
| 489 | LU_KINT | Char | 20 | The intercept of the line at the knee for upper part of left lung at Total Lung Capacity <br> (TLC) |
| 490 | LU_CCUTOFF | Char | 20 | Upper part of left lung: definition of emphysema cutoff value (HU) values less than this <br> are considered emphysema |
| 491 | LU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of left lung to <br> emphysema voxels at Total Lung Capacity (TLC) |
| 492 | LU_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 593 | LU_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of left lung <br> to emphysema voxels. at Total Lung Capacity (TLC) |
| 594 | LU_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper <br> part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 509 | Char left lung at Total Lung Capacity (TLC) |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 514 | LUC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 515 | LUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 516 | LUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 517 | LUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 518 | LUC_BE900 | Char | 20 | 20 |
| 519 | LUC_BE890 | Char | Number of voxels below or equal to -900 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |  |
| 530 | LUC_BE870 | Chamber of voxels below or equal to -890 hounsfield units for upper part of core section |  |  |
| of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 537 | LUC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 538 | LUC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 539 | LUC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 540 | LUC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 541 | LUC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 542 | LUC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 543 | LUC_AE600 | Char | 20 | Char |
| 557 | LUC_KSLP | Char slope of the line at the knee for upper part of core section of left lung at Total Lung |  |  |
| of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 560 | LUC_KINT | Char | 20 | The intercept of the line at the knee for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 561 | LUC_CCUTOFF | Char | 20 | Upper part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 562 | LUC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 563 | LUC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 564 | LUC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 565 | LUC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 566 | LUC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 567 | LUC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 568 | LUC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 569 | LUC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 570 | LUC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 571 | LUC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 572 | LUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 573 | LUC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of upper left lung |
| 574 | LUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of upper left lung |
| 575 | LUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper part of core section of left lung at Total Lung Capacity (TLC) |
| 576 | LUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 577 | LUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of upper left lung |
| 578 | LUP_TOTVX | Char | 20 | Total number of voxels in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 579 | LUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 580 | LUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of upper left lung |
| 581 | LUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 582 | LUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of upper left lung |
| 583 | LUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 584 | LUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 585 | LUP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 586 | LUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 587 | LUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 588 | LUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 589 | LUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 590 | LUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 591 | LUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 592 | LUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 593 | LUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 594 | LUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 595 | LUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 596 | LUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 597 | LUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 598 | LUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 599 | LUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 600 | LUP_BE550 | Char | 20 | Number of voxels below or equal to - 550 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 601 | LUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 602 | LUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 603 | LUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 604 | LUP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 605 | LUP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 606 | LUP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 607 | LUP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 608 | LUP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 609 | LUP_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 610 | LUP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 611 | LUP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 612 | LUP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 613 | LUP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 614 | LUP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 615 | LUP_MEAN | Char | 20 | Average pixel values within upper part of peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 616 | LUP_MED | Char | 20 | Median pixel values within upper part of peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 617 | LUP_VAR | Char | 20 | Variance of pixel values within upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 618 | LUP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of upper left lung |
| 619 | LUP_ADEV | Char | 20 | Average deviation of pixel values within peel section of upper left lung |
| 620 | LUP_SKEW | Char | 20 | Skewness of pixel values in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 621 | LUP_KURT | Char | 20 | Kurtosis of pixel values in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 622 | LUP_FWHM | Char | 20 | Full width, half max (HU) for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 623 | LUP_AIRV | Char | 20 | Total volume of air in upper part of peel section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 624 | LUP_TISV | Char | 20 | Total volume of tissue in upper part of peel section of left lung (ml) at Total Lung Capacity (TLC) |
| 625 | LUP_TOTV | Char | 20 | Total volume of upper part of peel section of left lung (ml) at Total Lung Capacity (TLC) |
| 626 | LUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 627 | LUP_ASLP | Char | 20 | The slope of the line at the ankle for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 628 | LUP_AINT | Char | 20 | The interecept of the line at the ankle for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 629 | LUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 630 | LUP_KSLP | Char | 20 | The slope of the line at the knee for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 631 | LUP_KINT | Char | 20 | The intercept of the line at the knee for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 632 | LUP_CCUTOFF | Char | 20 | Upper part of peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 633 | LUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 634 | LUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of peel section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 635 | LUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of peel section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 636 | LUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 637 | LUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 638 | LUP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 639 | LUP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 640 | LUP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 641 | LUP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 642 | LUP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 643 | LUP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 644 | LUP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of upper left lung |
| 645 | LUP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of upper left lung |
| 646 | LUP_VESSELVX | Char | 20 | Total number of vessel voxels in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 647 | LUP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 648 | LL_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in lower left lung |
| 649 | LL_TOTVX | Char | 20 | Total number of voxels in lower part of left lung at Total Lung Capacity (TLC) |
| 650 | LL_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 651 | LL_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for lower left lung |
| 652 | LL_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 653 | LL_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for lower left lung |
| 654 | LL_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 655 | LL_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 656 | LL_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 657 | LL_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 658 | LL_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 659 | LL_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 660 | LL_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 661 | LL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 662 | LL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 663 | LL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 664 | LL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 665 | LL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 666 | LL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 667 | LL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 668 | LL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 669 | LL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 670 | LL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 671 | LL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 672 | LL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 673 | LL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 674 | LL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 675 | LL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 676 | LL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 677 | LL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 678 | LL_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 679 | LL_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 680 | LL_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 681 | LL_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 682 | LL_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 683 | LL_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 684 | LL_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 685 | LL_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 686 | LL_MEAN | Char | 20 | Average pixel values within lower part of left lung (HU) at Total Lung Capacity (TLC) |
| 687 | LL_MED | Char | 20 | Median pixel values within lower part of left lung (HU) at Total Lung Capacity (TLC) |
| 688 | LL_VAR | Char | 20 | Variance of pixel values within lower part of left lung at Total Lung Capacity (TLC) |
| 689 | LL_SDEV | Char | 20 | Standard deviation of pixel values within lower left lung |
| 690 | LL_ADEV | Char | 20 | Average deviation of pixel values within lower left lung |
| 691 | LL_SKEW | Char | 20 | Skewness of pixel values in lower part of left lung at Total Lung Capacity (TLC) |
| 692 | LL_KURT | Char | 20 | Kurtosis of pixel values in lower part of left lung at Total Lung Capacity (TLC) |
| 693 | LL_FWHM | Char | 20 | Full width, half max (HU) for lower part of left lung at Total Lung Capacity (TLC) |
| 694 | LL_AIRV | Char | 20 | Total volume of air in lower part of left lung (milliliters) at Total Lung Capacity (TLC) |
| 695 | LL_TISV | Char | 20 | Total volume of tissue in lower part of left lung (ml) at Total Lung Capacity (TLC) |
| 696 | LL_TOTV | Char | 20 | Total volume of lower part of left lung (ml) at Total Lung Capacity (TLC) |
| 697 | LL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of left lung at Total Lung Capacity (TLC) |
| 698 | LL_ASLP | Char | 20 | The slope of the line at the ankle for lower part of left lung at Total Lung Capacity (TLC) |
| 699 | LL_AINT | Char | 20 | The interecept of the line at the ankle for lower part of left lung at Total Lung Capacity (TLC) |
| 700 | LL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of left lung at Total Lung Capacity (TLC) |
| 701 | LL_KSLP | Char | 20 | The slope of the line at the knee for lower part of left lung at Total Lung Capacity (TLC) |
| 702 | LL_KINT | Char | 20 | The intercept of the line at the knee for lower part of left lung at Total Lung Capacity (TLC) |
| 703 | LL_CCUTOFF | Char | 20 | Lower part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 704 | LL_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 705 | LL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 706 | LL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 707 | LL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 708 | LL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 709 | LL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 710 | LL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 711 | LL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 712 | LL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 713 | LL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 714 | LL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 715 | LL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left lung |
| 716 | LL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the lower left lung |
| 717 | LL_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of left lung at Total Lung Capacity (TLC) |
| 718 | LL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of left lung at Total Lung Capacity (TLC) |
| 719 | LLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of the lower left lung |
| 720 | LLC_TOTVX | Char | 20 | Total number of voxels in lower part of core section of left lung at Total Lung Capacity (TLC) |
| 721 | LLC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 722 | LLC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of lower left lung |
| 723 | LLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 724 | LLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of lower left lung |
| 725 | LLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 726 | LLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 727 | LLC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 728 | LLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 729 | LLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 730 | LLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 731 | LLC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 732 | LLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 733 | LLC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 734 | LLC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 735 | LLC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 736 | LLC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 737 | LLC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 738 | LLC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 739 | LLC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 740 | LLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 741 | LLC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 742 | LLC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 743 | LLC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 744 | LLC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 745 | LLC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 746 | LLC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 747 | LLC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 748 | LLC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 749 | LLC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 750 | LLC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 751 | LLC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 752 | LLC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 753 | LLC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 754 | LLC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 755 | LLC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 756 | LLC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 757 | LLC_MEAN | Char | 20 | Average pixel values within lower part of core section of left lung (HU) at Total Lung <br> Capacity (TLC) |
| 758 | LLC_MED | Char | 20 | Median pixel values within of lower part of core section of left lung (HU) at Total <br> Lung Capacity (TLC) |
| 759 | LLC_VAR | Char | 20 | Variance of pixel values within lower part of core section of left lung at Total Lung <br> Capacity (TLC) |
| 7777 | LLC_SDEV | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 778 | LLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 779 | LLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of core <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 780 | LLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 781 | LLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of core <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 782 | LLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 783 | LLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core <br> section of left lung at Total Lung Capacity (TLC) |
| 790 | LLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core <br> section of left lung at Total Lung Capacity (TLC) |
| 789 | Char |  |  |  |
| 797 | LLC_HU20 left lung at Total Lung Capacity (TLC) |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 803 | LLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 804 | LLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 805 | LLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 806 | LLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 807 | LLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 808 | LLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 809 | LLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 810 | LLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 811 | LLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 812 | LLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 813 | LLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 814 | LLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 815 | LLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 816 | LLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 817 | LLP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 818 | LLP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 819 | LLP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 820 | LLP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 821 | LLP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 822 | LLP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 823 | LLP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 824 | LLP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 825 | LLP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 826 | LLP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section <br> of left lung at Total Lung Capacity (TLC) |
| 827 | LLP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section <br> of left lung at Total Lung Capacity (TLC) |
| 828 | LLP_MEAN | Char | 20 | Average pixel values within lower part of peel section of left lung (HU) at Total Lung <br> Capacity (TLC) |
| 829 | LLP_MED | Char | 20 | Median pixel values within lower part of peel section of left lung (HU) at Total Lung <br> Capacity (TLC) |
| 830 | LLP_VAR | Char | 20 | Variance of pixel values within lower part of peel section of left lung at Total Lung <br> Capacity (TLC) |
| 831 | LLP_SDEV | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 849 | LLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 850 | LLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of peel <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 851 | LLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 852 | LLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of peel <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 853 | LLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 854 | LLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel <br> section of left lung at Total Lung Capacity (TLC) |
| 855 | LLP_HU15 | Char | 20 | Char |
| 872 | R_BE900 | Char the pixel that is at the 15th percentile of pixel values for lower part of peel |  |  |
| section of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 874 | R_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 875 | R_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 876 | R_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 877 | R_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 878 | R_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 879 | R_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 880 | R_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 881 | R_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 882 | R_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 883 | R_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 884 | R_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 885 | R_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 886 | R_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 887 | R_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 888 | R_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 889 | R_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 890 | R_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 891 | R_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 892 | R_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 893 | R_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 894 | R_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 895 | R_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 896 | R_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 897 | R_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for right lung at Total Lung <br> Capacity (TLC) |
| 898 | R_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for right lung at Total Lung <br> Capacity (TLC) |
| 899 | R_MEAN | Char | 20 | Average pixel values within right lung (HU) at Total Lung Capacity (TLC) |
| 900 | R_MED | Char | 20 | Median pixel values within right lung (HU) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 926 | R_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for right lung at Total <br> Lung Capacity (TLC) |
| 927 | R_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for right lung at Total <br> Lung Capacity (TLC) |
| 928 | R_AIRWAYVX | Char | 20 | Total number of airway voxels in right lung |
| 929 | R_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in right lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 952 | RC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 953 | RC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 954 | RC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 955 | RC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 956 | RC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 97 | Char_BE450 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 977 | RC_FWHM | Char | 20 | Full width, half max (HU) for core section of right lung at Total Lung Capacity (TLC) |
| 978 | RC_AIRV | Char | 20 | Total volume of air in core section of right lung (milliliters) at Total Lung Capacity <br> (TLC) |
| 979 | RC_TISV | Char | 20 | Total volume of tissue in core section of right lung (ml) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1002 | RC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for core section of right lung at Total Lung Capacity (TLC) |
| 1003 | RP_VXSİE | Char | 20 | Volume of voxel in cubic millimeters in peel section of right lung |
| 1004 | RP_TOTVX | Char | 20 | Total number of voxels in peel section of right lung at Total Lung Capacity (TLC) |
| 1005 | RP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1006 | RP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of right lung |
| 1007 | RP_B1000 | Char | 20 | Number of voxels below or equal to - 1000 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1008 | RP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of right lung |
| 1009 | RP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1010 | RP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1011 | RP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1012 | RP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1013 | RP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1014 | RP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1015 | RP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1016 | RP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1017 | RP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1018 | RP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1019 | RP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1020 | RP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1021 | RP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1022 | RP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1023 | RP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1024 | RP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1025 | RP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1026 | RP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1027 | RP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1028 | RP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1029 | RP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1030 | RP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1031 | RP_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1032 | RP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1033 | RP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for peel section of right lung <br> at Total Lung Capacity (TLC) |
| 1052 | RP_ANKL | Char where the 2nd derivative is most positive (1st inflection point) on a plot of number |  |  |
| of voxels versus HU for peel section of right lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1053 | RP_ASLP | Char | 20 | The slope of the line at the ankle for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1054 | RP_AINT | Char | 20 | The interecept of the line at the ankle for peel section of right lung at Total Lung <br> Capacity (TLC) |
| 1055 | RP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1056 | RP_KSLP | Char | 20 | The slope of the line at the knee for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1057 | RP_KINT | Char | 20 | The intercept of the line at the knee for peel section of right lung at Total Lung <br> Capacity (TLC) |
| 1058 | RP_CCUTOFF section of right lung: definition of emphysema cutoff value (HU) values less than |  |  |  |
| this are considered emphysema at Total Lung Capacity (TLC) |  |  |  |  |$|$| 1059 | RP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of peel section of right lung to <br> emphysema voxels at Total Lung Capacity (TLC) |
| :--- | :--- | ---: | :--- | :--- |
| 1060 | RP_CVSD | Standard deviation of the length of vectors drawn from the centroid of peel section of <br> right lung to emphysema voxels. at Total Lung Capacity (TLC) |  |  |
| 1061 | RP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of peel section of right <br> lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1062 | RP_CVXSD | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1078 | RU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1079 | RU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper right lung |
| 1080 | RU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1081 | RU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1082 | RU_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1083 | RU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1084 | RU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1085 | RU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1086 | RU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1087 | RU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1088 | RU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1089 | RU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1090 | RU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1091 | RU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1092 | RU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1093 | RU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1094 | RU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1095 | RU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1096 | RU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1097 | RU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1098 | RU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1099 | RU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1100 | RU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1101 | RU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1102 | RU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1103 | RU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1104 | RU_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1105 | RU_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1106 | RU_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1107 | RU_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1108 | RU_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1127 | RU_AINT | Char | Char slope of the line at the knee for upper part of right lung at Total Lung Capacity |  |
| (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1128 | RU_KINT | Char | 20 | The intercept of the line at the knee for upper part of right lung at Total Lung Capacity <br> (TLC) |
| 1129 | RU_CCUTOFF | Char | 20 | Upper part of right lung: definition of emphysema cutoff value (HU) values less than <br> this are considered emphysema |
| 1130 | RU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of right lung to <br> emphysema voxels at Total Lung Capacity (TLC) |
| 1131 | RU_CVSD | Char | 20 <br> Standard deviation of the length of vectors drawn from the centroid of upper part of <br> right lung to emphysema voxels. at Total Lung Capacity (TLC) |  |
| 1132 | RU_CVXM | Char |  |  |
| The X component of the mean vector drawn from the centroid of upper part of right |  |  |  |  |
| lung to emphysema voxels. at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1153 | RUC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1154 | RUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1155 | RUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1156 | RUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1157 | RUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1158 | RUC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1159 | RUC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1160 | RUC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1161 | RUC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1162 | RUC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1163 | RUC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1164 | RUC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1165 | RUC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1166 | RUC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1167 | RUC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1168 | RUC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1169 | RUC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1170 | RUC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1171 | RUC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1172 | RUC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1173 | RUC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1174 | RUC_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |
| 1175 | RUC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of core section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1176 | RUC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1177 | RUC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1178 | RUC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1179 | RUC_AE250 | Number of voxels above or equal to -250 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1180 | RUC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1181 | RUC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1182 | RUC_AE600 | Char | 20 |  |
| Number of voxels above or equal to -600 hounsfield units for upper part of core section |  |  |  |  |
| of righn at Total Lung Capacity (TLC) |  |  |  |  |\(\left|\begin{array}{l}Average pixel values within upper part of core section of right lung (HU) at Total <br>


Lung Capacity (TLC)\end{array}\right|\)| Median pixel values within upper part of core section of right lung (HU) at Total |
| :--- |
| Lung Capacity (TLC) |

\(\left.$$
\begin{array}{|c|l|l|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\
\hline 1199 & \text { RUC_KINT } & \text { Char } & 20 & \begin{array}{l}\text { The intercept of the line at the knee for upper part of core section of right lung at Total } \\
\text { Lung Capacity (TLC) }\end{array} \\
\hline 1200 & \text { RUC_CCUTOFF } & \text { Char } & 20 & \begin{array}{l}\text { Upper part of core section of right lung: definition of emphysema cutoff value (HU) } \\
\text { values less than this are considered emphysema }\end{array} \\
\hline 1201 & \text { RUC_CVM } & \text { Char } & 20 & \begin{array}{l}\text { Mean length of vectors drawn from the centroid of upper part of core section of right } \\
\text { lung to emphysema voxels at Total Lung Capacity (TLC) }\end{array} \\
\hline 1202 & \text { RUC_CVSD } & \text { Char } & 20 & \begin{array}{l}\text { Standard deviation of the length of vectors drawn from the centroid of upper part of } \\
\text { core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) }\end{array} \\
\hline 1203 & \text { RUC_CVXM } & \text { Char } & 20 & \begin{array}{l}\text { The X component of the mean vector drawn from the centroid of upper part of core } \\
\text { section of right lung to emphysema voxels. at Total Lung Capacity (TLC) }\end{array}
$$ <br>
\hline 1204 \& RUC_CVXSD \& Char component of the standard deviation of the vectors from the centroid of upper <br>

part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC)\end{array}\right]\)| Char |
| :--- |
| 1205 |
| RUC_CVYM |
| 1206 |
| RUC_CVYSD |
| The Y component of the mean vector drawn from the centroid of upper part of core |
| section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1224 | RUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1225 | RUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1226 | RUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1227 | RUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1228 | RUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1229 | RUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1230 | RUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1231 | RUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1232 | RUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1233 | RUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1234 | RUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1235 | RUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1236 | RUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1237 | RUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1238 | RUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1239 | RUP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1240 | RUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1241 | RUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1242 | RUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1243 | RUP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1244 | RUP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1245 | RUP_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1246 | RUP_AE50 | Char | 20 | Number of voxels above or equal to - 50 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1247 | RUP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1248 | RUP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1249 | RUP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1250 | RUP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1251 | RUP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1252 | RUP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1253 | RUP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1254 | RUP_MEAN | Char | 20 | Average pixel values within upper part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1255 | RUP_MED | Char | 20 | Median pixel values within upper part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1256 | RUP_VAR | Char | 20 | Variance of pixel values within upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1257 | RUP_SDEV | Char | 20 | Standard deviation of pixel values within upper section of upper right lung |
| 1258 | RUP_ADEV | Char | 20 | Average deviation of pixel values within peel section of upper right lung |
| 1259 | RUP_SKEW | Char | 20 | Skewness of pixel values in upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1260 | RUP_KURT | Char | 20 | Kurtosis of pixel values in upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1261 | RUP_FWHM | Char | 20 | Full width, half max (HU) for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1262 | RUP_AIRV | Char | 20 | Total volume of air in upper part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1263 | RUP_TISV | Char | 20 | Total volume of tissue in upper part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1264 | RUP_TOTV | Char | 20 | Total volume of upper part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1265 | RUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1266 | RUP_ASLP | Char | 20 | The slope of the line at the ankle for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1267 | RUP_AINT | Char | 20 | The interecept of the line at the ankle for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1268 | RUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1269 | RUP_KSLP | Char | 20 | The slope of the line at the knee for upper part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1270 | RUP_KINT | Char | 20 | The intercept of the line at the knee for upper part of peel section of right lung at Total <br> Lung Capacity (TLC) |
| 1271 | RUP_CCUTOFF | Char | 20 | Upper part of peel section of right lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 1272 | RUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of peel section of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1273 | RUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1274 | RUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1275 | RUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper <br> part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1276 | RUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1272 | RManber of voxels below or equal to -950 hounsfield units for middle part of right lung |  |  |  |
| at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1296 | RM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1297 | RM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1298 | RM_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1299 | RM_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1300 | RM_BE890 | Char | 20 | Number of voxels below or equal to - 890 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1301 | RM_BE870 | Char | 20 | Char |
| 1302 | RM_BE856 | Charber of voxels below or equal to -870 hounsfield units for middle part of right lung |  |  |
| at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1319 | RM_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1320 | RM_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1321 | RM_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1322 | RM_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1323 | RM_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1324 | RM_AE600 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1345 | RM_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1346 | RM_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1347 | RM_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1348 | RM_CVYSD | The Y component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |
| 1349 | RM_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1350 | RM_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1351 | RM_HU10 | Char |  |  |
| lung of The pixel that is at the 10th percentile of pixel values for middle part of right |  |  |  |  |
| luapacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1370 | RMC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1371 | RMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1372 | RMC_BE870 | Char | 20 | Number of voxels below or equal to - 870 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1373 | RMC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1374 | RMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1375 | RMC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1376 | RMC_BE810 | Char | 20 | Number of voxels below or equal to - 810 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1377 | RMC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1378 | RMC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1379 | RMC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1380 | RMC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1381 | RMC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1382 | RMC_BE500 | Char | 20 | Number of voxels below or equal to - 500 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1383 | RMC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1384 | RMC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1385 | RMC_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1386 | RMC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1387 | RMC_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1388 | RMC_AE50 | Char | 20 | Number of voxels above or equal to - 50 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1389 | RMC_AE100 | Char | 20 | Number of voxels above or equal to - 100 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1390 | RMC_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1391 | RMC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1392 | RMC_AE250 | Char | 20 | Number of voxels above or equal to - 250 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1393 | RMC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1394 | RMC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1395 | RMC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1396 | RMC_MEAN | Char | 20 | Average pixel values within middle part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1397 | RMC_MED | Char | 20 | Median pixel values within middle part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1398 | RMC_VAR | Char | 20 | Variance of pixel values within middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1399 | RMC_SDEV | Char | 20 | Standard deviation of pixel values within core section of middle right lung |
| 1400 | RMC_ADEV | Char | 20 | Average deviation of pixel values within core section of middle right lung |
| 1401 | RMC_SKEW | Char | 20 | Skewness of pixel values in middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1402 | RMC_KURT | Char | 20 | Kurtosis of pixel values in middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1403 | RMC_FWHM | Char | 20 | Full width, half max (HU) for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1404 | RMC_AIRV | Char | 20 | Total volume of air in middle part of core section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1405 | RMC_TISV | Char | 20 | Total volume of tissue in middle part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1406 | RMC_TOTV | Char | 20 | Total volume of middle part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1407 | RMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1408 | RMC_ASLP | Char | 20 | The slope of the line at the ankle for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1409 | RMC_AINT | Char | 20 | The interecept of the line at the ankle for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1410 | RMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1411 | RMC_KSLP | Char | 20 | The slope of the line at the knee for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1412 | RMC_KINT | Char | 20 | The intercept of the line at the knee for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1413 | RMC_CCUTOFF | Char | 20 | Middle part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1414 | RMC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1415 | RMC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1416 | RMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1417 | RMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1418 | RMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1419 | RMC_CVYSD | The Y component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |
| 1420 | RMC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1421 | RMC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1422 | RMC_HU10 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |  |  |
| 1423 | RMC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |
| 1424 | RMC_HU20 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |  |  |
| 1425 | RMC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of middle right lung |
| 1426 | RMC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in core section of middle right lung |
| 1427 | RMC_VESSELVX | Char | 20 | Total number of vessel voxels in middle part of core section of right lung at Total <br> Lung Capacity (TLC) |
| 1420 | Char | 20 | Char <br> Number of voxels below or equal to -930 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |  |
| 1439 | RMP_BE920 | Number of voxels below or equal to -920 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |  |  |
| 1440 | RMP_BE910 | RMmber of voxels below or equal to -910 hounsfield units for middle part of peel |  |  |
| section of right lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1441 | RMP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1442 | RMP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1443 | RMP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1444 | RMP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1445 | RMP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1446 | RMP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1447 | RMP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1448 | RMP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1449 | RMP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1450 | RMP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1451 | RMP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1452 | RMP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1453 | RMP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1454 | RMP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1455 | RMP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1456 | RMP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1457 | RMP_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1458 | RMP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1459 | RMP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1460 | RMP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1461 | RMP_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1462 | RMP_AE200 | Char | 20 | Number of voxels above or equal to - 200 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1463 | RMP_AE250 | Char | 20 | Number of voxels above or equal to - 250 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1464 | RMP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1465 | RMP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1466 | RMP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1467 | RMP_MEAN | Char | 20 | Average pixel values within middle part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1468 | RMP_MED | Char | 20 | Median pixel values within middle part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1469 | RMP_VAR | Char | 20 | Variance of pixel values within middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1470 | RMP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of middle right lung |
| 1471 | RMP_ADEV | Char | 20 | Average deviation of pixel values within peel section of middle right lung |
| 1472 | RMP_SKEW | Char | 20 | Skewness of pixel values in middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1473 | RMP_KURT | Char | 20 | Kurtosis of pixel values in middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1474 | RMP_FWHM | Char | 20 | Full width, half max (HU) for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1475 | RMP_AIRV | Char | 20 | Total volume of air in middle part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1476 | RMP_TISV | Char | 20 | Total volume of tissue in middle part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1477 | RMP_TOTV | Char | 20 | Total volume of middle part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1478 | RMP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1479 | RMP_ASLP | Char | 20 | The slope of the line at the ankle for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1480 | RMP_AINT | Char | 20 | The interecept of the line at the ankle for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1481 | RMP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1482 | RMP_KSLP | Char | 20 | The slope of the line at the knee for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1483 | RMP_KINT | Char | 20 | The intercept of the line at the knee for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1484 | RMP_CCUTOFF | Char | 20 | Middle part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1485 | RMP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1486 | RMP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1487 | RMP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of peel <br> section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1488 | RMP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle <br> part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1489 | RMP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of peel <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1490 | RMP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of middle <br> part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1491 | RMP_CVZM | The Z component of the mean vector drawn from the centroid of middle part of peel <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |
| 1492 | RMP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1493 | RMP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1494 | RMP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1495 | RMP_HU20 | Char |  |  |
| Vection of right lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1513 | RL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1514 | RL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1515 | RL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1516 | RL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1517 | RL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1518 | RL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1519 | RL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1520 | RL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1521 | RL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1522 | RL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1523 | RL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1524 | RL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1525 | RL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1526 | RL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1527 | RL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1528 | RL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1529 | RL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1530 | RL_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1531 | RL_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1532 | RL_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1533 | RL_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1534 | RL_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1535 | RL_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1536 | RL_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of right lung at <br> Total Lung Capacity (TLC) |
| 1537 | RL_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of right lung at <br> Total Lung Capacity (TLC) |
| 1538 | RL_MEAN | Char | 20 | Average pixel values within lower part of right lung (HU) at Total Lung Capacity <br> (TLC) |
| 1539 | RL_MED | Char | 20 | Median pixel values within lower part of right lung (HU) at Total Lung Capacity <br> (TLC) |
| 1540 | RL_VAR | Char | 20 | Variance of pixel values within lower part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1562 | RL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1563 | RL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1564 | RL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1565 | RL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1566 | RL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1567 | RL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower right lung |
| 1568 | RL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the lower right lung |
| 1569 | RL_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of right lung at Total Lung Capacity (TLC) |
| 1570 | RL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of right lung at Total Lung Capacity (TLC) |
| 1571 | RLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of lower right lung |
| 1572 | RLC_TOTVX | Char | 20 | Total number of voxels in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1573 | RLC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1574 | RLC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of lower right lung |
| 1575 | RLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1576 | RLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of lower right lung |
| 1577 | RLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1578 | RLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1579 | RLC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1580 | RLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1581 | RLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1582 | RLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1583 | RLC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1584 | RLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1585 | RLC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1586 | RLC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1587 | RLC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1588 | RLC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1589 | RLC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1590 | RLC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1591 | RLC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1592 | RLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1593 | RLC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1594 | RLC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1595 | RLC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1596 | RLC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1597 | RLC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1598 | RLC_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1599 | RLC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1600 | RLC_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1601 | RLC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1602 | RLC_AE100 | Char | 20 | Number of voxels above or equal to - 100 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1603 | RLC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1604 | RLC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1605 | RLC_AE250 | Char | 20 | Number of voxels above or equal to - 250 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1606 | RLC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1607 | RLC_AE500 | Char | 20 | Number of voxels above or equal to - 500 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1608 | RLC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1609 | RLC_MEAN | Char | 20 | Average pixel values within lower part of core section of right lung (HU) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1610 | RLC_MED | Char | 20 | Median pixel values within lower part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1611 | RLC_VAR | Char | 20 | Variance of pixel values within lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1612 | RLC_SDEV | Char | 20 | Standard deviation of pixel values within core section of lower right lung |
| 1613 | RLC_ADEV | Char | 20 | Average deviation of pixel values within core section of lower right lung |
| 1614 | RLC_SKEW | Char | 20 | Skewness of pixel values in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1615 | RLC_KURT | Char | 20 | Kurtosis of pixel values in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1616 | RLC_FWHM | Char | 20 | Full width, half max (HU) for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1617 | RLC_AIRV | Char | 20 | Total volume of air in lower part of core section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1618 | RLC_TISV | Char | 20 | Total volume of tissue in lower part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1619 | RLC_TOTV | Char | 20 | Total volume of lower part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1620 | RLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1621 | RLC_ASLP | Char | 20 | The slope of the line at the ankle for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1622 | RLC_AINT | Char | 20 | The interecept of the line at the ankle for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1623 | RLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1624 | RLC_KSLP | Char | 20 | The slope of the line at the knee for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1625 | RLC_KINT | Char | 20 | The intercept of the line at the knee for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1626 | RLC_CCUTOFF | Char | 20 | Lower part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1627 | RLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1628 | RLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1629 | RLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1630 | RLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1631 | RLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1632 | RLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1633 | RLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1634 | RLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1635 | RLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1636 | RLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1637 | RLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1638 | RLC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of lower right lung |
| 1639 | RLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of lower right lung |
| 1640 | RLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1641 | RLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1642 | RLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of lower right lung |
| 1643 | RLP_TOTVX | Char | 20 | Total number of voxels in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1644 | RLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of lower right lung |
| 1645 | RLP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of lower right lung |
| 1646 | RLP_B1000 | Char | 20 | Number of voxels below or equal to - 1000 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1647 | RLP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of lower right lung |
| 1648 | RLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1649 | RLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1650 | RLP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1651 | RLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1652 | RLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1653 | RLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1654 | RLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1655 | RLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1656 | RLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1657 | RLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1658 | RLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1659 | RLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1660 | RLP_BE810 | Char | 20 | 20 <br> Number of voxels below or equal to -810 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1661 | RLP_BE660 | Number of voxels below or equal to -660 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1662 | RLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1663 | RLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1664 | RLP_BE600 | Number of voxels below or equal to -600 hounsfield units for lower part of peel section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1665 | RLP_BE550 | Char | Char | 20 |
| 1666 | RLP_BE500 |  |  |  |
| of right lung at Total Lung Capacity (TLC) |  |  |  |  | | Number of voxels below or equal to -500 hounsfield units for lower part of peel section |
| :--- |
| of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1681 | RLP_MED | Char | 20 | Median pixel values within lower part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1682 | RLP_VAR | Char | 20 | Variance of pixel values within lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1683 | RLP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of lower right lung |
| 1684 | RLP_ADEV | Char | 20 | Average deviation of pixel values within peel section of lower right lung |
| 1685 | RLP_SKEW | Char | 20 | Skewness of pixel values in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1686 | RLP_KURT | Char | 20 | Kurtosis of pixel values in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1687 | RLP_FWHM | Char | 20 | Full width, half max (HU) for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1688 | RLP_AIRV | Char | 20 | Total volume of air in lower part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1689 | RLP_TISV | Char | 20 | Total volume of tissue in lower part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1690 | RLP_TOTV | Char | 20 | Total volume of lower part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1691 | RLP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1692 | RLP_ASLP | Char | 20 | The slope of the line at the ankle for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1693 | RLP_AINT | Char | 20 | The interecept of the line at the ankle for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1694 | RLP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1695 | RLP_KSLP | Char | 20 | The slope of the line at the knee for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1696 | RLP_KINT | Char | 20 | The intercept of the line at the knee for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1697 | RLP_CCUTOFF | Char | 20 | Lower part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1698 | RLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1699 | RLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1700 | RLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1701 | RLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1702 | RLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1703 | RLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1704 | RLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1705 | RLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1706 | RLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1707 | RLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1708 | RLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1709 | RLP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of lower right lung |
| 1710 | RLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of lower right lung |
| 1711 | RLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1712 | RLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1713 | TLU_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of left lung |
| 1714 | TLU_TOTVX | Char | 20 | Total number of voxels in upper third of left lung |
| 1715 | TLU_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of left lung |
| 1716 | TLU_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of left lung |
| 1717 | TLU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of left lung |
| 1718 | TLU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of left lung |
| 1719 | TLU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of left lung |
| 1720 | TLU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of left lung |
| 1721 | TLU_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of left lung |
| 1722 | TLU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of left lung |
| 1723 | TLU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of left lung |
| 1724 | TLU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of left lung |
| 1725 | TLU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of left lung |
| 1726 | TLU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of left lung |
| 1727 | TLU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of left lung |
| 1728 | TLU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of left lung |
| 1729 | TLU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of left lung |
| 1730 | TLU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of left lung |
| 1731 | TLU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of left lung |
| 1732 | TLU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of left lung |
| 1733 | TLU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of left lung |
| 1734 | TLU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of left lung |
| 1735 | TLU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of left lung |
| 1736 | TLU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1737 | TLU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of left lung |
| 1738 | TLU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of left lung |
| 1739 | TLU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of left lung |
| 1740 | TLU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of left lung |
| 1741 | TLU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of left lung |
| 1742 | TLU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of left lung |
| 1743 | TLU_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of left lung |
| 1744 | TLU_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of left lung |
| 1745 | TLU_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of left lung |
| 1746 | TLU_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of left lung |
| 1747 | TLU_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of left lung |
| 1748 | TLU_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of left lung |
| 1749 | TLU_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of left lung |
| 1750 | TLU_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of left lung |
| 1751 | TLU_MEAN | Char | 20 | Average pixel values within upper third of left lung (HU) |
| 1752 | TLU_MED | Char | 20 | Median pixel values within upper third of left lung (HU) |
| 1753 | TLU_VAR | Char | 20 | Variance of pixel values within upper third of left lung |
| 1754 | TLU_SDEV | Char | 20 | Standard deviation of pixel values within upper third of left lung |
| 1755 | TLU_ADEV | Char | 20 | Average deviation of pixel values within upper third of left lung |
| 1756 | TLU_SKEW | Char | 20 | Skewness of pixel values in upper third of left lung |
| 1757 | TLU_KURT | Char | 20 | Kurtosis of pixel values in upper third of left lung |
| 1758 | TLU_FWHM | Char | 20 | Full width, half max (HU) for upper third of left lung |
| 1759 | TLU_AIRV | Char | 20 | Total volume of air in upper third of left lung (milliliters) |
| 1760 | TLU_TISV | Char | 20 | Total volume of tissue in upper third of left lung (ml) |
| 1761 | TLU_TOTV | Char | 20 | Total volume of upper third of left lung (ml) |
| 1762 | TLU_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of left lung |
| 1763 | TLU_ASLP | Char | 20 | The slope of the line at the ankle for upper third of left lung |
| 1764 | TLU_AINT | Char | 20 | The intercept of the line at the ankle for upper third of left lung |
| 1765 | TLU_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of left lung |
| 1766 | TLU_KSLP | Char | 20 | The slope of the line at the knee for upper third of left lung |
| 1767 | TLU_KINT | Char | 20 | The intercept of the line at the knee for upper third of left lung |
| 1768 | TLU_CCUTOFF | Char | 20 | upper third of left lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1769 | TLU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of left lung to emphysema voxels |
| 1770 | TLU_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of left lung to emphysema voxels |
| 1771 | TLU_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of left lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1772 | TLU_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of left lung to emphysema voxels |
| 1773 | TLU_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of left lung to emphysema voxels |
| 1774 | TLU_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of left lung to emphysema voxels |
| 1775 | TLU_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of left lung to emphysema voxels |
| 1776 | TLU_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of left lung to emphysema voxels |
| 1777 | TLU_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of left lung |
| 1778 | TLU_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of left lung |
| 1779 | TLU_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of left lung |
| 1780 | TLU_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of left lung |
| 1781 | TLU_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in upper third of left lung |
| 1782 | TLU_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of left lung |
| 1783 | TLU_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of left lung |
| 1784 | TLUC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of core section of left lung |
| 1785 | TLUC_TOTVX | Char | 20 | Total number of voxels in upper third of core section of left lung |
| 1786 | TLUC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of core section of left lung |
| 1787 | TLUC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of core section of left lung |
| 1788 | TLUC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of core section of left lung |
| 1789 | TLUC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of core section of left lung |
| 1790 | TLUC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of core section of left lung |
| 1791 | TLUC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of core section of left lung |
| 1792 | TLUC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of core section of left lung |
| 1793 | TLUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of core section of left lung |
| 1794 | TLUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of core section of left lung |
| 1795 | TLUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of core section of left lung |
| 1796 | TLUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of core section of left lung |
| 1797 | TLUC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1798 | TLUC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of core section of left lung |
| 1799 | TLUC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of core section of left lung |
| 1800 | TLUC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of core section of left lung |
| 1801 | TLUC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of core section of left lung |
| 1802 | TLUC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of core section of left lung |
| 1803 | TLUC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of core section of left lung |
| 1804 | TLUC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of core section of left lung |
| 1805 | TLUC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of core section of left lung |
| 1806 | TLUC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of core section of left lung |
| 1807 | TLUC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of core section of left lung |
| 1808 | TLUC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of core section of left lung |
| 1809 | TLUC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of core section of left lung |
| 1810 | TLUC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of core section of left lung |
| 1811 | TLUC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of core section of left lung |
| 1812 | TLUC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper third of core section of left lung |
| 1813 | TLUC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of core section of left lung |
| 1814 | TLUC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of core section of left lung |
| 1815 | TLUC_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of core section of left lung |
| 1816 | TLUC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of core section of left lung |
| 1817 | TLUC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of core section of left lung |
| 1818 | TLUC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of core section of left lung |
| 1819 | TLUC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of core section of left lung |
| 1820 | TLUC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of core section of left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1821 | TLUC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of core section of <br> left lung |
| 1822 | TLUC_MEAN | Char | 20 | Average pixel values within upper third of core section of left lung (HU) |
| 1823 | TLUC_MED | Char | 20 | Median pixel values within upper third of core section of left lung (HU) |
| 1824 | TLUC_VAR | Char | 20 | Variance of pixel values within upper third of core section of left lung |
| 1825 | TLUC_SDEV | Char | 20 | Standard deviation of pixel values within upper third of core section of left lung |
| 1826 | TLUC_ADEV | Char | 20 | Average deviation of pixel values within upper third of core section of left lung |
| 1827 | TLUC_SKEW | Char | 20 | Kurtosis of pixel values in upper third of core section of left lung |
| 1828 | TLUC_KURT | Char | 20 | Full width, half max (HU) for upper third of core section of left lung |
| 1829 | TLUC_FWHM | Char | 20 | Total volume of air in upper third of core section of left lung (milliliters) |
| 1830 | TLUC_AIRV volume of tissue in upper third of core section of left lung (ml) |  |  |  |
| 1831 | TLUC_TISV | Char | 20 | Total volume of upper third of core section of left lung (ml) |
| 1832 | TLUC_TOTV | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for upper third of core section of left lung |
| 1833 | TLUC_ANKL | Char | 20 | The slope of the line at the ankle for upper third of core section of left lung |
| 1834 | TLUC_ASLP | Char | 20 | The intercept of the line at the ankle for upper third of core section of left lung <br> Vection of left lung |
| 1835 | TLUC_AINT | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for upper third of core section of left lung |
| 1836 | TLUC_KNEE | Char | 20 | The slope of the line at the knee for upper third of core section of left lung <br> section of left lung |
| 1849 | Third of core section of left lung to emphysema voxels |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1850 | TLUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of core section of left lung |
| 1851 | TLUC_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of core section of left lung |
| 1852 | TLUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{TotVx} * 100$ ) in upper third of core section of left lung |
| 1853 | TLUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of core section of left lung |
| 1854 | TLUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of core section of left lung |
| 1855 | TLUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of peel section of left lung |
| 1856 | TLUP_TOTVX | Char | 20 | Total number of voxels in upper third of peel section of left lung |
| 1857 | TLUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of peel section of left lung |
| 1858 | TLUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of peel section of left lung |
| 1859 | TLUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of peel section of left lung |
| 1860 | TLUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of peel section of left lung |
| 1861 | TLUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of peel section of left lung |
| 1862 | TLUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of peel section of left lung |
| 1863 | TLUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of peel section of left lung |
| 1864 | TLUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of peel section of left lung |
| 1865 | TLUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of peel section of left lung |
| 1866 | TLUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of peel section of left lung |
| 1867 | TLUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of peel section of left lung |
| 1868 | TLUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of peel section of left lung |
| 1869 | TLUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of peel section of left lung |
| 1870 | TLUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of peel section of left lung |
| 1871 | TLUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of peel section of left lung |
| 1872 | TLUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of peel section of left lung |
| 1873 | TLUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of peel section of left lung |
| 1874 | TLUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of peel section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1875 | TLUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of peel section of left lung |
| 1876 | TLUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of peel section of left lung |
| 1877 | TLUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of peel section of left lung |
| 1878 | TLUP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of peel section of left lung |
| 1879 | TLUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of peel section of left lung |
| 1880 | TLUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of peel section of left lung |
| 1881 | TLUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of peel section of left lung |
| 1882 | TLUP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of peel section of left lung |
| 1883 | TLUP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of peel section of left lung |
| 1884 | TLUP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of peel section of left lung |
| 1885 | TLUP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of peel section of left lung |
| 1886 | TLUP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of peel section of left lung |
| 1887 | TLUP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of peel section of left lung |
| 1888 | TLUP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of peel section of left lung |
| 1889 | TLUP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of peel section of left lung |
| 1890 | TLUP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of peel section of left lung |
| 1891 | TLUP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of peel section of left lung |
| 1892 | TLUP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of peel section of left lung |
| 1893 | TLUP_MEAN | Char | 20 | Average pixel values within upper third of peel section of left lung (HU) |
| 1894 | TLUP_MED | Char | 20 | Median pixel values within upper third of peel section of left lung (HU) |
| 1895 | TLUP_VAR | Char | 20 | Variance of pixel values within upper third of peel section of left lung |
| 1896 | TLUP_SDEV | Char | 20 | Standard deviation of pixel values within upper third of peel section of left lung |
| 1897 | TLUP_ADEV | Char | 20 | Average deviation of pixel values within upper third of peel section of left lung |
| 1898 | TLUP_SKEW | Char | 20 | Skewness of pixel values in upper third of peel section of left lung |
| 1899 | TLUP_KURT | Char | 20 | Kurtosis of pixel values in upper third of peel section of left lung |
| 1900 | TLUP_FWHM | Char | 20 | Full width, half max (HU) for upper third of peel section of left lung |
| 1901 | TLUP_AIRV | Char | 20 | Total volume of air in upper third of peel section of left lung (milliliters) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1902 | TLUP_TISV | Char | 20 | Total volume of tissue in upper third of peel section of left lung (ml) |
| 1903 | TLUP_TOTV | Char | 20 | Total volume of upper third of peel section of left lung (ml) |
| 1904 | TLUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of peel section of left lung |
| 1905 | TLUP_ASLP | Char | 20 | The slope of the line at the ankle for upper third of peel section of left lung |
| 1906 | TLUP_AINT | Char | 20 | The intercept of the line at the ankle for upper third of peel section of left lung |
| 1907 | TLUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of peel section of left lung |
| 1908 | TLUP_KSLP | Char | 20 | The slope of the line at the knee for upper third of peel section of left lung |
| 1909 | TLUP_KINT | Char | 20 | The intercept of the line at the knee for upper third of peel section of left lung |
| 1910 | TLUP_CCUTOFF | Char | 20 | upper third of peel section of left lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1911 | TLUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of peel section of left lung to emphysema voxels |
| 1912 | TLUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of peel section of left lung to emphysema voxels |
| 1913 | TLUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of peel section of left lung to emphysema voxels |
| 1914 | TLUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of peel section of left lung to emphysema voxels |
| 1915 | TLUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of peel section of left lung to emphysema voxels |
| 1916 | TLUP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of peel section of left lung to emphysema voxels |
| 1917 | TLUP_CVZM | Char | 20 | The $Z$ component of the mean vector drawn from the centroid of upper third of peel section of left lung to emphysema voxels |
| 1918 | TLUP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of peel section of left lung to emphysema voxels |
| 1919 | TLUP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of peel section of left lung |
| 1920 | TLUP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of peel section of left lung |
| 1921 | TLUP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of peel section of left lung |
| 1922 | TLUP_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of peel section of left lung |
| 1923 | TLUP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in upper third of peel section of left lung |
| 1924 | TLUP_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of peel section of left lung |
| 1925 | TLUP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of peel section of left lung |
| 1926 | TLM_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of left lung |
| 1927 | TLM_TOTVX | Char | 20 | Total number of voxels in middle third of left lung |
| 1928 | TLM_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of left lung |
| 1929 | TLM_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1930 | TLM_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of left lung |
| 1931 | TLM_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third left lung |
| 1932 | TLM_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of left lung |
| 1933 | TLM_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of left lung |
| 1934 | TLM_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of left lung |
| 1935 | TLM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of left lung |
| 1936 | TLM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of left lung |
| 1937 | TLM_BE910 | Char | 20 | Number of voxexels below or equal to equal to -900 hounsfield units for middle third of left lung |
| 1938 | TLM_BE900 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of left lung |
| 1939 | TLM_BE890 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of left lung |
| 1940 | TLM_BE870 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of left lung |
| 1941 | TLM_BE856 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of left lung |
| 1942 | TLM_BE850 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of left lung |
| 1943 | TLM_BE830 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of left lung |
| 1944 | TLM_BE810 | Char | 20 | Average deviation of pixel values within middle third of left lung |
| 1945 | TLM_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of left lung |
| 1946 | TLM_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of left lung |
| 1947 | TLM_BE620 | Char | 20 | 20 |
| 1948 |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1969 | TLM_SKEW | Char | 20 | Skewness of pixel values in middle third of left lung |
| 1970 | TLM_KURT | Char | 20 | Kurtosis of pixel values in middle third of left lung |
| 1971 | TLM_FWHM | Char | 20 | Full width, half max (HU) for middle third of left lung |
| 1972 | TLM_AIRV | Char | 20 | Total volume of air in middle third of left lung (milliliters) |
| 1973 | TLM_TISV | Char | 20 | Total volume of tissue in middle third of left lung (ml) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1999 | TLMC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of core section of left lung |
| 2000 | TLMC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of core section of left lung |
| 2001 | TLMC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of core section of left lung |
| 2002 | TLMC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of core section of left lung |
| 2003 | TLMC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of core section of left lung |
| 2004 | TLMC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of core section of left lung |
| 2005 | TLMC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of core section of left lung |
| 2006 | TLMC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of core section of left lung |
| 2007 | TLMC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of core section of left lung |
| 2008 | TLMC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of core section of left lung |
| 2009 | TLMC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of core section of left lung |
| 2010 | TLMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of core section of left lung |
| 2011 | TLMC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of core section of left lung |
| 2012 | TLMC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of core section of left lung |
| 2013 | TLMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of core section of left lung |
| 2014 | TLMC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of core section of left lung |
| 2015 | TLMC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of core section of left lung |
| 2016 | TLMC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of core section of left lung |
| 2017 | TLMC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of core section of left lung |
| 2018 | TLMC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of core section of left lung |
| 2019 | TLMC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of core section of left lung |
| 2020 | TLMC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of core section of left lung |
| 2021 | TLMC_BE500 | Char | 20 | Number of voxels below or equal to - 500 hounsfield units for middle third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2022 | TLMC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of core section of left lung |
| 2023 | TLMC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of core section of left lung |
| 2024 | TLMC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of core section of left lung |
| 2025 | TLMC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of core section of left lung |
| 2026 | TLMC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of core section of left lung |
| 2027 | TLMC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of core section of left lung |
| 2028 | TLMC_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of core section of left lung |
| 2029 | TLMC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of core section of left lung |
| 2030 | TLMC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of core section of left lung |
| 2031 | TLMC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of core section of left lung |
| 2032 | TLMC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of core section of left lung |
| 2033 | TLMC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of core section of left lung |
| 2034 | TLMC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of core section of left lung |
| 2035 | TLMC_MEAN | Char | 20 | Average pixel values within middle third of core section of left lung (HU) |
| 2036 | TLMC_MED | Char | 20 | Median pixel values within middle third of core section of left lung (HU) |
| 2037 | TLMC_VAR | Char | 20 | Variance of pixel values within middle third of core section of left lung |
| 2038 | TLMC_SDEV | Char | 20 | Standard deviation of pixel values within middle third of core section of left lung |
| 2039 | TLMC_ADEV | Char | 20 | Average deviation of pixel values within middle third of core section of left lung |
| 2040 | TLMC_SKEW | Char | 20 | Skewness of pixel values in middle third of core section of left lung |
| 2041 | TLMC_KURT | Char | 20 | Kurtosis of pixel values in middle third of core section of left lung |
| 2042 | TLMC_FWHM | Char | 20 | Full width, half max (HU) for middle third of core section of left lung |
| 2043 | TLMC_AIRV | Char | 20 | Total volume of air in middle third of core section of left lung (milliliters) |
| 2044 | TLMC_TISV | Char | 20 | Total volume of tissue in middle third of core section of left lung (ml) |
| 2045 | TLMC_TOTV | Char | 20 | Total volume of middle third of core section of left lung (ml) |
| 2046 | TLMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of core section of left lung |
| 2047 | TLMC_ASLP | Char | 20 | The slope of the line at the ankle for middle third of core section of left lung |
| 2048 | TLMC_AINT | Char | 20 | The intercept of the line at the ankle for middle third of core section of left lung |
| 2049 | TLMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of core section of left lung |
| 2050 | TLMC_KSLP | Char | 20 | The slope of the line at the knee for middle third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2051 | TLMC_KINT | Char | 20 | The intercept of the line at the knee for middle third of core section of left lung |
| 2052 | TLMC_CCUTOFF | Char | 20 | middle third of core section of left lung : definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 2053 | TLMC_CVM | Char | 20 | 20 <br> Mean length of vectors drawn from the centroid of middle third of core section of left <br> lung emphysema voxels |
| 2054 | TLMC_CVSD | Standard deviation of the length of vectors drawn from the centroid of the middle third <br> of core section of left lung to emphysema voxels |  |  |
| 2055 | TLMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of <br> core section of left lung to emphysema voxels |
| 2056 | TLMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the <br> middle third of core section of left lung to emphysema voxels |
| 2057 | TLMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of <br> core section of left lung to emphysema voxels |
| 2058 | TLMC_CVYSD | The Y component of the standard deviation of the vectors from the centroid of the <br> middle third of core section of left lung to emphysema voxels |  |  |
| 2059 | TLMC_CVZM | Char | The Z component of the mean vector drawn from the centroid of middle third of core <br> section of left lung to emphysema voxels |  |
| 2060 | TLMC_CVZSD | Char | The Z component of the standard deviation of the vectors from the centroid of middle <br> third of core section of left lung to emphysema voxels |  |
| 2061 | TLMC_HU10 | Char | 20 | Value of the pixel that is at the 10 th percentile of pixel values for middle third of core <br> section of left lung |
| 2062 | TLMC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of core <br> section of left lung |
| 2073 | Thumber of voxels below or equal to -960 hounsfield units for middle third of peel |  |  |  |
| section of left lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 2076 | TLMP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of peel <br> section of left lung |
| 2077 | TLMP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of peel <br> section of left lung |
| 2078 | TLMP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of peel <br> section of left lung |
| 2079 | TLMP_BE910 | Number of voxels below or equal to -910 hounsfield units for middle third of peel <br> section of left lung |  |  |
| 2080 | TLMP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of peel <br> section of left lung |
| 2081 | TLMP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of peel <br> section of left lung |
| 2082 | TLMP_BE870 | Charber of voxels below or equal to -870 hounsfield units for middle third of peel |  |  |
| section of left lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2099 | TLMP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of peel section <br> of left lung |
| 2100 | TLMP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of peel section <br> of left lung |
| 2101 | TLMP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of peel section <br> of left lung |
| 2102 | TLMP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of peel section <br> of left lung |
| 2103 | TLMP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of peel section <br> of left lung |
| 2104 | TLMP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of peel section <br> of left lung |
| 2120 | TLMP_AE600 | Char_CVXSD | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2128 | TLMP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of <br> peel section of left lung to emphysema voxels |
| 2129 | TLMP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the <br> middle third of peel section of left lung to emphysema voxels |
| 2130 | TLMP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of peel <br> section of left lung to emphysema voxels |
| 2131 | TLMP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> third of peel section of left lung to emphysema voxels |
| 2132 | TLMP_HU10 | Char | 20 | Value of the pixel that is at the 10 th percentile of pixel values for middle third of peel <br> section of left lung |
| 2133 | TLMP_HU15 | Char | 20 | Value of the pixel that is at the 15 th percentile of pixel values for middle third of peel <br> section of left lung |
| 2134 | TLMP_HU20 | Char | 20 | Char |
| 2159 | TLL_BE640 | TLL_BE620 | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2161 | TLL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of left lung |
| 2162 | TLL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of left lung |
| 2163 | TLL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of left lung |
| 2164 | TLL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of left lung |
| 2165 | TLL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of left lung |
| 2166 | TLL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower third of left lung |
| 2167 | TLL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower third of left lung |
| 2168 | TLL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower third of left lung |
| 2169 | TLL_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of left lung |
| 2170 | TLL_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of left lung |
| 2171 | TLL_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of left lung |
| 2172 | TLL_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower third of left lung |
| 2173 | TLL_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower third of left lung |
| 2174 | TLL_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower third of left lung |
| 2175 | TLL_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of left lung |
| 2176 | TLL_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower third of left lung |
| 2177 | TLL_MEAN | Char | 20 | Average pixel values within lower third of left lung (HU) |
| 2178 | TLL_MED | Char | 20 | Median pixel values within lower third of left lung (HU) |
| 2179 | TLL_VAR | Char | 20 | Variance of pixel values within lower third of left lung |
| 2180 | TLL_SDEV | Char | 20 | Standard deviation of pixel values within lower third of left lung |
| 2181 | TLL_ADEV | Char | 20 | Average deviation of pixel values within lower third of left lung |
| 2182 | TLL_SKEW | Char | 20 | Skewness of pixel values in lower third of left lung |
| 2183 | TLL_KURT | Char | 20 | Kurtosis of pixel values in lower third of left lung |
| 2184 | TLL_FWHM | Char | 20 | Full width, half max (HU) for lower third of left lung |
| 2185 | TLL_AIRV | Char | 20 | Total volume of air in lower third of left lung (milliliters) |
| 2186 | TLL_TISV | Char | 20 | Total volume of tissue in lower third of left lung (ml) |
| 2187 | TLL_TOTV | Char | 20 | Total volume of lower third of left lung (ml) |
| 2188 | TLL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of left lung |
| 2189 | TLL_ASLP | Char | 20 | The slope of the line at the ankle for lower third of left lung |
| 2190 | TLL_AINT | Char | 20 | The intercept of the line at the ankle for lower third of left lung |
| 2191 | TLL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of left lung |
| 2192 | TLL_KSLP | Char | 20 | The slope of the line at the knee for lower third of left lung |
| 2193 | TLL_KINT | Char | 20 | The intercept of the line at the knee for lower third of left lung |
| 2194 | TLL_CCUTOFF | Char | 20 | lower third of left lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2195 | TLL_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower third of left lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2196 | TLL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2197 | TLL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2198 | TLL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of left lung to emphysema voxels |
| 2199 | TLL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2200 | TLL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of left lung to emphysema voxels |
| 2201 | TLL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of left lung to emphysema voxels |
| 2202 | TLL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of left lung to emphysema voxels |
| 2203 | TLL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of left lung |
| 2204 | TLL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of left lung |
| 2205 | TLL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of left lung |
| 2206 | TLL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of left lung |
| 2207 | TLL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of left lung |
| 2208 | TLL_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of left lung |
| 2209 | TLL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of left lung |
| 2210 | TLLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower left third of the core section of the lung |
| 2211 | TLLC_TOTVX | Char | 20 | Total number of voxels in lower left third of the core section of the lung |
| 2212 | TLLC_B1024 | Char | 20 | Number of voxels below or equal to - 1024 hounsfield units for lower left third of the core section of the lung |
| 2213 | TLLC_E1024 | Char | 20 | Number of voxels equal to -1000 hounsfield units lower left third of the core section of the lung |
| 2214 | TLLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower left third of the core section of the lung |
| 2215 | TLLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units lower left third of the core section of the lung |
| 2216 | TLLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower left third of the core section of the lung |
| 2217 | TLLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower left third of the core section of the lung |
| 2218 | TLLC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower left third of the core section of the lung |
| 2219 | TLLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower left third of the core section of the lung |
| 2220 | TLLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower left third of the core section of the lung |
| 2221 | TLLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower left third of the core section of the lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2222 | TLLC_BE900 | Char | 20 | Number of voxels below or equal to - 900 hounsfield units for lower left third of the <br> core section of the lung |
| 2223 | TLLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower left third of the <br> core section of the lung |
| 2224 | TLLC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower left third of the <br> core section of the lung |
| 2225 | TLLC_BE856 | Char | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2245 | TLLC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower left third of the core section of the lung |
| 2246 | TLLC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower left third of the core section of the lung |
| 2247 | TLLC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower left third of the core section of the lung |
| 2248 | TLLC_MEAN | Char | 20 | Average pixel values within lower left third of the core section of the lung (HU) |
| 2249 | TLLC_MED | Char | 20 | Median pixel values within lower left third of the core section of the lung (HU) |
| 2250 | TLLC_VAR | Char | 20 | Variance of pixel values within lower left third of the core section of the lung |
| 2251 | TLLC_SDEV | Char | 20 | Standard deviation of pixel values within lower left third of the core section of the lung |
| 2252 | TLLC_ADEV | Char | 20 | Average deviation of pixel values within lower left third of the core section of the lung |
| 2253 | TLLC_SKEW | Char | 20 | Skewness of pixel values in lower left third of the core section of the lung |
| 2254 | TLLC_KURT | Char | 20 | Kurtosis of pixel values in lower left third of the core section of the lung |
| 2255 | TLLC_FWHM | Char | 20 | Full width, half max (HU) for lower left third of the core section of the lung |
| 2256 | TLLC_AIRV | Char | 20 | Total volume of air in lower left third of the core section of the lung (milliliters) |
| 2257 | TLLC_TISV | Char | 20 | Total volume of tissue in lower left third of the core section of the lung (ml) |
| 2258 | TLLC_TOTV | Char | 20 | Total volume of lower left third of the core section of the lung (ml) |
| 2259 | TLLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower left third of the core section of the lung |
| 2260 | TLLC_ASLP | Char | 20 | The slope of the line at the ankle for lower left third of the core section of the lung |
| 2261 | TLLC_AINT | Char | 20 | The intercept of the line at the ankle for lower left third of the core section of the lung |
| 2262 | TLLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower left third of the core section of the lung |
| 2263 | TLLC_KSLP | Char | 20 | The slope of the line at the knee for lower left third of the core section of the lung |
| 2264 | TLLC_KINT | Char | 20 | The intercept of the line at the knee for lower left third of the core section of the lung |
| 2265 | TLLC_CCUTOFF | Char | 20 | lower left third of the core section of the lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2266 | TLLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower left third of the core section of the lung to emphysema voxels |
| 2267 | TLLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2268 | TLLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2269 | TLLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2270 | TLLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2271 | TLLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2272 | TLLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower left third of the core section of the lung to emphysema voxels |
| 2273 | TLLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower left third of the core section of the lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2274 | TLLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower left third of the core section of the lung |
| 2275 | TLLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower left third of the core section of the lung |
| 2276 | TLLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower left third of the core section of the lung |
| 2277 | TLLC_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left third of the core section of the lung |
| 2278 | TLLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower left third of the core section of the lung |
| 2279 | TLLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower left third of the core section of the lung |
| 2280 | TLLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower left third of the core section of the lung |
| 2281 | TLLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower left third of the peel section of the lung |
| 2282 | TLLP_TOTVX | Char | 20 | Total number of voxels in lower left third of the peel section of the lung |
| 2283 | TLLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower left third of the peel section of the lung |
| 2284 | TLLP_E1024 | Char | 20 | Number of voxels equal to - 1024 hounsfield units for lower left third of the peel section of the lung |
| 2285 | TLLP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower left third of the peel section of the lung |
| 2286 | TLLP_E1000 | Char | 20 | Number of voxels equal to - 1000 hounsfield units for lower left third of the peel section of the lung |
| 2287 | TLLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower left third of the peel section of the lung |
| 2288 | TLLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower left third of the peel section of the lung |
| 2289 | TLLP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower left third of the peel section of the lung |
| 2290 | TLLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower left third of the peel section of the lung |
| 2291 | TLLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower left third of the peel section of the lung |
| 2292 | TLLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower left third of the peel section of the lung |
| 2293 | TLLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower left third of the peel section of the lung |
| 2294 | TLLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower left third of the peel section of the lung |
| 2295 | TLLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower left third of the peel section of the lung |
| 2296 | TLLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower left third of the peel section of the lung |
| 2297 | TLLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower left third of the peel section of the lung |
| 2298 | TLLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower left third of the peel section of the lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2299 | TLLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower left third of the peel section of the lung |
| 2300 | TLLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower left third of the peel section of the lung |
| 2301 | TLLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower left third of the peel section of the lung |
| 2302 | TLLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower left third of the peel section of the lung |
| 2303 | TLLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower left third of the peel section of the lung |
| 2304 | TLLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower left third of the peel section of the lung |
| 2305 | TLLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower left third of the peel section of the lung |
| 2306 | TLLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower left third of the peel section of the lung |
| 2307 | TLLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower left third of the peel section of the lung |
| 2308 | TLLP_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for lower left third of the peel section of the lung |
| 2309 | TLLP_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for lower left third of the peel section of the lung |
| 2310 | TLLP_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for lower left third of the peel section of the lung |
| 2311 | TLLP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower left third of the peel section of the lung |
| 2312 | TLLP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower left third of the peel section of the lung |
| 2313 | TLLP_AE150 | Char | 20 | Number voxels above or equal to - 150 hounsfield units in lower left third of the peel section of the lung |
| 2314 | TLLP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower left third of the peel section of the lung |
| 2315 | TLLP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower left third of the peel section of the lung |
| 2316 | TLLP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower left third of the peel section of the lung |
| 2317 | TLLP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower left third of the peel section of the lung |
| 2318 | TLLP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower left third of the peel section of the lung |
| 2319 | TLLP_MEAN | Char | 20 | Average pixel values within lower left third of the peel section of the lung (HU) |
| 2320 | TLLP_MED | Char | 20 | Median pixel values within lower left third of the peel section of the lung (HU) |
| 2321 | TLLP_VAR | Char | 20 | Variance of pixel values within lower left third of the peel section of the lung |
| 2322 | TLLP_SDEV | Char | 20 | Standard deviation of pixel values within lower left third of the peel section of the lung |
| 2323 | TLLP_ADEV | Char | 20 | Average deviation of pixel values within lower left third of the peel section of the lung |
| 2324 | TLLP_SKEW | Char | 20 | Skewness of pixel values in lower left third of the peel section of the lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2325 | TLLP_KURT | Char | 20 | Kurtosis of pixel values in lower left third of the peel section of the lung |
| 2326 | TLLP_FWHM | Char | 20 | Full width, half max (HU) for lower left third of the peel section of the lung |
| 2327 | TLLP_AIRV | Char | 20 | Total volume of air in lower left third of the peel section of the lung (milliliters) |
| 2328 | TLLP_TISV | Char | 20 | Total volume of tissue in lower left third of the peel section of the lung (ml) |
| 2329 | TLLP_TOTV | Char | 20 | Total volume of lower left third of the peel section of the lung (ml) |
| 2330 | TLLP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower left third of the peel section of the lung |
| 2331 | TLLP_ASLP | Char | 20 | The slope of the line at the ankle for lower left third of the peel section of the lung |
| 2332 | TLLP_AINT | Char | 20 | The intercept of the line at the ankle for lower left third of the peel section of the lung |
| 2333 | TLLP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower left third of the peel section of the lung |
| 2334 | TLLP_KSLP | Char | 20 | The slope of the line at the knee for lower left third of the peel section of the lung |
| 2335 | TLLP_KINT | Char | 20 | The intercept of the line at the knee for lower left third of the peel section of the lung |
| 2336 | TLLP_CCUTOFF | Char | 20 | lower left third of the peel section of the lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2337 | TLLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower left third of the peel section of the lung to emphysema voxels |
| 2338 | TLLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2339 | TLLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2340 | TLLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2341 | TLLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2342 | TLLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2343 | TLLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower left third of the peel section of the lung to emphysema voxels |
| 2344 | TLLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower left third of the peel section of the lung to emphysema voxels |
| 2345 | TLLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower left third of the peel section of the lung |
| 2346 | TLLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower left third of the peel section of the lung |
| 2347 | TLLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower left third of the peel section of the lung |
| 2348 | TLLP_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left third of the peel section of the lung |
| 2349 | TLLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{TotVx} * 100$ ) in lower left third of the peel section of the lung |
| 2350 | TLLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower left third of the peel section of the lung |
| 2351 | TLLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower left third of the peel section of the lung |
| 2352 | TRU_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2353 | TRU_TOTVX | Char | 20 | Total number of voxels in upper third of right lung |
| 2354 | TRU_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of right lung |
| 2355 | TRU_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of right lung |
| 2356 | TRU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of right lung |
| 2357 | TRU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of right lung |
| 2358 | TRU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of right lung |
| 2359 | TRU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of right lung |
| 2360 | TRU_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of right lung |
| 2361 | TRU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of right lung |
| 2362 | TRU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of right lung |
| 2363 | TRU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of right lung |
| 2364 | TRU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of right lung |
| 2365 | TRU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of right lung |
| 2366 | TRU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of right lung |
| 2367 | TRU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of right lung |
| 2368 | TRU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of right lung |
| 2369 | TRU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of right lung |
| 2370 | TRU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of right lung |
| 2371 | TRU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of right lung |
| 2372 | TRU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of right lung |
| 2373 | TRU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of right lung |
| 2374 | TRU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of right lung |
| 2375 | TRU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of right lung |
| 2376 | TRU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of right lung |
| 2377 | TRU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of right lung |
| 2378 | TRU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of right lung |
| 2379 | TRU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of right lung |
| 2380 | TRU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of right lung |
| 2381 | TRU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of right lung |
| 2382 | TRU_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of right lung |
| 2383 | TRU_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of right lung |
| 2384 | TRU_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of right lung |
| 2385 | TRU_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of right lung |
| 2386 | TRU_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of right lung |
| 2387 | TRU_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of right lung |
| 2388 | TRU_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of right lung |
| 2389 | TRU_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of right lung |
| 2390 | TRU_MEAN | Char | 20 | Average pixel values within upper third of right lung (HU) |
| 2391 | TRU_MED | Char | 20 | Median pixel values within upper third of right lung (HU) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 2392 | TRU_VAR | Char | 20 | Variance of pixel values within upper third of right lung |
| 2393 | TRU_SDEV | Char | 20 | Standard deviation of pixel values within upper third of right lung |
| 2394 | TRU_ADEV | 20 | Average deviation of pixel values within upper third of right lung |  |
| 2395 | TRU_SKEW | Char | 20 | Skewness of pixel values in upper third of right lung |
| 2396 | TRU_KURT | Char | 20 | Kurtosis of pixel values in upper third of right lung |
| 2397 | TRU_FWHM | Char | 20 | Total volume of air in upper third of right lung (milliliters) |
| 2398 | TRU_AIRV | Char | 20 | Total volume of tissue in upper third of right lung (ml) |
| 2399 | TRU_TISV | Char | 20 | Char |
| 2400 | TRU_TOTV | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2422 | TRU_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of right lung |
| 2423 | TRUC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of core section of right lung |
| 2424 | TRUC_TOTVX | Char | 20 | Total number of voxels in upper third of core section of right lung |
| 2425 | TRUC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of core section of right lung |
| 2426 | TRUC_E1024 | Char | 20 | Number of voxels equal to - 1024 hounsfield units for upper third of core section of right lung |
| 2427 | TRUC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of core section of right lung |
| 2428 | TRUC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of core section of right lung |
| 2429 | TRUC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of core section of right lung |
| 2430 | TRUC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of core section of right lung |
| 2431 | TRUC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of core section of right lung |
| 2432 | TRUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of core section of right lung |
| 2433 | TRUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of core section of right lung |
| 2434 | TRUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of core section of right lung |
| 2435 | TRUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of core section of right lung |
| 2436 | TRUC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of core section of right lung |
| 2437 | TRUC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of core section of right lung |
| 2438 | TRUC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of core section of right lung |
| 2439 | TRUC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of core section of right lung |
| 2440 | TRUC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of core section of right lung |
| 2441 | TRUC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of core section of right lung |
| 2442 | TRUC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of core section of right lung |
| 2443 | TRUC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of core section of right lung |
| 2444 | TRUC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of core section of right lung |
| 2445 | TRUC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of core section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2446 | TRUC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of core section of right lung |
| 2447 | TRUC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of core section of right lung |
| 2448 | TRUC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of core section of right lung |
| 2449 | TRUC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of core section of right lung |
| 2450 | TRUC_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for upper third of core section of right lung |
| 2451 | TRUC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper third of core section of right lung |
| 2452 | TRUC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of core section of right lung |
| 2453 | TRUC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of core section of right lung |
| 2454 | TRUC_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of core section of right lung |
| 2455 | TRUC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of core section of right lung |
| 2456 | TRUC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of core section of right lung |
| 2457 | TRUC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of core section of right lung |
| 2458 | TRUC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of core section of right lung |
| 2459 | TRUC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of core section of right lung |
| 2460 | TRUC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of core section of right lung |
| 2461 | TRUC_MEAN | Char | 20 | Average pixel values within upper third of core section of right lung (HU) |
| 2462 | TRUC_MED | Char | 20 | Median pixel values within upper third of core section of right lung (HU) |
| 2463 | TRUC_VAR | Char | 20 | Variance of pixel values within upper third of core section of right lung |
| 2464 | TRUC_SDEV | Char | 20 | Standard deviation of pixel values within upper third of core section of right lung |
| 2465 | TRUC_ADEV | Char | 20 | Average deviation of pixel values within upper third of core section of right lung |
| 2466 | TRUC_SKEW | Char | 20 | Skewness of pixel values in upper third of core section of right lung |
| 2467 | TRUC_KURT | Char | 20 | Kurtosis of pixel values in upper third of core section of right lung |
| 2468 | TRUC_FWHM | Char | 20 | Full width, half max (HU) for upper third of core section of right lung |
| 2469 | TRUC_AIRV | Char | 20 | Total volume of air in upper third of core section of right lung (milliliters) |
| 2470 | TRUC_TISV | Char | 20 | Total volume of tissue in upper third of core section of right lung (ml) |
| 2471 | TRUC_TOTV | Char | 20 | Total volume of upper third of core section of right lung (ml) |
| 2472 | TRUC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of core section of right lung |
| 2473 | TRUC_ASLP | Char | 20 | The slope of the line at the ankle for upper third of core section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2474 | TRUC_AINT | Char | 20 | The intercept of the line at the ankle for upper third of core section of right lung |
| 2475 | TRUC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of core section of right lung |
| 2476 | TRUC_KSLP | Char | 20 | The slope of the line at the knee for upper third of core section of right lung |
| 2477 | TRUC_KINT | Char | 20 | The intercept of the line at the knee for upper third of core section of right lung |
| 2478 | TRUC_CCUTOFF | Char | 20 | upper third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2479 | TRUC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of core section of right lung to emphysema voxels |
| 2480 | TRUC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2481 | TRUC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2482 | TRUC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2483 | TRUC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2484 | TRUC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2485 | TRUC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of core section of right lung to emphysema voxels |
| 2486 | TRUC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of core section of right lung to emphysema voxels |
| 2487 | TRUC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of core section of right lung |
| 2488 | TRUC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of core section of right lung |
| 2489 | TRUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of core section of right lung |
| 2490 | TRUC_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of core section of right lung |
| 2491 | TRUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{Tot} V \mathrm{x} * 100$ ) in upper third of core section of right lung |
| 2492 | TRUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of core section of right lung |
| 2493 | TRUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of core section of right lung |
| 2494 | TRUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of peel section of right lung |
| 2495 | TRUP_TOTVX | Char | 20 | Total number of voxels in upper third of peel section of right lung |
| 2496 | TRUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of peel section of right lung |
| 2497 | TRUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of peel section of right lung |
| 2498 | TRUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of peel section of right lung |
| 2499 | TRUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2500 | TRUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of peel <br> section of right lung |
| 2501 | TRUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of peel <br> section of right lung |
| 2502 | TRUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of peel <br> section of right lung |
| 2503 | TRUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of peel <br> section of right lung |
| 2504 | TRUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of peel <br> section of right lung |
| 2505 | TRUP_BE910 | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2523 | TRUP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of peel section of right lung |
| 2524 | TRUP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of peel section of right lung |
| 2525 | TRUP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of peel section of right lung |
| 2526 | TRUP_AE150 | Char | 20 | Number voxels above or equal to - 150 hounsfield units in upper third of peel section of right lung |
| 2527 | TRUP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of peel section of right lung |
| 2528 | TRUP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of peel section of right lung |
| 2529 | TRUP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of peel section of right lung |
| 2530 | TRUP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of peel section of right lung |
| 2531 | TRUP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of peel section of right lung |
| 2532 | TRUP_MEAN | Char | 20 | Average pixel values within upper third of peel section of right lung (HU) |
| 2533 | TRUP_MED | Char | 20 | Median pixel values within upper third of peel section of right lung (HU) |
| 2534 | TRUP_VAR | Char | 20 | Variance of pixel values within upper third of peel section of right lung |
| 2535 | TRUP_SDEV | Char | 20 | Standard deviation of pixel values within upper third of peel section of right lung |
| 2536 | TRUP_ADEV | Char | 20 | Average deviation of pixel values within upper third of peel section of right lung |
| 2537 | TRUP_SKEW | Char | 20 | Skewness of pixel values in upper third of peel section of right lung |
| 2538 | TRUP_KURT | Char | 20 | Kurtosis of pixel values in upper third of peel section of right lung |
| 2539 | TRUP_FWHM | Char | 20 | Full width, half max (HU) for upper third of peel section of right lung |
| 2540 | TRUP_AIRV | Char | 20 | Total volume of air in upper third of peel section of right lung (milliliters) |
| 2541 | TRUP_TISV | Char | 20 | Total volume of tissue in upper third of peel section of right lung (ml) |
| 2542 | TRUP_TOTV | Char | 20 | Total volume of upper third of peel section of right lung (ml) |
| 2543 | TRUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of peel section of right lung |
| 2544 | TRUP_ASLP | Char | 20 | The slope of the line at the ankle for upper third of peel section of right lung |
| 2545 | TRUP_AINT | Char | 20 | The intercept of the line at the ankle for upper third of peel section of right lung |
| 2546 | TRUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of peel section of right lung |
| 2547 | TRUP_KSLP | Char | 20 | The slope of the line at the knee for upper third of peel section of right lung |
| 2548 | TRUP_KINT | Char | 20 | The intercept of the line at the knee for upper third of peel section of right lung |
| 2549 | TRUP_CCUTOFF | Char | 20 | upper third of peel section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2550 | TRUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2551 | TRUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2552 | TRUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2553 | TRUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2554 | TRUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2555 | TRUP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2556 | TRUP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2557 | TRUP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2558 | TRUP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of peel section of right lung |
| 2559 | TRUP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of peel section of right lung |
| 2560 | TRUP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of peel section of right lung |
| 2561 | TRUP_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of peel section of right lung |
| 2562 | TRUP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{TotVx} * 100$ ) in upper third of peel section of right lung |
| 2563 | TRUP_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of peel section of right lung |
| 2564 | TRUP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / $\operatorname{TotVx} * 100$ ) for upper third of peel section of right lung |
| 2565 | TRM_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of right lung |
| 2566 | TRM_TOTVX | Char | 20 | Total number of voxels in middle third of right lung |
| 2567 | TRM_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of right lung |
| 2568 | TRM_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of right lung |
| 2569 | TRM_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of right lung |
| 2570 | TRM_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of right lung |
| 2571 | TRM_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of right lung |
| 2572 | TRM_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of right lung |
| 2573 | TRM_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of right lung |
| 2574 | TRM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of right lung |
| 2575 | TRM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of right lung |
| 2576 | TRM_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of right lung |
| 2577 | TRM_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of right lung |
| 2578 | TRM_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of right lung |
| 2579 | TRM_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of right lung |
| 2580 | TRM_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of right lung |
| 2581 | TRM_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2582 | TRM_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of right lung |
| 2583 | TRM_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of right lung |
| 2584 | TRM_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of right lung |
| 2585 | TRM_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of right lung |
| 2586 | TRM_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of right lung |
| 2587 | TRM_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of right lung |
| 2588 | TRM_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of right lung |
| 2589 | TRM_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of right lung |
| 2590 | TRM_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of right lung |
| 2591 | TRM_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of right lung |
| 2592 | TRM_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for middle third of right lung |
| 2593 | TRM_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of right lung |
| 2594 | TRM_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of right lung |
| 2595 | TRM_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of right lung |
| 2596 | TRM_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of right lung |
| 2597 | TRM_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of right lung |
| 2598 | TRM_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of right lung |
| 2599 | TRM_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of right lung |
| 2600 | TRM_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of right lung |
| 2601 | TRM_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of right lung |
| 2602 | TRM_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of right lung |
| 2603 | TRM_MEAN | Char | 20 | Average pixel values within middle third of right lung (HU) |
| 2604 | TRM_MED | Char | 20 | Median pixel values within middle third of right lung (HU) |
| 2605 | TRM_VAR | Char | 20 | Variance of pixel values within middle third of right lung |
| 2606 | TRM_SDEV | Char | 20 | Standard deviation of pixel values within middle third of right lung |
| 2607 | TRM_ADEV | Char | 20 | Average deviation of pixel values within middle third of right lung |
| 2608 | TRM_SKEW | Char | 20 | Skewness of pixel values in middle third of right lung |
| 2609 | TRM_KURT | Char | 20 | Kurtosis of pixel values in middle third of right lung |
| 2610 | TRM_FWHM | Char | 20 | Full width, half max (HU) for middle third of right lung |
| 2611 | TRM_AIRV | Char | 20 | Total volume of air in middle third of right lung (milliliters) |
| 2612 | TRM_TISV | Char | 20 | Total volume of tissue in middle third of right lung (ml) |
| 2613 | TRM_TOTV | Char | 20 | Total volume of middle third of right lung (ml) |
| 2614 | TRM_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of right lung |
| 2615 | TRM_ASLP | Char | 20 | The slope of the line at the ankle for middle third of right lung |
| 2616 | TRM_AINT | Char | 20 | The intercept of the line at the ankle for middle third of right lung |
| 2617 | TRM_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of right lung |
| 2618 | TRM_KSLP | Char | 20 | The slope of the line at the knee for middle third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2619 | TRM_KINT | Char | 20 | The intercept of the line at the knee for middle third of right lung |
| 2620 | TRM_CCUTOFF | Char | 20 | middle third of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2621 | TRM_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle third of right lung to emphysema voxels |
| 2622 | TRM_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2623 | TRM_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2624 | TRM_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the middle third of right lung to emphysema voxels |
| 2625 | TRM_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2626 | TRM_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the middle third of right lung to emphysema voxels |
| 2627 | TRM_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of right lung to emphysema voxels |
| 2628 | TRM_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle third of right lung to emphysema voxels |
| 2629 | TRM_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle third of right lung |
| 2630 | TRM_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of right lung |
| 2631 | TRM_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for middle third of right lung |
| 2632 | TRM_AIRWAYVX | Char | 20 | Total number of airway voxels in middle third of right lung |
| 2633 | TRM_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in middle third of right lung |
| 2634 | TRM_VESSELVX | Char | 20 | Total number of vessel voxels in middle third of right lung |
| 2635 | TRM_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle third of right lung |
| 2636 | TRMC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of core section of right lung |
| 2637 | TRMC_TOTVX | Char | 20 | Total number of voxels in middle third of core section of right lung |
| 2638 | TRMC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of core section of right lung |
| 2639 | TRMC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of core section of right lung |
| 2640 | TRMC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of core section of right lung |
| 2641 | TRMC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of core section of right lung |
| 2642 | TRMC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of core section of right lung |
| 2643 | TRMC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of core section of right lung |
| 2644 | TRMC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of core section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2645 | TRMC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of core section of right lung |
| 2646 | TRMC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of core section of right lung |
| 2647 | TRMC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of core section of right lung |
| 2648 | TRMC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of core section of right lung |
| 2649 | TRMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of core section of right lung |
| 2650 | TRMC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of core section of right lung |
| 2651 | TRMC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of core section of right lung |
| 2652 | TRMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of core section of right lung |
| 2653 | TRMC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of core section of right lung |
| 2654 | TRMC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of core section of right lung |
| 2655 | TRMC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of core section of right lung |
| 2656 | TRMC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of core section of right lung |
| 2657 | TRMC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of core section of right lung |
| 2658 | TRMC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of core section of right lung |
| 2659 | TRMC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of core section of right lung |
| 2660 | TRMC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of core section of right lung |
| 2661 | TRMC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of core section of right lung |
| 2662 | TRMC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of core section of right lung |
| 2663 | TRMC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of core section of right lung |
| 2664 | TRMC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for middle third of core section of right lung |
| 2665 | TRMC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of core section of right lung |
| 2666 | TRMC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of core section of right lung |
| 2667 | TRMC_AE100 | Char | 20 | Number voxels above or equal to - 100 hounsfield units in middle third of core section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2668 | TRMC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of core section of right lung |
| 2669 | TRMC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of core section of right lung |
| 2670 | TRMC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of core section of right lung |
| 2671 | TRMC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of core section of right lung |
| 2672 | TRMC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of core section of right lung |
| 2673 | TRMC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of core section of right lung |
| 2674 | TRMC_MEAN | Char | 20 | Average pixel values within middle third of core section of right lung (HU) |
| 2675 | TRMC_MED | Char | 20 | Median pixel values within middle third of core section of right lung (HU) |
| 2676 | TRMC_VAR | Char | 20 | Variance of pixel values within middle third of core section of right lung |
| 2677 | TRMC_SDEV | Char | 20 | Standard deviation of pixel values within middle third of core section of right lung |
| 2678 | TRMC_ADEV | Char | 20 | Average deviation of pixel values within middle third of core section of right lung |
| 2679 | TRMC_SKEW | Char | 20 | Skewness of pixel values in middle third of core section of right lung |
| 2680 | TRMC_KURT | Char | 20 | Kurtosis of pixel values in middle third of core section of right lung |
| 2681 | TRMC_FWHM | Char | 20 | Full width, half max (HU) for middle third of core section of right lung |
| 2682 | TRMC_AIRV | Char | 20 | Total volume of air in middle third of core section of right lung (milliliters) |
| 2683 | TRMC_TISV | Char | 20 | Total volume of tissue in middle third of core section of right lung (ml) |
| 2684 | TRMC_TOTV | Char | 20 | Total volume of middle third of core section of right lung (ml) |
| 2685 | TRMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of core section of right lung |
| 2686 | TRMC_ASLP | Char | 20 | The slope of the line at the ankle for middle third of core section of right lung |
| 2687 | TRMC_AINT | Char | 20 | The intercept of the line at the ankle for middle third of core section of right lung |
| 2688 | TRMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of core section of right lung |
| 2689 | TRMC_KSLP | Char | 20 | The slope of the line at the knee for middle third of core section of right lung |
| 2690 | TRMC_KINT | Char | 20 | The intercept of the line at the knee for middle third of core section of right lung |
| 2691 | TRMC_CCUTOFF | Char | 20 | middle third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2692 | TRMC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle third of core section of right lung to emphysema voxels |
| 2693 | TRMC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2694 | TRMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2695 | TRMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2696 | TRMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of core section of right lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2697 | TRMC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2698 | TRMC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of core section of right lung to emphysema voxels |
| 2699 | TRMC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle third of core section of right lung to emphysema voxels |
| 2700 | TRMC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle third of core section of right lung |
| 2701 | TRMC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of core section of right lung |
| 2702 | TRMC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for middle third of core section of right lung |
| 2703 | TRMC_AIRWAYVX | Char | 20 | Total number of airway voxels in middle third of core section of right lung |
| 2704 | TRMC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in middle third of core section of right lung |
| 2705 | TRMC_VESSELVX | Char | 20 | Total number of vessel voxels in middle third of core section of right lung |
| 2706 | TRMC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle third of core section of right lung |
| 2707 | TRMP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of peel section of right lung |
| 2708 | TRMP_TOTVX | Char | 20 | Total number of voxels in middle third of peel section of right lung |
| 2709 | TRMP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of peel section of right lung |
| 2710 | TRMP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of peel section of right lung |
| 2711 | TRMP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of peel section of right lung |
| 2712 | TRMP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of peel section of right lung |
| 2713 | TRMP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of peel section of right lung |
| 2714 | TRMP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of peel section of right lung |
| 2715 | TRMP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of peel section of right lung |
| 2716 | TRMP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of peel section of right lung |
| 2717 | TRMP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of peel section of right lung |
| 2718 | TRMP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of peel section of right lung |
| 2719 | TRMP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of peel section of right lung |
| 2720 | TRMP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of peel section of right lung |
| 2721 | TRMP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2722 | TRMP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of peel section of right lung |
| 2723 | TRMP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of peel section of right lung |
| 2724 | TRMP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of peel section of right lung |
| 2725 | TRMP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of peel section of right lung |
| 2726 | TRMP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of peel section of right lung |
| 2727 | TRMP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of peel section of right lung |
| 2728 | TRMP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of peel section of right lung |
| 2729 | TRMP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of peel section of right lung |
| 2730 | TRMP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of peel section of right lung |
| 2731 | TRMP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of peel section of right lung |
| 2732 | TRMP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of peel section of right lung |
| 2733 | TRMP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of peel section of right lung |
| 2734 | TRMP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of peel section of right lung |
| 2735 | TRMP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of peel section of right lung |
| 2736 | TRMP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of peel section of right lung |
| 2737 | TRMP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of peel section of right lung |
| 2738 | TRMP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of peel section of right lung |
| 2739 | TRMP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of peel section of right lung |
| 2740 | TRMP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of peel section of right lung |
| 2741 | TRMP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of peel section of right lung |
| 2742 | TRMP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of peel section of right lung |
| 2743 | TRMP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of peel section of right lung |
| 2744 | TRMP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of peel section of right lung |
| 2745 | TRMP_MEAN | Char | 20 | Average pixel values within middle third of peel section of right lung (HU) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2746 | TRMP_MED | Char | 20 | Median pixel values within middle third of peel section of right lung (HU) |
| 2747 | TRMP_VAR | Char | 20 | Variance of pixel values within middle third of peel section of right lung |
| 2748 | TRMP_SDEV | Char | 20 | Standard deviation of pixel values within middle third of peel section of right lung |
| 2749 | TRMP_ADEV | Char | 20 | Average deviation of pixel values within middle third of peel section of right lung |
| 2750 | TRMP_SKEW | Char | 20 | Skewness of pixel values in middle third of peel section of right lung |
| 2751 | TRMP_KURT | Char | 20 | Kurtosis of pixel values in middle third of peel section of right lung |
| 2752 | TRMP_FWHM | Char | 20 | Full width, half max (HU) for middle third of peel section of right lung |
| 2753 | TRMP_AIRV | Char | 20 | Total volume of air in middle third of peel section of right lung (milliliters) |
| 2754 | TRMP_TISV | Char | 20 | Total volume of tissue in middle third of peel section of right lung (ml) |
| 2755 | TRMP_TOTV | Char | 20 | Total volume of middle third of peel section of right lung (ml) |
| 2756 | TRMP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of peel section of right lung |
| 2757 | TRMP_ASLP | Char | 20 | The slope of the line at the ankle for middle third of peel section of right lung |
| 2758 | TRMP_AINT | Char | 20 | The intercept of the line at the ankle for middle third of peel section of right lung |
| 2759 | TRMP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of peel section of right lung |
| 2760 | TRMP_KSLP | Char | 20 | The slope of the line at the knee for middle third of peel section of right lung |
| 2761 | TRMP_KINT | Char | 20 | The intercept of the line at the knee for middle third of peel section of right lung |
| 2762 | TRMP_CCUTOFF | Char | 20 | middle third of peel section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2763 | TRMP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle third of peel section of right lung to emphysema voxels |
| 2764 | TRMP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the middle third of peel section of right lung to emphysema voxels |
| 2765 | TRMP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of peel section of right lung to emphysema voxels |
| 2766 | TRMP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the middle third of peel section of right lung to emphysema voxels |
| 2767 | TRMP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of peel section of right lung to emphysema voxels |
| 2768 | TRMP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the middle third of peel section of right lung to emphysema voxels |
| 2769 | TRMP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of peel section of right lung to emphysema voxels |
| 2770 | TRMP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle third of peel section of right lung to emphysema voxels |
| 2771 | TRMP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle third of peel section of right lung |
| 2772 | TRMP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of peel section of right lung |
| 2773 | TRMP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for middle third of peel section of right lung |
| 2774 | TRMP_AIRWAYVX | Char | 20 | Total number of airway voxels in middle third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2775 | TRMP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in middle third of peel section of right lung |
| 2776 | TRMP_VESSELVX | Char | 20 | Total number of vessel voxels in middle third of peel section of right lung |
| 2777 | TRMP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle third of peel section of right lung |
| 2778 | TRL_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower third of right lung |
| 2779 | TRL_TOTVX | Char | 20 | Total number of voxels in lower third of right lung |
| 2780 | TRL_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower third of right lung |
| 2781 | TRL_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for lower third of right lung |
| 2782 | TRL_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower third of right lung |
| 2783 | TRL_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for lower third of right lung |
| 2784 | TRL_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower third of right lung |
| 2785 | TRL_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower third of right lung |
| 2786 | TRL_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower third of right lung |
| 2787 | TRL_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower third of right lung |
| 2788 | TRL_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower third of right lung |
| 2789 | TRL_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower third of right lung |
| 2790 | TRL_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower third of right lung |
| 2791 | TRL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower third of right lung |
| 2792 | TRL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower third of right lung |
| 2793 | TRL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower third of right lung |
| 2794 | TRL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower third of right lung |
| 2795 | TRL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower third of right lung |
| 2796 | TRL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower third of right lung |
| 2797 | TRL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower third of right lung |
| 2798 | TRL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of right lung |
| 2799 | TRL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of right lung |
| 2800 | TRL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of right lung |
| 2801 | TRL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of right lung |
| 2802 | TRL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of right lung |
| 2803 | TRL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of right lung |
| 2804 | TRL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of right lung |
| 2805 | TRL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower third of right lung |
| 2806 | TRL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower third of right lung |
| 2807 | TRL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower third of right lung |
| 2808 | TRL_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of right lung |
| 2809 | TRL_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of right lung |
| 2810 | TRL_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of right lung |
| 2811 | TRL_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2812 | TRL_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower third of right lung |
| 2813 | TRL_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower third of right lung |
| 2814 | TRL_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of right lung |
| 2815 | TRL_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower third of right lung |
| 2816 | TRL_MEAN | Char | 20 | Average pixel values within lower third of right lung (HU) |
| 2817 | TRL_MED | Char | 20 | Median pixel values within lower third of right lung (HU) |
| 2818 | TRL_VAR | Char | 20 | Variance of pixel values within lower third of right lung |
| 2819 | TRL_SDEV | Char | 20 | Standard deviation of pixel values within lower third of right lung |
| 2820 | TRL_ADEV | Char | 20 | Average deviation of pixel values within lower third of right lung |
| 2821 | TRL_SKEW | Char | 20 | Skewness of pixel values in lower third of right lung |
| 2822 | TRL_KURT | Char | 20 | Kurtosis of pixel values in lower third of right lung |
| 2823 | TRL_FWHM | Char | 20 | Full width, half max (HU) for lower third of right lung |
| 2824 | TRL_AIRV | Char | 20 | Total volume of air in lower third of right lung (milliliters) |
| 2825 | TRL_TISV | Char | 20 | Total volume of tissue in lower third of right lung (ml) |
| 2826 | TRL_TOTV | Char | 20 | Total volume of lower third of right lung (ml) |
| 2827 | TRL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of right lung |
| 2828 | TRL_ASLP | Char | 20 | The slope of the line at the ankle for lower third of right lung |
| 2829 | TRL_AINT | Char | 20 | The intercept of the line at the ankle for lower third of right lung |
| 2830 | TRL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of right lung |
| 2831 | TRL_KSLP | Char | 20 | The slope of the line at the knee for lower third of right lung |
| 2832 | TRL_KINT | Char | 20 | The intercept of the line at the knee for lower third of right lung |
| 2833 | TRL_CCUTOFF | Char | 20 | lower third of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2834 | TRL_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of right lung to emphysema voxels |
| 2835 | TRL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2836 | TRL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2837 | TRL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of right lung to emphysema voxels |
| 2838 | TRL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2839 | TRL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of right lung to emphysema voxels |
| 2840 | TRL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of right lung to emphysema voxels |
| 2841 | TRL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of right lung to emphysema voxels |
| 2842 | TRL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2843 | TRL_HU15 | Char | 20 | Value of the pixel that is at the 15 th percentile of pixel values for lower third of right <br> lung |
| 2844 | TRL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of right <br> lung |
| 2845 | TRL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of right lung |
| 2846 | TRL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of right lung |
| 2847 | TRL_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of right lung |
| 2848 | TRL_VESSELPERCENT | Char | 20 | Char |
| 2849 | TRLC_VXSIZE | Char voxels percentage (VesselVx / TotVx * 100) for lower third of right lung |  |  |
| 2850 | TRLC_TOTVX | 20 | Char | 20 | | Volume of voxel in cubic millimeters for lower third of core section of right lung |
| :--- |
| 2851 |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2869 | TRLC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of core <br> section of right lung |
| 2870 | TRLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of core <br> section of right lung |
| 2871 | TRLC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of core <br> section of right lung |
| 2872 | TRLC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of core <br> section of right lung |
| 2873 | TRLC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of core <br> section of right lung |
| 2874 | TRLC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of core <br> section of right lung |
| 2875 | TRLC_BE400 | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2896 | TRLC_TISV | Char | 20 | Total volume of tissue in lower third of core section of right lung (ml) |
| 2897 | TRLC_TOTV | Char | 20 | Total volume of lower third of core section of right lung (ml) |
| 2898 | TRLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of core section of right lung |
| 2899 | TRLC_ASLP | Char | 20 | The slope of the line at the ankle for lower third of core section of right lung |
| 2900 | TRLC_AINT | Char | 20 | The intercept of the line at the ankle for lower third of core section of right lung |
| 2901 | TRLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of core section of right lung |
| 2902 | TRLC_KSLP | Char | 20 | The slope of the line at the knee for lower third of core section of right lung |
| 2903 | TRLC_KINT | Char | 20 | The intercept of the line at the knee for lower third of core section of right lung |
| 2904 | TRLC_CCUTOFF | Char | 20 | lower third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2905 | TRLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of core section of right lung to emphysema voxels |
| 2906 | TRLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2907 | TRLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2908 | TRLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2909 | TRLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2910 | TRLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2911 | TRLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of core section of right lung to emphysema voxels |
| 2912 | TRLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of core section of right lung to emphysema voxels |
| 2913 | TRLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of core section of right lung |
| 2914 | TRLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of core section of right lung |
| 2915 | TRLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of core section of right lung |
| 2916 | TRLC_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of core section of right lung |
| 2917 | TRLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{Tot} V \mathrm{x} * 100$ ) in lower third of core section of right lung |
| 2918 | TRLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of core section of right lung |
| 2919 | TRLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of core section of right lung |
| 2920 | TRLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower third of peel section of right lung |
| 2921 | TRLP_TOTVX | Char | 20 | Total number of voxels in lower third of peel section of right lung |
| 2922 | TRLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2923 | TRLP_E1024 | Char | 20 | Number of voxels equal to - 1024 hounsfield units for lower third of peel section of right lung |
| 2924 | TRLP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower third of peel section of right lung |
| 2925 | TRLP_E1000 | Char | 20 | Number of voxels equal to - 1000 hounsfield units for lower third of peel section of right lung |
| 2926 | TRLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower third of peel section of right lung |
| 2927 | TRLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower third of peel section of right lung |
| 2928 | TRLP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower third of peel section of right lung |
| 2929 | TRLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower third of peel section of right lung |
| 2930 | TRLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower third of peel section of right lung |
| 2931 | TRLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower third of peel section of right lung |
| 2932 | TRLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower third of peel section of right lung |
| 2933 | TRLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower third of peel section of right lung |
| 2934 | TRLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower third of peel section of right lung |
| 2935 | TRLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower third of peel section of right lung |
| 2936 | TRLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower third of peel section of right lung |
| 2937 | TRLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower third of peel section of right lung |
| 2938 | TRLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower third of peel section of right lung |
| 2939 | TRLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower third of peel section of right lung |
| 2940 | TRLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of peel section of right lung |
| 2941 | TRLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of peel section of right lung |
| 2942 | TRLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of peel section of right lung |
| 2943 | TRLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of peel section of right lung |
| 2944 | TRLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of peel section of right lung |
| 2945 | TRLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2946 | TRLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of peel section of right lung |
| 2947 | TRLP_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for lower third of peel section of right lung |
| 2948 | TRLP_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for lower third of peel section of right lung |
| 2949 | TRLP_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for lower third of peel section of right lung |
| 2950 | TRLP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of peel section of right lung |
| 2951 | TRLP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of peel section of right lung |
| 2952 | TRLP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of peel section of right lung |
| 2953 | TRLP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower third of peel section of right lung |
| 2954 | TRLP_AE250 | Char | 20 | Number voxels above or equal to - 250 hounsfield units in lower third of peel section of right lung |
| 2955 | TRLP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower third of peel section of right lung |
| 2956 | TRLP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of peel section of right lung |
| 2957 | TRLP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower third of peel section of right lung |
| 2958 | TRLP_MEAN | Char | 20 | Average pixel values within lower third of peel section of right lung (HU) |
| 2959 | TRLP_MED | Char | 20 | Median pixel values within lower third of peel section of right lung (HU) |
| 2960 | TRLP_VAR | Char | 20 | Variance of pixel values within lower third of peel section of right lung |
| 2961 | TRLP_SDEV | Char | 20 | Standard deviation of pixel values within lower third of peel section of right lung |
| 2962 | TRLP_ADEV | Char | 20 | Average deviation of pixel values within lower third of peel section of right lung |
| 2963 | TRLP_SKEW | Char | 20 | Skewness of pixel values in lower third of peel section of right lung |
| 2964 | TRLP_KURT | Char | 20 | Kurtosis of pixel values in lower third of peel section of right lung |
| 2965 | TRLP_FWHM | Char | 20 | Full width, half max (HU) for lower third of peel section of right lung |
| 2966 | TRLP_AIRV | Char | 20 | Total volume of air in lower third of peel section of right lung (milliliters) |
| 2967 | TRLP_TISV | Char | 20 | Total volume of tissue in lower third of peel section of right lung (ml) |
| 2968 | TRLP_TOTV | Char | 20 | Total volume of lower third of peel section of right lung (ml) |
| 2969 | TRLP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of peel section of right lung |
| 2970 | TRLP_ASLP | Char | 20 | The slope of the line at the ankle for lower third of peel section of right lung |
| 2971 | TRLP_AINT | Char | 20 | The intercept of the line at the ankle for lower third of peel section of right lung |
| 2972 | TRLP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of peel section of right lung |
| 2973 | TRLP_KSLP | Char | 20 | The slope of the line at the knee for lower third of peel section of right lung |
| 2974 | TRLP_KINT | Char | 20 | The intercept of the line at the knee for lower third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2975 | TRLP_CCUTOFF | Char | 20 | lower third of peel section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2976 | TRLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2977 | TRLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2978 | TRLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2979 | TRLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2980 | TRLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2981 | TRLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2982 | TRLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2983 | TRLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2984 | TRLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of peel section of right lung |
| 2985 | TRLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of peel section of right lung |
| 2986 | TRLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of peel section of right lung |
| 2987 | TRLP_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of peel section of right lung |
| 2988 | TRLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of peel section of right lung |
| 2989 | TRLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of peel section of right lung |
| 2990 | TRLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of peel section of right lung |
| 2991 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 2992 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 2993 | SESSION_ID_VERSION | Char | 20 | Version ID of the Session ID |

Data Set Name: v1_ct_edftracking_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 |  |
| 3 | QA_NOISSUES | Num | 8 | QA_NoIssues |
| 4 | QA_INCORRECTPROTOCOL | Num | 8 | QA_IncorrectProtocol |
| 5 | QA_METALARTIFACT | Num | 8 | QA_MetalArtifact |
| 6 | QA_FIELDOFVIEWISSUES | Num | 8 | QA_FieldOfViewIssues |
| 7 | QA_MOTIONARTIFACT | Num | 8 | QA_MotionArtifact |
| 8 | QA_MISSINGSLICES | Num | 8 | QA_MissingSlices |
| 9 | QA_RADIATIONDOSEDEVIATION | Num | 8 | QA_RadiationDoseDeviation |
| 10 | QA_OTHERS | Num | 8 | QA_Others |
| 11 | QA_ROIOUTSIDEAIR | Num | 8 | QA_RoiOutsideAir |
| 12 | QA_ROIOUTSIDEAIRMEAN | Num | 8 | QA_RoiOutsideAirMean |
| 13 | QA_ROIOUTSIDEAIRSTDDEV | Num | 8 | QA_RoiOutsideAirStdDev |
| 14 | QA_ROIOUTSIDEAIRAREA | Num | 8 | QA_RoiOutsideAirArea |
| 15 | QA_APPROVEDFORANALYSIS | Num | 8 | QA_ApprovedForAnalysis |
| 16 | QA_REJECTEDFORANALYSIS | Num | 8 | QA_RejectedForAnalysis |
| 17 | AIRWAYS_RB1TARGETLEVEL | Char | 2 | Airways_RB1TargetLevel |
| 18 | AIRWAYS_RB1LEVEL | Char | 2 | Airways_RB1Level |
| 19 | AIRWAYS_RB1ISSUE | Char | 13 | Airways_RB1Issue |
| 20 | AIRWAYS_RB4TARGETLEVEL | Char | 2 | Airways_RB4TargetLevel |
| 21 | AIRWAYS_RB4LEVEL | Char | 2 | Airways_RB4Level |
| 22 | AIRWAYS_RB4ISSUE | Char | 13 | Airways_RB4Issue |
| 23 | AIRWAYS_RB10TARGETLEVEL | Char | 2 | Airways_RB10TargetLevel |
| 24 | AIRWAYS_RB10LEVEL | Char | 2 | Airways_RB10Level |
| 25 | AIRWAYS_RB10ISSUE | Char | 13 | Airways_RB10Issue |
| 26 | AIRWAYS_LB1TARGETLEVEL | Char | 2 | Airways_LB1TargetLevel |
| 27 | AIRWAYS_LB1LEVEL | Char | 2 | Airways_LB1Level |
| 28 | AIRWAYS_LB1ISSUE | Char | 13 | Airways_LB1Issue |
| 29 | AIRWAYS_LB10TARGETLEVEL | Char | 2 | Airways_LB10TargetLevel |
| 30 | AIRWAYS_LB10LEVEL | Char | 2 | Airways_LB10Level |
| 31 | AIRWAYS_LB10ISSUE | Char | 13 | Airways_LB10Issue |
| 32 | AIRWAYS_COMMENT | Char | 47 | Airways_Comment |
| 33 | LABELING_TRACHEAISSUE | Char | 8 | Labeling_TracheaIssue |
| 34 | LABELING_RMBISSUE | Char | 13 | Labeling_RMBIssue |
| 35 | LABELING_RULISSUE | Char | 14 | Labeling_RULIssue |
| 36 | LABELING_RB1ISSUE | Char | 8 | Labeling_RB1Issue |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | LABELING_RB2ISSUE | Char | 14 | Labeling_RB2Issue |
| 38 | LABELING_RB3ISSUE | Char | 14 | Labeling_RB3Issue |
| 39 | LABELING_BRONINTISSUE | Char | 8 | Labeling_BronIntIssue |
| 40 | LABELING_RB4_5ISSUE | Char | 8 | Labeling_RB4_5Issue |
| 41 | LABELING_RB4ISSUE | Char | 14 | Labeling_RB4Issue |
| 42 | LABELING_RB5ISSUE | Char | 14 | Labeling_RB5Issue |
| 43 | LABELING_RB6ISSUE | Char | 14 | Labeling_RB6Issue |
| 44 | LABELING_RLL7ISSUE | Char | 13 | Labeling_RLL7Issue |
| 45 | LABELING_RB7ISSUE | Char | 14 | Labeling_RB7Issue |
| 46 | LABELING_RLLISSUE | Char | 8 | Labeling_RLLIssue |
| 47 | LABELING_RB8ISSUE | Char | 14 | Labeling_RB8Issue |
| 48 | LABELING_RB9ISSUE | Char | 14 | Labeling_RB9Issue |
| 49 | LABELING_RB10ISSUE | Char | 14 | Labeling_RB10Issue |
| 50 | LABELING_LMBISSUE | Char | 8 | Labeling_LMBIssue |
| 51 | LABELING_LULISSUE | Char | 13 | Labeling_LULIssue |
| 52 | LABELING_LB1_2ISSUE | Char | 13 | Labeling_LB1_2Issue |
| 53 | LABELING_LB1ISSUE | Char | 14 | Labeling_LB1Issue |
| 54 | LABELING_LB2ISSUE | Char | 14 | Labeling_LB2Issue |
| 55 | LABELING_LB3ISSUE | Char | 14 | Labeling_LB3Issue |
| 56 | LABELING_LB4_5ISSUE | Char | 14 | Labeling_LB4_5Issue |
| 57 | LABELING_LB4ISSUE | Char | 14 | Labeling_LB4Issue |
| 58 | LABELING_LB5ISSUE | Char | 14 | Labeling_LB5Issue |
| 59 | LABELING_LLB6ISSUE | Char | 8 | Labeling_LLB6Issue |
| 60 | LABELING_LB6ISSUE | Char | 14 | Labeling_LB6Issue |
| 61 | LABELING_LLBISSUE | Char | 8 | Labeling_LLBIssue |
| 62 | LABELING_LB8ISSUE | Char | 14 | Labeling_LB8Issue |
| 63 | LABELING_LB9ISSUE | Char | 14 | Labeling_LB9Issue |
| 64 | LABELING_LB10ISSUE | Char | 14 | Labeling_LB10Issue |
| 65 | LABELING_COMMENT | Char | 41 | Labeling_Comment |
| 66 | LOBES_LULISSUE | Char | 14 | Lobes_LULIssue |
| 67 | LOBES_LLLISSUE | Char | 14 | Lobes_LLLIssue |
| 68 | LOBES_RULISSUE | Char | 8 | Lobes_RULIssue |
| 69 | LOBES_RMLISSUE | Char | 14 | Lobes_RMLIssue |
| 70 | LOBES_RLLISSUE | Char | 14 | Lobes_RLLIssue |
| 71 | LOBES_COMMENT | Char | 20 | Lobes_Comment |
| 72 | PROBLEMDATA_AIRWAY | Num | 8 | ProblemData_Airway |
| 73 | PROBLEMDATA_SKELETON | Num | 8 | ProblemData_Skeleton |
| 74 | PROBLEMDATA_LABELS | Num | 8 | ProblemData_Labels |
| 75 | PROBLEMDATA_LUNGS | Num | 8 | ProblemData_Lungs |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | PROBLEMDATA_VESSELS | Num | 8 | ProblemData_Vessels |
| 77 | PROBLEMDATA_LOBES | Num | 8 | ProblemData_Lobes |
| 78 | PROBLEMDATA_SUBLOBES | Num | 8 | ProblemData_SubLobes |
| 79 | PROBLEMDATA_FISSURE | Num | 8 | ProblemData_Fissure |
| 80 | PROBLEMDATA_COMMENT | Char | 67 | ProblemData_Comment |

## Data Set Name: v1_ct_lac_tlc_nhlbiv1_160919.sas7bdat

$\left.\begin{array}{|r|l|r|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\ \hline 1 & \text { BLINDID } & \text { Char } & 5 & \text { Public Subject ID } \\ \hline 2 & \text { VISIT } & \text { Char } & 10 & \text { study visit } \\ \hline 3 & \text { STUDY_TIME } & \text { Char } & 26 & \text { Series name - (0000,103e) SeriesDescription } \\ \hline 4 & \text { SERIES_NAME } & \text { Num } & 8 & \text { Time the series was reconstructed - (0008,0031) SeriesTime } \\ \hline 5 & \text { SERIES_TIME } & \text { Char } & 18 & \text { Manufacturer of scanner - (0008,0070) Manufacturer } \\ \hline 6 & \text { MANUFACTURER } & \text { Char } & 24 & \text { Model of scanner - (0008,1090) ManufacturersModelName } \\ \hline 7 & \text { MODEL } & 8 & \begin{array}{l}\text { Convolution kernel used when reconstructing this scan - } \text { (0018,1210) } \\ \text { ConvolutionKernel }\end{array} \\ \hline 8 & \text { KERNEL } & \text { Char } & 12 & \text { Indicator of analysis status of CT scan (passed, problem scan, or rejected) }\end{array}\right\}$

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 29 | BOTH_SLOPE_BELOW_856 | Num | 8 | Both lungs: slope (alpha) of the log-log plot below or equal to -856 <br> Hounsfield Units |
| 30 | BOTH_INTERCEPT_BELOW_856 | Num | 8 | Both lungs: y-axis intercept of the log-log plot below or equal to -856 <br> Hounsfield Units |
| 31 | BOTH_R_SQUARED_BELOW_856 | Num | 8 | Both lungs: Correlation coefficient of the log-log plot below or equal to <br> -856 Hounsfield Units |
| 32 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 53 | LEFT_UPPER_SLOPE_BELOW_950 | Num | 8 | Left upper lung: slope (alpha) of the log-log plot below or equal to -950 <br> Hounsfield Units |  |
| 54 | L_UPPER_INTERCEPT_BELOW_950 | Num | 8 | Left upper lung: y-axis intercept of the log-log plot below or equal to <br> -950 Hounsfield Units |  |
| 55 | L_UPPER_R_SQUARED_BELOW_950 | Num | 8 | Left upper lung: Correlation coefficient of the log-log plot below or equal <br> to -950 Hounsfield Units |  |
| 56 | LEFT_UPPER_SLOPE_BELOW_910 | Num | 8 | Left upper lung: slope (alpha) of the log-log plot below or equal to -910 <br> Hounsfield Units |  |
| 76 |  | L_UPPER_INTERCEPT_BELOW_910 | Num | 8 | Left upper lung: y-axis intercept of the log-log plot below or equal to <br> $-910 ~ H o u n s f i e l d ~ U n i t s ~$ |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 77 | R_LOWER_INTERCEPT_BELOW_910 | Num | 8 | Right lower lung: y-axis intercept of the log-log plot below or equal to <br> -910 Hounsfield Units |
| 78 | R_LOWER_R_SQUARED_BELOW_910 | Num | 8 | Right lower lung: Correlation coefficient of the log-log plot below or <br> equal to -910 Hounsfield Units |
| 79 | RIGHT_LOWER_SLOPE_BELOW_856 | Num | 8 | Right lower lung: slope (alpha) of the log-log plot below or equal to -856 <br> Hounsfield Units |
| 80 | R_LOWER_INTERCEPT_BELOW_856 | Num | 8 | Right lower lung: y-axis intercept of the log-log plot below or equal to <br> $-856 ~ H o u n s f i e l d ~ U n i t s ~$ |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 101 | R_UPPER_R_SQUARED_BELOW_856 | Num | 8 | Right upper lung: Correlation coefficient of the log-log plot below or <br> equal to -856 Hounsfield Units |
| 102 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 103 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 104 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v1_ct_pi10_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |
| 3 | STUDY_TIME | Num | 8 | Time of scan - $(0008,0030)$ StudyTime |
| 4 | SERIES_NAME | Char | 26 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Num | 8 | Time the series was reconstructed - $(0008,0031)$ SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - $(0008,0070)$ Manufacturer |
| 7 | MODEL | Char | 24 | Model of scanner - $(0008,1090)$ ManufacturersModelName |
| 8 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 9 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) |
| 10 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan |
| 11 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan |
| 12 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan |
| 13 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan |
| 14 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan |
| 15 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator of incorrect radiation dose issues in CT scan |
| 16 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan |
| 17 | PI10_LB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB1 path and subtree |
| 18 | PI10_LB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB1 path and subtree |
| 19 | PI10_LB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB10 path and subtree |
| 20 | PI10_LB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB10 path and subtree |
| 21 | PI10_LB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB4 path and subtree |
| 22 | PI10_LB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB4 path and subtree |
| 23 | PI10_RB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB1 path and subtree |
| 24 | PI10_RB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB1 path and subtree |
| 25 | PI10_RB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB10 path and subtree |
| 26 | PI10_RB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB10 path and subtree |
| 27 | PI10_RB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB4 path and subtree |
| 28 | PI10_RB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB4 path and subtree |
| 29 | PI10_WHOLE_TREE_ALL | Num | 8 | Pi10 value for all airways on whole airway tree |
| 30 | PI10_WHOLE_TREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on whole airway tree |
| 31 | PI10_LEFT_LUNG_ALL | Num | 8 | Pi10 value for all airways on left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | :--- | :--- |
| 32 | PI10_LEFT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter < 20 mm on left lung |
| 33 | PI10_RIGHT_LUNG_ALL | Num | 8 | Pi10 value for all airways on right lung |
| 34 | PI10_RIGHT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on right lung |
| 35 | PI10_LEFT_UPPER_LOBE_ALL | Num | 8 | Pi10 value for all airways on left upper lobe |
| 36 | PI10_LEFT_UPPER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20 mm on left upper |
| lobe |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 62 | PI10_RB5_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB5 path and <br> subtree |
| 63 | PI10_RB6_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB6 path and subtree |
| 64 | PI10_RB6_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB6 path and <br> subtree |
| 65 | PI10_RB7_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB7 path and subtree |
| 66 | PI10_RB7_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB7 path and <br> subtree |
| 67 | PI10_RB8_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB8 path and subtree |
| 68 | PI10_RB8_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB8 path and <br> subtree |
| 69 | PI10_RB9_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB9 path and subtree |
| 70 | PI10_RB9_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB9 path and <br> subtree |
| 71 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 72 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 73 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v1_ct_rv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Study visit |
| 3 | STUDY_TIME | Char | 8 | Time of scan - (0000,0030) StudyTime |
| 4 | SERIES_NAME | Char | 25 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Char | 8 | Time the series was reconstructed - (0008,0031) SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 30 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Residual Volume (RV) |
| 31 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 32 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Residual Volume (RV) |
| 33 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 34 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Residual Volume (RV) |
| 35 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Residual Volume (RV) |
| 36 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Residual Volume (RV) |
| 37 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 38 | LL_TOT_V | Num | 8 | Left lower lobe: Total volume at Residual Volume (RV) |
| 39 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Residual Volume (RV) |
| 40 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 41 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 42 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 43 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 44 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Residual Volume (RV) |
| 45 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 46 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Residual Volume (RV) |
| 47 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 48 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Residual Volume (RV) |
| 49 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Residual Volume (RV) |
| 50 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Residual Volume (RV) |
| 51 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest $15 \%$ Hounsfield unit at Residual Volume (RV) |
| 52 | TLL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLL lung at Residual Volume (RV) |
| 53 | TLL_PCT_BE_950 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 54 | TLL_PCT_BE_910 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 55 | TLL_PCT_BE_856 | Num | 8 | Left lower third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 56 | TLL_PCT_AE_0 | Num | 8 | Left lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 57 | TLL_MEAN | Num | 8 | Left lower third: Mean lung density at Residual Volume (RV) |
| 58 | TLL_SD | Num | 8 | Left lower third: Standard deviation of mean lung density at Residual Volume (RV) |
| 59 | TLL_SKEW | Num | 8 | Left lower third: Skewness of lung density histogram at Residual Volume (RV) |
| 60 | TLL_KURT | Num | 8 | Left lower third: Kurtosis of lung density histogram at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 61 | TLL_AIR_V | Num | 8 | Left lower third: Total air volume at Residual Volume (RV) |
| 62 | TLL_TIS_V | Num | 8 | Left lower third: Total tissue volume at Residual Volume (RV) |
| 63 | TLL_TOT_V | Num | 8 | Left lower third: Total volume at Residual Volume (RV) |
| 64 | TLL_HU15 | Num | 8 | Left lower third: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 65 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Residual Volume (RV) |
| 66 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 67 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 68 | TLM_PCT_BE_856 | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 69 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 70 | TLM_MEAN | Num | 8 | Left middle third: Mean lung density at Residual Volume (RV) |
| 71 | TLM_SD | Num | 8 | Left middle third: Standard deviation of mean lung density at Residual Volume (RV) |
| 72 | TLM_SKEW | Num | 8 | Left middle third: Skewness of lung density histogram at Residual Volume (RV) |
| 73 | TLM_KURT | Num | 8 | Left middle third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 74 | TLM_AIR_V | Num | 8 | Left middle third: Total air volume at Residual Volume (RV) |
| 75 | TLM_TIS_V | Num | 8 | Left middle third: Total tissue volume at Residual Volume (RV) |
| 76 | TLM_TOT_V | Num | 8 | Left middle third: Total volume at Residual Volume (RV) |
| 77 | TLM_HU15 | Num | 8 | Left middle third: Location of the lowest $15 \%$ Hounsfield unit at Residual Volume (RV) |
| 78 | TLU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLU lung at Residual Volume (RV) |
| 79 | TLU_PCT_BE_950 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 80 | TLU_PCT_BE_910 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 81 | TLU_PCT_BE_856 | Num | 8 | Left upper third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 82 | TLU_PCT_AE_0 | Num | 8 | Left upper third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 83 | TLU_MEAN | Num | 8 | Left upper third: Mean lung density at Residual Volume (RV) |
| 84 | TLU_SD | Num | 8 | Left upper third: Standard deviation of mean lung density at Residual Volume (RV) |
| 85 | TLU_SKEW | Num | 8 | Left upper third: Skewness of lung density histogram at Residual Volume (RV) |
| 86 | TLU_KURT | Num | 8 | Left upper third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 87 | TLU_AIR_V | Num | 8 | Left upper third: Total air volume at Residual Volume (RV) |
| 88 | TLU_TIS_V | Num | 8 | Left upper third: Total tissue volume at Residual Volume (RV) |
| 89 | TLU_TOT_V | Num | 8 | Left upper third: Total volume at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 90 | TLU_HU15 | Num | 8 | Left upper third: Location of the lowest 15\% Hounsfield unit at Residual <br> Volume (RV) |
| 91 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Residual Volume (RV) |
| 92 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Residual Volume (RV) |
| 93 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including <br> -910 Hounsfield units at Residual Volume (RV) |
| 94 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Residual Volume (RV) |
| 95 | TRL_PCT_AE_0 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 117 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Residual Volume (RV) |
| 118 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Residual Volume (RV) |
| 119 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -910 Hounsfield units at Residual Volume (RV) |
| 120 | TRU_PCT_BE_856 | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Residual Volume (RV) |
| 121 | TRU_PCT_AE_0 | Num | 8 | Right upper third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Residual Volume (RV) |
| 122 | TRU_MEAN | Num | 8 | Right upper third: Mean lung density at Residual Volume (RV) |
| 123 | TRU_SD | 8 | Right upper third: Standard deviation of mean lung density at Residual <br> Volume (RV) |  |
| 124 | TRU_SKEW | Num | 8 | Right upper third: Skewness of lung density histogram at Residual Volume <br> (RV) |
| 125 | TRU_KURT | Num | 8 | Right upper third: Kurtosis of lung density histogram at Residual Volume <br> (RV) |
| 126 | TRU_AIR_V | Num | 8 | Right upper third: Total air volume at Residual Volume (RV) |
| 127 | TRU_TIS_V | Num | 8 | Right upper third: Total tissue volume at Residual Volume (RV) |
| 128 | TRU_TOT_V | Num | 8 | Right upper third: Total volume at Residual Volume (RV) |
| 129 | TRU_HU15 | Num | 8 | Right upper third: Location of the lowest 15\% Hounsfield unit at Residual <br> Volume (RV) |
| 130 | STUDY_DATE_DAYS | 8 | 8 | Num |
| 131 | SERIES_DATE_DAYS | 8 | Date the series was reconstructed - Days from enrollment |  |

## Data Set Name: v1_ct_tlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Study visit |
| 3 | STUDY_TIME | Char | 26 | Time of scan - (00008,0030) StudyTime |
| 4 | SERIES_NAME | Num | 8 | Time the series was reconstructed - (00008,0031) SeriesTime |
| 5 | SERIES_TIME | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |
| 6 | MANUFACTURER | Char | 24 | Model of scanner - (0008,1090) ManufacturersModelName |
| 7 | MODEL | Num | Convolution kernel used when reconstructing this scan - (0018,1210) <br> ConvolutionKernel |  |
| 8 | KERNEL | Num | 8 | X-ray tube current |
| 9 | pixel size |  |  |  |
| 10 | PIXEL_SPACING | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) at <br> Total Lung Capacity (TLC) |
| 11 | ANALYSIS_STATUS | Char | 5 | Indicator that incorrect protocol was followed during CT scan at Total Lung <br> Capacity (TLC) |
| 12 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator of metal artifact in CT scan at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 29 | BOTH_TIS_V | Num | 8 | Both lungs: Total tissue volume at Total Lung Capacity (TLC) |
| 30 | BOTH_TOT_V | Num | 8 | Both lungs: Total volume at Total Lung Capacity (TLC) |
| 31 | BOTH_HU15 | Num | 8 | Both lungs: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 32 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung at Total Lung Capacity (TLC) |
| 33 | LEFT_PCT_BE_950 | Num | 8 | Left lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 34 | LEFT_PCT_BE_910 | Num | 8 | Left lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 35 | LEFT_PCT_BE_856 | Num | 8 | Left lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 36 | LEFT_PCT_AE_0 | Num | 8 | Left lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 37 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Total Lung Capacity (TLC) |
| 38 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 39 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 40 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 41 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Total Lung Capacity (TLC) |
| 42 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Total Lung Capacity (TLC) |
| 43 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Total Lung Capacity (TLC) |
| 44 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 45 | LL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LL lung at Total Lung Capacity (TLC) |
| 46 | LL_PCT_BE_950 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 47 | LL_PCT_BE_910 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 48 | LL_PCT_BE_856 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 49 | LL_PCT_AE_0 | Num | 8 | Left lower lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 50 | LL_MEAN | Num | 8 | Left lower lobe: Mean lung density at Total Lung Capacity (TLC) |
| 51 | LL_SD | Num | 8 | Left lower lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 52 | LL_SKEW | Num | 8 | Left lower lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 53 | LL_KURT | Num | 8 | Left lower lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 54 | LL_AIR_V | Num | 8 | Left lower lobe: Total air volume at Total Lung Capacity (TLC) |
| 55 | LL_TIS_V | Num | 8 | Left lower lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 56 | LL_TOT_V | Num | 8 | Left lower lobe: Total volume at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 57 | LL_HU15 | Num | 8 | Left lower lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 58 | LU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LU lung at Total Lung Capacity (TLC) |
| 59 | LU_PCT_BE_950 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 60 | LU_PCT_BE_910 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 61 | LU_PCT_BE_856 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 62 | LU_PCT_AE_0 | Num | 8 | Left upper lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 63 | LU_MEAN | Num | 8 | Left upper lobe: Mean lung density at Total Lung Capacity (TLC) |
| 64 | LU_SD | Num | 8 | Left upper lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 65 | LU_SKEW | Num | 8 | Left upper lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 66 | LU_KURT | Num | 8 | Left upper lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 67 | LU_AIR_V | Num | 8 | Left upper lobe: Total air volume at Total Lung Capacity (TLC) |
| 68 | LU_TIS_V | Num | 8 | Left upper lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 69 | LU_TOT_V | Num | 8 | Left upper lobe: Total volume at Total Lung Capacity (TLC) |
| 70 | LU_HU15 | Num | 8 | Left upper lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 71 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Total Lung Capacity (TLC) |
| 72 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 73 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 74 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 75 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 76 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Total Lung Capacity (TLC) |
| 77 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 78 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 79 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 80 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Total Lung Capacity (TLC) |
| 81 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Total Lung Capacity (TLC) |
| 82 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Total Lung Capacity (TLC) |
| 83 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 84 | RL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RL lung at Total Lung Capacity <br> (TLC) |  |
| 85 | RL_PCT_BE_950 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -950 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 86 | RL_PCT_BE_910 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -910 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 87 | RL_PCT_BE_856 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 88 | RL_PCT_AE_0 | Num | 8 | Right lower lobe: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 99 | RL_MEAN | Num | 8 | Num | Nught lower lobe: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 110 | RU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RU lung at Total Lung Capacity <br> (TLC) |
| 111 | RU_PCT_BE_950 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -950 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 112 | RU_PCT_BE_910 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -910 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 113 | RU_PCT_BE_856 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 114 | RU_PCT_AE_0 | Num | 8 | Right upper lobe: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 115 | RU_MEAN | Num | 8 | Rught upper lobe: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 136 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Total Lung Capacity <br> (TLC) |  |
| 137 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Total Lung Capacity (TLC) |  |
| 138 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -910 |  |
| 139 | TLM_PCT_BE_856 |  | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 140 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 141 | TLM_MEAN | Num | 8 | Num | Neft middle third: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 162 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Total Lung Capacity (TLC) |
| 163 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 164 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 165 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 166 | TRL_PCT_AE_0 | Num | 8 | Right lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 167 | TRL_MEAN | Num | 8 | Right lower third: Mean lung density at Total Lung Capacity (TLC) |
| 168 | TRL_SD | Num | 8 | Right lower third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 169 | TRL_SKEW | Num | 8 | Right lower third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 170 | TRL_KURT | Num | 8 | Right lower third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 171 | TRL_AIR_V | Num | 8 | Right lower third: Total air volume at Total Lung Capacity (TLC) |
| 172 | TRL_TIS_V | Num | 8 | Right lower third: Total tissue volume at Total Lung Capacity (TLC) |
| 173 | TRL_TOT_V | Num | 8 | Right lower third: Total volume at Total Lung Capacity (TLC) |
| 174 | TRL_HU15 | Num | 8 | Right lower third: Location of the lowest $15 \%$ Hounsfield unit at Total Lung Capacity (TLC) |
| 175 | TRM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRM lung at Total Lung Capacity (TLC) |
| 176 | TRM_PCT_BE_950 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 177 | TRM_PCT_BE_910 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 178 | TRM_PCT_BE_856 | Num | 8 | Right middle third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 179 | TRM_PCT_AE_0 | Num | 8 | Right middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 180 | TRM_MEAN | Num | 8 | Right middle third: Mean lung density at Total Lung Capacity (TLC) |
| 181 | TRM_SD | Num | 8 | Right middle third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 182 | TRM_SKEW | Num | 8 | Right middle third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 183 | TRM_KURT | Num | 8 | Right middle third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 184 | TRM_AIR_V | Num | 8 | Right middle third: Total air volume at Total Lung Capacity (TLC) |
| 185 | TRM_TIS_V | Num | 8 | Right middle third: Total tissue volume at Total Lung Capacity (TLC) |
| 186 | TRM_TOT_V | Num | 8 | Right middle third: Total volume at Total Lung Capacity (TLC) |
| 187 | TRM_HU15 | Num | 8 | Right middle third: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 188 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Total Lung Capacity (TLC) |
| 189 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 190 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 191 | TRU_PCT_BE_856 | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 192 | TRU_PCT_AE_0 | Num | 8 | Right upper third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 193 | TRU_MEAN | Num | 8 | Right upper third: Mean lung density at Total Lung Capacity (TLC) |
| 194 | TRU_SD | Num | 8 | Right upper third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 195 | TRU_SKEW | Num | 8 | Right upper third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 196 | TRU_KURT | Num | 8 | Right upper third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 197 | TRU_AIR_V | Num | 8 | Right upper third: Total air volume at Total Lung Capacity (TLC) |
| 198 | TRU_TIS_V | Num | 8 | Right upper third: Total tissue volume at Total Lung Capacity (TLC) |
| 199 | TRU_TOT_V | Num | 8 | Right upper third: Total volume at Total Lung Capacity (TLC) |
| 200 | TRU_HU15 | Num | 8 | Right upper third: Location of the lowest $15 \%$ Hounsfield unit at Total Lung Capacity (TLC) |
| 201 | LEFT_PCT_ABV_600 | Num | 8 | Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 202 | LEFT_PCT_ABV_650 | Num | 8 | Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 203 | RIGHT_PCT_ABV_600 | Num | 8 | right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 204 | RIGHT_PCT_ABV_650 | Num | 8 | right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 205 | BOTH_PCT_ABV_600 | Num | 8 | Both lungs: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 206 | BOTH_PCT_ABV_650 | Num | 8 | Both lungs: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 207 | LU_PCT_ABV_600 | Num | 8 | Upper Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 208 | LU_PCT_ABV_650 | Num | 8 | Upper Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 209 | LL_PCT_ABV_600 | Num | 8 | Lower Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 210 | LL_PCT_ABV_650 | Num | 8 | Lower Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 211 | RU_PCT_ABV_600 | Num | 8 | Upper right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 212 | RU_PCT_ABV_650 | Num | 8 | Upper right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 213 | RM_PCT_ABV_600 | Num | 8 | Middle right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 214 | RM_PCT_ABV_650 | Num | 8 | Middle right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 215 | RL_PCT_ABV_600 | Num | 8 | Lower right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 216 | RL_PCT_ABV_650 | Num | 8 | Lower right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 217 | TLU_PCT_ABV_600 | Num | 8 | Left upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 218 | TLU_PCT_ABV_650 | Num | 8 | Left upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 219 | TLM_PCT_ABV_600 | Num | 8 | Left middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 220 | TLM_PCT_ABV_650 | Num | 8 | Left middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 221 | TLL_PCT_ABV_600 | Num | 8 | Left lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 222 | TLL_PCT_ABV_650 | Num | 8 | Left lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 223 | TRU_PCT_ABV_600 | Num | 8 | right upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 224 | TRU_PCT_ABV_650 | Num | 8 | right upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 225 | TRM_PCT_ABV_600 | Num | 8 | right middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 226 | TRM_PCT_ABV_650 | Num | 8 | right middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 227 | TRL_PCT_ABV_600 | Num | 8 | right lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 228 | TRL_PCT_ABV_650 | Num | 8 | right lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 229 | PCT_EMPHYSEMA | Num | 8 | Percentage of emphysema in the lung based on -950 Hounsfield units |
| 230 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 231 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 232 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v1_dem_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | DEM01A | Num | 8 | DEM01A Age |
| 5 | DEM02 | Char | 2 | DEM02 Highest grade completed |
| 6 | DEM03 | Char | 1 | DEM03 Marital status |
| 7 | DEM04 | Char | 1 | DEM04 Total yearly household income |
| 8 | VERSION | Char | 21 | Version |
| 9 | DEM0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_derv_cbc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CBC03_DERV | Num | 8 | 3) Total red blood cells |
| 5 | CBC04_DERV | Num | 8 | 4) Hemoglobin |
| 6 | CBC05_DERV | Num | 8 | 5) Hemacrit |
| 7 | CBC06_DERV | Num | 8 | 6) Mean corpuscular volume |
| 8 | CBC07_DERV | Num | 8 | 7) Red blood cell distribution width |
| 9 | CBC08_DERV | Num | 8 | 8) Total white blood cells |
| 10 | CBC09_DERV | Num | 8 | 9) Neutrophil granulocyte |
| 11 | CBC10_DERV | Num | 8 | 10) Lymphocytes |
| 12 | CBC11_DERV | Num | 8 | 11) Monocytes |
| 13 | CBC12_DERV | Num | 8 | 12) Eosinophil granuloctyes |
| 14 | CBC13_DERV | Num | 8 | 13) Basophil granuloctyes |
| 15 | CBC14_DERV | Num | 8 | 14) Platelet Count |
| 16 | CBC15_DERV | Num | 8 | 15) Mean Platelet Volume |
| 17 | CBC16_DERV | Char | 2000 | 16) Comments: |
| 18 | CBC09A_DERV | Num | 8 | 9a) Neutrophil granulocyte \% |
| 19 | CBC10A_DERV | Num | 8 | 10a) Lymphocyte \% |
| 20 | CBC11A_DERV | Num | 8 | 11a) Monocyte \% |
| 21 | CBC12A_DERV | Num | 8 | 12a) Eosinophil granuloctye \% |
| 22 | CBC13A_DERV | Num | 8 | 13a) Basophil granuloctye \% |
| 23 | VERSION | Char | 21 | Version |
| 24 | CBC0A_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 25 | CBC01_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 26 | CBC02_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_derv_post_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | study_id |
| 5 | PFV10 | Char | 15 | Position |
| 6 | PFV12 | Num | 8 | visit_num |
| 7 | PFV13 | Num | 8 | interval_num |
| 8 | PFV14 | Num | 8 | stage_num |
| 9 | PFV15 | Num | 8 | seq_num |
| 10 | PFV16 | Char | 15 | vlabel |
| 11 | PFV17 | Num | 8 | repeats |
| 12 | PFV22B | Num | 8 | Mit_derv |
| 13 | PFV23B | Num | 8 | Fevpd_derv |
| 14 | PFV24B | Num | 8 | Pctfev_derv |
| 34 | PFV80_DERV | Num | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV43_DERV | Num | 8 | Fev05_derv |
| 38 | PFV45_DERV | Num | 8 | Fev1_derv |
| 39 | PFV46 | Num | 8 | flag_fev_best |
| 40 | PFV66_DERV | Num | 8 | Vext_derv |
| 41 | PFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | PFV69_DERV | Num | 8 | RVSPCA_derv |
| 43 | PFV70_DERV | Num | 8 | Fevdiff_derv |
| 44 | PFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 45 | PFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 46 | PFV44_DERV | Num | 8 | Fev05fvc_derv |
| 47 | PFV47_DERV | Num | 8 | Fev1fvc_derv |
| 48 | PFV48 | Num | 8 | flag_fevfvc_best |
| 49 | PFV50_DERV | Num | 8 | Fev3fvc_derv |
| 50 | PFV32_DERV | Num | 8 | Fefpd_derv |
| 51 | PFV37_DERV | Num | 8 | Pctfef2575_derv |
| 52 | PFV52_DERV | Num | 8 | Fef212_derv |
| 53 | PFV53_DERV | Num | 8 | Fef2575_derv |
| 54 | PFV54 | Num | 8 | flag_fef2575_best |
| 55 | PFV55_DERV | Num | 8 | Fef25756_derv |
| 56 | PFV56_DERV | Num | 8 | Fef25_derv |
| 57 | PFV57_DERV | Num | 8 | Fef50_derv |
| 58 | PFV58_DERV | Num | 8 | Fef506_derv |
| 59 | PFV59_DERV | Num | 8 | Fef75_derv |
| 60 | PFV60_DERV | Num | 8 | Fef756_derv |
| 61 | PFV61_DERV | Num | 8 | Fef7585_derv |
| 62 | PFV64_DERV | Num | 8 | Met_derv |
| 63 | PFV34_DERV | Num | 8 | Pefpd_derv |
| 64 | PFV38_DERV | Num | 8 | Pctpefr_derv |
| 65 | PFV62_DERV | Num | 8 | Pefr_derv |
| 66 | PFV63 | Num | 8 | flag_pefr_best |
| 67 | PFV65_DERV | Num | 8 | Peft_derv |
| 68 | PFV77_DERV | Num | 8 | Pifr_derv |
| 69 | POST_FEV1FVC_DERV | Num | 8 | post_BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 70 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 71 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 72 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 73 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v1_derv_post_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | study_id |
| 5 | PSV10 | Char | 15 | position |
| 6 | PSV12 | Num | 8 | visit_num |
| 7 | PSV13 | Char | 15 | interval_num |
| 8 | PSV14 | Num | 8 | stage_num |
| 9 | PSV15 | Num | 8 | seq_num |
| 10 | PSV16 | Char | 5 | vlabel |
| 11 | PSV17 | Num | 8 | repeats |
| 12 | PSV19 | Char | 15 | qa_grade |
| 13 | PSV20 | Char | 15 | qa_status |
| 14 | PSV23B | Char | 8 | time_best |
| 15 | PSV24B | Char | 8 | time_first |
| 16 | PSV28 | Num | 8 | temperature |
| 17 | PSV29 | Num | 8 | barometric |
| 18 | PSV30 | Num | 8 | humidity |
| 19 | PSV32 | Char | 5 | tom |
| 20 | VERSION | Char | 21 | Version |
| 21 | PSV33_DERV | Num | 8 | Svc_derv |
| 22 | PSV34_DERV | Num | 8 | Svcpd_derv |
| 23 | PSV35_DERV | Num | 8 | Pctsvc_derv |
| 24 | PSV36 | Num | 8 | flag_svc_best |
| 25 | PSV37_DERV | Num | 8 | IC_derv |
| 26 | PSV38_DERV | Num | 8 | IRV_derv |
| 27 | PSV39_DERV | Num | 8 | ERV_derv |
| 28 | PSV40_DERV | Num | 8 | TV_derv |
| 29 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 30 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 31 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 32 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v1_derv_pre_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | study_id |
| 5 | SFV10 | Char | 15 | Position |
| 6 | SFV12 | Num | 8 | visit_num |
| 7 | SFV13 | Num | 8 | interval_num |
| 8 | SFV14 | Num | 8 | stage_num |
| 9 | SFV15 | Num | 8 | seq_num |
| 10 | SFV16 | Char | 10 | vlabel |
| 11 | SFV17 | Num | 8 | repeats |
| 12 | SFV22B | Num | 8 | Mit_derv |
| 13 | SFV23B | Num | 8 | Fevpd_derv |
| 14 | SFV24B | 8 | time |  |
| 34 | Num | 8 | Pctfev_derv |  |
| 35 | SFV27 | Shar | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV43_DERV | Num | 8 | Fev05_derv |
| 38 | SFV45_DERV | Num | 8 | Fev1_derv |
| 39 | SFV46 | Num | 8 | flag_fev_best |
| 40 | SFV66_DERV | Num | 8 | Vext_derv |
| 41 | SFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | SFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 43 | SFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 44 | SFV44_DERV | Num | 8 | Fev05fvc_derv |
| 45 | SFV47_DERV | Num | 8 | Fev1fvc_derv |
| 46 | SFV48 | Num | 8 | flag_fevfvc_best |
| 47 | SFV50_DERV | Num | 8 | Fev3fvc_derv |
| 48 | SFV32_DERV | Num | 8 | Fefpd_derv |
| 49 | SFV37_DERV | Num | 8 | Pctfef2575_derv |
| 50 | SFV52_DERV | Num | 8 | Fef212_derv |
| 51 | SFV53_DERV | Num | 8 | Fef2575_derv |
| 52 | SFV54 | Num | 8 | flag_fef2575_best |
| 53 | SFV55_DERV | Num | 8 | Fef25756_derv |
| 54 | SFV56_DERV | Num | 8 | Fef25_derv |
| 55 | SFV57_DERV | Num | 8 | Fef50_derv |
| 56 | SFV58_DERV | Num | 8 | Fef506_derv |
| 57 | SFV59_DERV | Num | 8 | Fef75_derv |
| 58 | SFV60_DERV | Num | 8 | Fef756_derv |
| 59 | SFV61_DERV | Num | 8 | Fef7585_derv |
| 60 | SFV64_DERV | Num | 8 | Met_derv |
| 61 | SFV34_DERV | Num | 8 | Pefpd_derv |
| 62 | SFV38_DERV | Num | 8 | Pctpefr_derv |
| 63 | SFV62_DERV | Num | 8 | Pefr_derv |
| 64 | SFV63 | Num | 8 | flag_pefr_best |
| 65 | SFV65_DERV | Num | 8 | Peft_derv |
| 66 | SFV77_DERV | Num | 8 | Pifr_derv |
| 67 | PRE_FEV1FVC_DERV | Num | 8 | pre-BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 68 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 69 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 70 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 71 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v1_derv_pre_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | study_id |
| 5 | SSV10 | Char | 15 | position |
| 6 | SSV12 | Num | 8 | visit_num |
| 7 | SSV13 | Num | 8 | interval_num |
| 8 | SSV14 | Num | 8 | stage_num |
| 9 | SSV15 | Num | 8 | seq_num |
| 10 | SSV16 | Char | 5 | vlabel |
| 11 | SSV17 | Num | 8 | repeats |
| 12 | SSV19 | Char | 15 | qa_grade |
| 13 | SSV20 | Char | 15 | qa_status |
| 14 | SSV23B | Char | 8 | time_best |
| 15 | SSV28 | Num | 8 | temperature |
| 16 | SSV29 | Num | 8 | barometric |
| 17 | SSV30 | Num | 8 | humidity |
| 18 | SSV31 | Num | 8 | pre_washout_1 |
| 19 | VERSION | Char | 21 | Version |
| 20 | SSV33_DERV | Num | 8 | Svc_derv |
| 21 | SSV34_DERV | Num | 8 | Svcpd_derv |
| 22 | SSV35_DERV | Num | 8 | Pctsvc_derv |
| 23 | SSV36 | Num | 8 | flag_svc_best |
| 24 | SSV37_DERV | Num | 8 | IC_derv |
| 25 | SSV38_DERV | Num | 8 | IRV_derv |
| 26 | SSV39_DERV | Num | 8 | ERV_derv |
| 27 | SSV40_DERV | Num | 8 | TV_derv |
| 28 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 29 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 30 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 31 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v1_eca_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECA1 | Char | 1 | 1. Have you ever used an electronic cigarette or eCigarette? |
| 5 | ECA3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 6 | ЕСАЗВ | Char | 1 | 3b. If yes, what flavor was it? |
| 7 | ECA4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 8 | ECA5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 9 | ECA5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 10 | ECA5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 11 | ECA5C1 | Num | 8 | 5c1. If Yes, about how many fewer cigarettes do you now smoke? |
| 12 | ECA6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 13 | ECA7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 14 | ECA8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 15 | ECA9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 16 | ECA9B | Char | 100 | 9b. Specify: |
| 17 | ECA10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 18 | ECA11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 19 | ECA12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 20 | ECA13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 21 | ECA14A | Num | 8 | how long did you smoke eCigarettes days |
| 22 | ECA14B | Num | 8 | how long did you smoke eCigarettes months |
| 23 | ECA14C | Num | 8 | how long did you smoke eCigarettes years |
| 24 | ECA15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 25 | ECA15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 26 | ECA15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 27 | ECA16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 28 | ECA17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 29 | ECA17A | Char | 100 | 17a. Specify: |
| 30 | ECA18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 31 | ECA19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 32 | VERSION | Char | 21 | Version |
| 33 | ECA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 34 | ECA2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v1_ehf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | EHF01 | Char | 1 | EHF01 Have you ever been employed |
| 5 | EHF02 | Char | 1 | EHF02 current employment situation |
| 6 | EHF07 | Num | 8 | EHF07 Total number of years at last job |
| 7 | EHF08 | Char | 1 | EHF08 left last job because of breathing or lung problems |
| 8 | EHF09 | Char | 1 | EHF09 Not working because of difficulty breathing |
| 9 | EHF10 | Char | 1 | EHF10 stoped work because of missed time due to illness |
| 10 | EHF11 | Char | 1 | EHF11 Exposure to vapors, gas, dust or fumes at last job |
| 11 | EHF12 | Char | 1 | EHF12 was last job the longest job ever held |
| 12 | EHF12D | Char | 1 | EHF12D Exposure to vapors, gas, dust, or fumes at longest job |
| 13 | EHF16 | Num | 8 | EHF16 Number of years at current job |
| 14 | EHF17 | Num | 8 | EHF17 average hours worked per week at current job |
| 15 | EHF18A | Char | 1 | EHF18A ever worked in a cotton, flax or hemp mill? |
| 16 | EHF18B | Char | 1 | EHF18B ever worked in a foundry? |
| 17 | EHF18C | Char | 1 | EHF18C ever worked in a glass works? |
| 18 | EHF18D | Char | 1 | EHF18D ever worked in a mine? |
| 19 | EHF18E | Char | 1 | EHF18E ever worked in a pottery? |
| 20 | EHF18F | Char | 1 | EHF18F ever worked in a power plant? |
| 21 | EHF18G | Char | 1 | EHF18G ever worked in a quarry? |
| 22 | EHF18H | Char | 1 | EHF18H ever worked in a refinery? |
| 23 | EHF18I | Char | 1 | EHF18I ever worked or with asbestos? |
| 24 | EHF18J | Char | 1 | EHF18J ever worked in synthetic fibers or fabric manufacturing? |
| 25 | EHF18K | Char | 1 | EHF18K ever worked in a paper mill? |
| 26 | EHF18L | Char | 1 | EHF18L ever worked in building or highway construction? |
| 27 | EHF18M | Char | 1 | EHF18M ever worked in an aluminum factory? |
| 28 | EHF18N | Char | 1 | EHF18N ever worked in a rubber tire plant? |
| 29 | EHF18O | Char | 1 | EHF18O ever worked in HVAC? |
| 30 | EHF18P | Char | 1 | EHF18P ever worked in demolition? |
| 31 | EHF18Q | Char | 1 | EHF18Q ever worked in remodeling? |
| 32 | EHF18R | Char | 1 | EHF18R ever worked in professional cleaning? |
| 33 | EHF18S | Char | 1 | EHF18S ever worked in beauty care? |
| 34 | EHF18T | Char | 1 | EHF18T ever worked in agriculture? |
| 35 | EHF18U | Char | 1 | EHF18U ever worked in the flooring industry? |
| 36 | EHF19A | Char | 1 | EHF19A ever worked as a boilermaker? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | EHF19B | Char | 1 | EHF19B ever worked as a carpenter? |
| 38 | EHF19C | Char | 1 | EHF19C ever worked as a chemical worker? |
| 39 | EHF19D | Char | 1 | EHF19D ever worked as an electrician? |
| 40 | EHF19E | Char | 1 | EHF19E ever worked as an elevator operator? |
| 41 | EHF19F | Char | 1 | EHF19F ever worked as an insulator? |
| 42 | EHF19G | Char | 1 | EHF19G ever worked as a lather? |
| 43 | EHF19H | Char | 1 | EHF19H ever worked as a machinist? |
| 44 | EHF19I | Char | 1 | EHF19I ever worked as a mechanic? |
| 45 | EHF19J | Char | 1 | EHF19J ever worked as a millwright? |
| 46 | EHF19K | Char | 1 | EHF19K ever worked as a pipefitter? |
| 47 | EHF19L | Char | 1 | EHF19L ever worked as a plasterer? |
| 48 | EHF19M | Char | 1 | EHF19M ever worked as a plumber? |
| 49 | EHF19N | Char | 1 | EHF19N ever worked as a sander? |
| 50 | EHF190 | Char | 1 | EHF190 ever worked as a sheet metal worker? |
| 51 | EHF19P | Char | 1 | EHF19P ever worked as a steelworker? |
| 52 | EHF19Q | Char | 1 | EHF19Q ever worked as a welder? |
| 53 | EHF19R | Char | 1 | EHF19R ever worked as a pig farmer? |
| 54 | EHF19S | Char | 1 | EHF19S ever worked as a rigger? |
| 55 | EHF19T | Char | 1 | EHF19T ever worked as a roofer? |
| 56 | EHF19U | Char | 1 | EHF19U ever worked as a painter? |
| 57 | EHF19V | Char | 1 | EHF19V ever worked as a mason? |
| 58 | EHF20A | Char | 1 | EHF20A ever had regular exposure to Irritant gases, such as chlorine or ammonia? |
| 59 | EHF20B | Char | 1 | EHF20B ever had regular exposure to Fire, smoke or other combustion products? |
| 60 | EHF20C | Char | 1 | EHF20C ever had regular exposure to Incinerators, boilers, or oil refineries? |
| 61 | EHF20D | Char | 1 | EHF20D ever had regular exposure to Coal dust or powder? |
| 62 | EHF20E | Char | 1 | EHF20E ever had regular exposure to Silica or sand, or concrete or cement dust? |
| 63 | EHF20F | Char | 1 | EHF20F ever had regular exposure to Indoor fuel powered motors, compressors, or engines? |
| 64 | EHF20G | Char | 1 | EHF20G ever had regular exposure to Diesel engine exhaust? |
| 65 | EHF20H | Char | 1 | EHF20H ever had regular exposure to Wheat flour or other grain dusts? |
| 66 | EHF20I | Char | 1 | EHF20I ever had regular exposure to Animal feeds or fodder? |
| 67 | EHF20J | Char | 1 | EHF20J ever had regular exposure to Cotton dust or cotton processing? |
| 68 | EHF20K | Char | 1 | EHF20K ever had regular exposure to Wood dust or saw dust? |
| 69 | EHF20L | Char | 1 | EHF20L ever had regular exposure to Cadmium fumes or batteries or sliver solder? |
| 70 | EHF20M | Char | 1 | EHF20M ever had regular exposure to Other metal dusts or metal fumes? |
| 71 | EHF20N | Char | 1 | EHF20N ever had regular exposure to Welding or flame cutting? |
| 72 | EHF200 | Char | 1 | EHF200 ever had regular exposure to Fiberglass or other man-made mineral fibers? |
| 73 | EHF20P | Char | 1 | EHF20P ever had regular exposure to Explosives or blasting fumes? |
| 74 | EHF07A | Num | 8 | EHF07A average number of hours per week worked at last job |
| 75 | EHF12E | Num | 8 | EHF12E year longest held job started |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | EHF12F | Num | 8 | EHF12F Total number of years at longest job held |
| 77 | EHF12G | Num | 8 | EHF12G average number of hours per week worked at longest held job |
| 78 | EHF18A1 | Num | 8 | EHF18A1 How many years worked in a cotton, flax or hemp mill? |
| 79 | EHF18B1 | Num | 8 | EHF18B1 How many years worked in a foundry? |
| 80 | EHF18C1 | Num | 8 | EHF18C1 How many years worked in a glass works? |
| 81 | EHF18D1 | Num | 8 | EHF18D1 How many years worked in a mine? |
| 82 | EHF18E1 | Num | 8 | EHF18E1 How many years worked in a pottery? |
| 83 | EHF18F1 | Num | 8 | EHF18F1 How many years worked in a power plant? |
| 84 | EHF18G1 | Num | 8 | EHF18G1 How many years worked in a quarry? |
| 85 | EHF18H1 | Num | 8 | EHF18H1 How many years worked in a refinery? |
| 86 | EHF18I1 | Num | 8 | EHF18I1 How many years worked or with asbestos? |
| 87 | EHF18J1 | Num | 8 | EHF18J1 How many years worked in synthetic fibers or fabric manufacturing? |
| 88 | EHF18K1 | Num | 8 | EHF18K1 How many years worked in a paper mill? |
| 89 | EHF18L1 | Num | 8 | EHF18L1 How many years worked in building or highway construction? |
| 90 | EHF18M1 | Num | 8 | EHF18M1 How many years worked in an aluminum factory? |
| 91 | EHF18N1 | Num | 8 | EHF18N1 How many years worked in a rubber tire plant? |
| 92 | EHF18O1 | Num | 8 | EHF18O1 How many years worked in HVAC? |
| 93 | EHF18P1 | Num | 8 | EHF18P1 How many years worked in demolition? |
| 94 | EHF18Q1 | Num | 8 | EHF18Q1 How many years worked in remodeling? |
| 95 | EHF18R1 | Num | 8 | EHF18R1 How many years worked in professional cleaning? |
| 96 | EHF18S1 | Num | 8 | EHF18S1 How many years worked in beauty care? |
| 97 | EHF18T1 | Num | 8 | EHF18T1 How many years worked in agriculture? |
| 98 | EHF18U1 | Num | 8 | EHF18U1 How many years worked in the flooring industry? |
| 99 | EHF19A1 | Num | 8 | EHF19A1 How many years worked as a boilermaker? |
| 100 | EHF19B1 | Num | 8 | EHF19B1 How many years worked as a carpenter? |
| 101 | EHF19C1 | Num | 8 | EHF19C1 How many years worked as a chemical worker? |
| 102 | EHF19D1 | Num | 8 | EHF19D1 How many years worked as an electrician? |
| 103 | EHF19E1 | Num | 8 | EHF19E1 How many years worked as an elevator operator? |
| 104 | EHF19F1 | Num | 8 | EHF19F1 How many years worked as an insulator? |
| 105 | EHF19G1 | Num | 8 | EHF19G1 How many years worked as a lather? |
| 106 | EHF19I1 | Num | 8 | EHF19I1 How many years worked as a machinist? |
| 107 | EHF19J1 | Num | 8 | EHF19J1 How many years worked as a mechanic? |
| 108 | EHF19K1 | Num | 8 | EHF19K1 How many years worked as a millwright? |
| 109 | EHF19L1 | Num | 8 | EHF19L1 How many years worked as a pipefitter? |
| 110 | EHF19M1 | Num | 8 | EHF19M1 How many years worked as a plasterer? |
| 111 | EHF19N1 | Num | 8 | EHF19N1 How many years worked as a plumber? |
| 112 | EHF19O1 | Num | 8 | EHF1901 How many years worked as a sander? |
| 113 | EHF19P1 | Num | 8 | EHF19P1 How many years worked as a sheet metal worker? |
| 114 | EHF19Q1 | Num | 8 | EHF19Q1 How many years worked as a steelworker? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | EHF19R1 | Num | 8 | EHF19R1 How many years worked as a welder? |
| 116 | EHF19S1 | Num | 8 | EHF19S1 How many years worked as a pig farmer? |
| 117 | EHF19T1 | Num | 8 | EHF19T1 How many years worked as a rigger? |
| 118 | EHF19U1 | Num | 8 | EHF19U1 How many years worked as a roofer? |
| 119 | EHF19V1 | Num | 8 | EHF19V1 How many years worked as a painter? |
| 120 | EHF20A1 | Num | 8 | EHF20A1 How many years worked as a mason? |
| 121 | EHF20B1 | Num | 8 | EHF20B1 How many years regularly exposed to Irritant gases, such as chlorine or ammonia? |
| 122 | EHF20C1 | Num | 8 | EHF20C1 How many years regularly exposed to Fire, smoke or other combustion products? |
| 123 | EHF20D1 | Num | 8 | EHF20D1 How many years regularly exposed to Incinerators, boilers, or oil refineries? |
| 124 | EHF20E1 | Num | 8 | EHF20E1 How many years regularly exposed to Coal dust or powder? |
| 125 | EHF20F1 | Num | 8 | EHF20F1 How many years regularly exposed to Silica or sand, or concrete or cement dust? |
| 126 | EHF20G1 | Num | 8 | EHF20G1 How many years regularly exposed to Indoor fuel powered motors, compressors, or engines? |
| 127 | EHF20H1 | Num | 8 | EHF20H1 How many years regularly exposed to Diesel engine exhaust? |
| 128 | EHF20I1 | Num | 8 | EHF20I1 How many years regularly exposed to Wheat flour or other grain dusts? |
| 129 | EHF20J1 | Num | 8 | EHF20J1 How many years regularly exposed to Animal feeds or fodder? |
| 130 | EHF20K1 | Num | 8 | EHF20K1 How many years regularly exposed to Cotton dust or cotton processing? |
| 131 | EHF20L1 | Num | 8 | EHF20L1 How many years regularly exposed to Wood dust or saw dust? |
| 132 | EHF20M1 | Num | 8 | EHF20M1 How many years regularly exposed to Cadmium fumes or batteries or sliver solder? |
| 133 | EHF20N1 | Num | 8 | EHF20N1 How many years regularly exposed to Other metal dusts or metal fumes? |
| 134 | EHF2001 | Num | 8 | EHF2001 How many years regularly exposed to Welding or flame cutting? |
| 135 | EHF20P1 | Num | 8 | EHF20P1 How many years regularly exposed to Fiberglass or other man-made mineral fibers? |
| 136 | EHF21 | Char | 1 | EHF21 Type of mine |
| 137 | EHF21A | Char | 50 | EHF21A Specify type of mine |
| 138 | EHF22 | Char | 1 | EHF22 What was mined? |
| 139 | EHF22A | Char | 50 | EHF22A Specify type of material mined |
| 140 | EHF23 | Char | 1 | EHF23 Exposure to vapors, gas, dust, or fumes at current job |
| 141 | EHF24 | Char | 1 | EHF24 Is current job the longest job you ever had |
| 142 | EHF24D | Char | 1 | EHF24D Exposure to vapors, gas, dust, or fumes in current/longest held job |
| 143 | EHF24F | Num | 8 | EHF24F number of years worked at current/longest held job |
| 144 | EHF24G | Num | 8 | EHF24G average number of hours per week at current/longest job |
| 145 | EHF19H1 | Num | 8 | How many years? |
| 146 | VERSION | Char | 21 | VERSION |
| 147 | EHF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_fct_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | FCT01 | Char | 1 | FCT01 Lack of energy |
| 5 | FCT02 | Char | 1 | FCT02 Nausea |
| 6 | FCT03 | Char | 1 | FCT03 Physical limitations |
| 7 | FCT04 | Char | 1 | FCT04 Pain |
| 8 | FCT05 | Char | 1 | FCT05 Side effects of treatment |
| 9 | FCT06 | Char | 1 | FCT06 Illness |
| 10 | FCT07 | Char | 1 | FCT07 Forced time in bed |
| 11 | FCT08 | Char | 1 | FCT08 Closeness to friends |
| 12 | FCT09 | Char | 1 | FCT09 Emotional support from family |
| 13 | FCT10 | Char | 1 | FCT10 Support from friends |
| 14 | FCT11 | Char | 1 | FCT11 Family accepted illness |
| 15 | FCT12 | Char | 1 | FCT12 Satisfied with communication |
| 16 | FCT13 | Char | 1 | FCT13 Closeness to partner |
| 17 | FCT14 | Num | 8 | FCT14 Answer or mark box |
| 18 | FCT15 | Char | 1 | FCT15 Satisfaction with sex life |
| 19 | FCT16 | Char | 1 | FCT16 Feeling sad |
| 20 | FCT17 | Char | 1 | FCT17 Satisfaction with coping |
| 21 | FCT18 | Char | 1 | FCT18 Loss of hope |
| 22 | FCT19 | Char | 1 | FCT19 Feeling nervous |
| 23 | FCT20 | Char | 1 | FCT20 Worries about death |
| 24 | FCT21 | Char | 1 | FCT21 Worry about worsening condition |
| 25 | FCT22 | Char | 1 | FCT22 Ability to work |
| 26 | FCT23 | Char | 1 | FCT23 Fulfillment of work |
| 27 | FCT24 | Char | 1 | FCT24 Ability to enjoy life |
| 28 | FCT25 | Char | 1 | FCT25 Acceptance of illness |
| 29 | FCT26 | Char | 1 | FCT26 Sleeping well |
| 30 | FCT27 | Char | 1 | FCT27 Enjoyment of fun activities |
| 31 | FCT28 | Char | 1 | FCT28 Content with quality of life |
| 32 | FCT29 | Char | 1 | FCT29 Feeling fatigued |
| 33 | FCT30 | Char | 1 | FCT30 Feeling weak |
| 34 | FCT31 | Char | 1 | FCT31 Feeling listless |
| 35 | FCT32 | Char | 1 | FCT32 Feeling tired |
| 36 | FCT33 | Char | 1 | FCT33 Trouble starting things |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | FCT34 | Char | 1 | FCT34 Trouble finishing things |
| 38 | FCT35 | Char | 1 | FCT35 Energy |
| 39 | FCT36 | Char | 1 | FCT36 Ability to do usual activities |
| 40 | FCT37 | Char | 1 | FCT37 Need to sleep during day |
| 41 | FCT38 | Char | 1 | FCT38 Too tired to eat |
| 42 | FCT39 | Char | 1 | FCT39 Need helping with usual activities |
| 43 | FCT40 | Char | 1 | FCT40 Frustrated with fatigue |
| 44 | FCT41 | Char | 1 | FCT41 Fatigue limits social activities |
| 45 | VERSION | Char | 21 | Version |
| 46 | FACIT_PHYSICALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT physical wellbeing score |
| 47 | FACIT_SOCIALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT social wellbeing score |
| 48 | FACIT_EMOTIONALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT emotional wellbeing score |
| 49 | FACIT_FUNCTIONALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT functional wellbeing score |
| 50 | FACIT_FATIGUESCORE01 | Num | 8 | Baseline FACIT fatigue score |
| 51 | FACIT_FTRIALOUTCOMEINDEX01 | Num | 8 | Baseline FACIT F trial outcome index score |
| 52 | FACIT_GTOTALSCORE01 | Num | 8 | Baseline FACIT G total score |
| 53 | FACIT_FTOTALSCORE01 | Num | 8 | Baseline FACIT F total score |
| 54 | FCT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_hds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HDS01 | Num | 8 | HDS01 Feeling tense |
| 5 | HDS02 | Num | 8 | HDS02 Enjoyment |
| 6 | HDS03 | Char | 1 | HDS03 Feeling fearful |
| 7 | HDS04 | Char | 1 | HDS04 Sense of humor |
| 8 | HDS05 | Num | 8 | HDS05 Worried thoughts |
| 9 | HDS06 | Num | 8 | HDS06 Feeling cheerful |
| 10 | HDS07 | Num | 8 | HDS07 Ability to relax |
| 11 | HDS08 | Num | 8 | HDS08 Feeling slowed down |
| 12 | HDS09 | 8 | HDS09 Feeling frightened |  |
| 13 | HDS10 | Num | 8 | HDS10 Lost interest in appearance |
| 14 | HDS11 | Num | 8 | HDS11 Feeling restless |
| 15 | HDS12 | Num | 8 | HDS12 Looking forward |
| 16 | HDS13 | Num | 8 | HDS13 Sudden feelings of panic |
| 17 | HDS14 | 8 | HDS14 Ability to enjoy |  |
| 18 | VERSION | Char | 21 | Version |
| 19 | HDS_ANXIETYSCORE01 | Num | 8 | Baseline HDS Anxiety Score |
| 20 | HDS_DEPRESSIONSCORE01 | Num | 8 | Baseline HDS Depression Score |
| 21 | HDS0A_DAYS | 8 | Form Date - Days from enrollment |  |

## Data Set Name: v1_isp_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISP01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISP01B | Num | 8 | is |
| 6 | ISP02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISP02B | Num | 8 | is |
| 8 | ISP03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISP03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISP03B | Num | 8 | 3 b ) How many puffs of albuterol was the participant given? |
| 11 | ISP04A | Num | 8 | a) FEV1 |
| 12 | ISP05A | Num | 8 | a) FEV1 |
| 13 | ISP06A | Num | 8 | a) FEV1 |
| 14 | ISP08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISP09A | Num | 8 | a) FEV1 |
| 16 | ISP10A | Num | 8 | a) FEV1 |
| 17 | ISP11A | Num | 8 | a) FEV1 |
| 18 | ISP12A | Num | 8 | a) FEV1 |
| 19 | ISP13A | Num | 8 | a) FEV1 |
| 20 | ISP14A | Num | 8 | a) FEV1 |
| 21 | ISP15A | Num | 8 | a) FEV1 |
| 22 | ISP16 | Char | 1 | 16) First 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 23 | ISP17 | Char | 1 | 17) If yes, \% NaCl used: |
| 24 | ISP18A | Num | 8 | a) FEV1 |
| 25 | ISP19A | Num | 8 | a) FEV1 |
| 26 | ISP20A | Num | 8 | a) FEV1 |
| 27 | ISP21A | Num | 8 | a) FEV1 |
| 28 | ISP22 | Char | 1 | 22) Second 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 29 | ISP23A | Num | 8 | a) FEV1 |
| 30 | ISP24A | Num | 8 | a) FEV1 |
| 31 | ISP25A | Num | 8 | a) FEV1 |
| 32 | ISP26A | Num | 8 | a) FEV1 |
| 33 | ISP27 | Char | 1 | 27) Was the participant able to produce sputum? |
| 34 | ISP28 | Char | 1 | 28) Was the induction terminated early? (If 'No', 30) |
| 35 | ISP29 | Char | 1 | 29) Reason terminated early |
| 36 | ISP29A | Char | 30 | Specify other |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISP30 | Char | 1 | 30) Did the participant require additional albuterol? |
| 38 | ISP31A | Num | 8 | a) FEV1 |
| 39 | ISP32A | Num | 8 | a) FEV1 |
| 40 | ISP33A | Num | 8 | a) FEV1 |
| 41 | ISP0D | Char | 5 | Time Collected |
| 42 | ISP0D_AMPM | Char | 1 | AM/PM |
| 43 | VERSION | Char | 21 | Version |
| 44 | ISP0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 45 | ISP0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

## Data Set Name: v1_isw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISW01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISW01B | Num | 8 | is |
| 6 | ISW02A | Num | 8 | 2) 20\% fall from |
| 7 | ISW02B | Num | 8 | is |
| 8 | ISW03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISW03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISW03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISW04A | Num | 8 | a) FEV1: |
| 12 | ISW05A | Num | 8 | a) FEV1: |
| 13 | ISW06A | Num | 8 | a) FEV1: |
| 14 | ISW08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISW09A | Num | 8 | a) FEV1 |
| 16 | ISW10A | Num | 8 | a) FEV1 |
| 17 | ISW11A | Num | 8 | a) FEV1 |
| 18 | ISW12A | Num | 8 | a) FEV1 |
| 19 | ISW13A | Num | 8 | a) FEV1 |
| 20 | ISW14 | Char | 1 | 14) First 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 21 | ISW15 | Char | 1 | 15) If yes, \% NaCl used: |
| 22 | ISW16A | Num | 8 | a) FEV1 |
| 23 | ISW17A | Num | 8 | a) FEV1 |
| 24 | ISW18 | Char | 1 | 18) Second 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 25 | ISW19 | Char | 1 | 19) If yes, \% NaCl used: |
| 26 | ISW20A | Num | 8 | a) FEV1 |
| 27 | ISW21A | Num | 8 | a) FEV1 |
| 28 | ISW22 | Char | 1 | $22)$ Was the participant able to produce sputum? |
| 29 | ISW23 | Char | 1 | $23)$ Was the induction terminated early? |
| 30 | ISW24 | Char | 1 | $24)$ Reason terminated early |
| 31 | ISW24A | Char | 30 | Specify other |
| 32 | ISW25 | Char | 1 | $25)$ Did the participant require additional albuterol? |
| 33 | ISW26A | Num | 8 | a) FEV1 |
| 34 | ISW27A | Num | 8 | a) FEV1 |
| 35 | ISW28A | Num | 8 | a) FVC |
| 36 | ISW29 | Char | 2000 | $29)$ Note reason and time point obtained |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISW0D | Char | 5 | Time Collected |
| 38 | ISW0D_AMPM | Char | 1 | AM/PM |
| 39 | VERSION | Char | 21 | Version |
| 40 | ISW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 41 | ISW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v1_mcq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MCQ01 | Char | 1 | MCQ01 Frequency of cough today |
| 5 | MCQ02 | Char | 1 | MCQ02 Frequency of cough last night |
| 6 | MCQ03 | Char | 1 | MCQ03 Severity of cough episodes |
| 7 | MCQ04 | Char | 1 | MCQ04 Ease of coughing up sputum today |
| 8 | MCQ05 | Char | 1 | MCQ05 Chest tightness/discomfort today |
| 9 | VERSION | Char | 21 | Version |
| 10 | MCQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_mrc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MRC01 | Num | 8 | MRC01 Describe shortness of breath |
| 5 | VERSION | Char | 21 | Version |
| 6 | MRC0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_pft_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFT01 | Num | 8 | PFT01 Large meal eaten within the last 2 hours |
| 5 | PFT02 | Num | 8 | PFT02 Smoked within the last hour |
| 6 | PFT03 | Num | 8 | PFT03 Vigorous exercise in the past 30 minutes |
| 7 | PFT04 | Num | 8 | PFT04 Consumed alcohol within past 4 hours |
| 8 | PFT05 | Num | 8 | PFT05 Medication for lungs in past 48 hours |
| 9 | PFT06 | Num | 8 | PFT06 Use of Spiriva within past 48 hours |
| 10 | PFT06B | Char | 5 | PFT06B Time last used Spiriva |
| 11 | PFT06B_AMPM | Char | 1 | PFT06B_AMPM Last used Spiriva AM/PM |
| 12 | PFT07 | Num | 8 | PFT07 Use of theophylline within past 48 hrs |
| 13 | PFT07A | Num | 8 | PFT07A Most recent type of theophyline used |
| 14 | PFT07C | Char | 5 | PFT07C Time last used theophyline |
| 15 | PFT07C_AMPM | Char | 1 | PFT07C_AMPM last used theophyline AM/PM |
| 16 | PFT08 | Num | 8 | PFT08 Use of one-a-day bronchodilator |
| 17 | PFT08B | Char | 5 | PFT08B Time last used one-a-day bronchodilator |
| 18 | PFT08B_AMPM | Char | 1 | PFT08B_AMPM last used one-a-day bronchodilator AM/PM |
| 19 | PFT09 | Num | 8 | PFT09 Use of long-acting beta agonist |
| 20 | PFT09A | Num | 8 | PFT09A Most recent long-acting beta agonist used |
| 21 | PFT09A1 | Char | 50 | PFT09A1 Specify long-acting beta agonist |
| 22 | PFT09B | Char | 5 | PFT09B Time last used long-acting beta agonist |
| 23 | PFT09B_AMPM | Char | 1 | PFT09B_AMPM last used long-acting beta agonist AM/PM |
| 24 | PFT10 | Num | 8 | PFT10 Use of ipratropium within the past 8 hours |
| 25 | PFT10A | Num | 8 | PFT10A Most recent ipratropium used |
| 26 | PFT10B | Char | 5 | PFT10B Time last used ipratropium |
| 27 | PFT10C_AMPM | Char | 1 | PFT10C_AMPM last used ipratropium AM/PM |
| 28 | PFT11 | Num | 8 | PFT11 Use of short-acting beta agonist |
| 29 | PFT11A | Num | 8 | PFT11A Most recent short-acting beta agonist used |
| 30 | PFT11A7A | Char | 50 | PFT11A7A Specify short-acting beta agonist |
| 31 | PFT11B | Char | 5 | PFT11B Time last short-acting beta agonist used |
| 32 | PFT11B_AMPM | Char | 1 | PFT11B_AMPM last short-acting beta agonist used AM/PM |
| 33 | PFT12 | Char | 1 | PFT12 Consumption of caffeine in past 6 hours |
| 34 | VERSION | Char | 21 | Version |
| 35 | PFT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 36 | PFT06A_DAYS | Num | 8 | Date last used Spiriva - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | PFT07B_DAYS | Num | 8 | Date last used theophyline - Days from enrollment |
| 38 | PFT08A_DAYS | Num | 8 | Date last used one-a-day bronchodilator - Days from enrollment |

Data Set Name: v1_pfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | PFV01 study_id |
| 5 | PFV10 | Char | 15 | PFV10 Position |
| 6 | PFV12 | Num | 8 | PFV12 visit_num |
| 7 | PFV13 | Num | 8 | PFV13 interval_num |
| 8 | PFV14 | Num | 8 | PFV14 stage_num |
| 9 | PFV15 | Num | 8 | PFV15 seq_num |
| 10 | PFV16 | Char | 15 | PFV16 vlabel |
| 11 | PFV17 | Num | 8 | PFV17 repeats |
| 12 | PFV19 | Char | 15 | PFV19 qa_grade |
| 13 | PFV20 | Char | 15 | PFV20 qa_status |
| 14 | PFV22B | Char | 8 | PFV22B time |
| 15 | PFV23B | Char | 8 | PFV23B time_best |
| 16 | PFV24B | Char | 8 | PFV24B time_first |
| 17 | PFV25 | Num | 8 | PFV25 trial_seq_num |
| 18 | PFV26 | Num | 8 | PFV26 ranking |
| 19 | PFV27 | Num | 8 | PFV27 temperature |
| 20 | PFV28 | Num | 8 | PFV28 barometric |
| 21 | PFV29 | Num | 8 | PFV29 humidity |
| 22 | PFV30 | Num | 8 | PFV30 fevpd |
| 23 | PFV31 | Num | 8 | PFV31 fvcpd |
| 24 | PFV32 | Num | 8 | PFV32 fefpd |
| 25 | PFV33 | Num | 8 | PFV33 fev1_fvcpd |
| 26 | PFV34 | Num | 8 | PFV34 pefpd |
| 27 | PFV35 | Num | 8 | PFV35 pctfev |
| 28 | PFV36 | Num | 8 | PFV36 petfvc |
| 29 | PFV37 | Num | 8 | PFV37 pctfef2575 |
| 30 | PFV38 | Num | 8 | PFV38 pctpefr |
| 31 | PFV39 | Num | 8 | PFV39 pctfev_fvc |
| 32 | PFV40 | Num | 8 | PFV40 fvc |
| 33 | PFV41 | Num | 8 | PFV41 flag_fvc_best |
| 34 | PFV42B | Char | 8 | PFV42B trials_time |
| 35 | PFV43 | Num | 8 | PFV43 fev05 |
| 36 | PFV44 | Num | 8 | PFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV45 | Num | 8 | PFV45 fev1 |
| 38 | PFV46 | Num | 8 | PFV46 flag_fev_best |
| 39 | PFV47 | Num | 8 | PFV47 fev1fvc |
| 40 | PFV48 | Num | 8 | PFV48 flag_fevfvc_best |
| 41 | PFV49 | Num | 8 | PFV49 fev3 |
| 42 | PFV50 | Num | 8 | PFV50 fev3fvc |
| 43 | PFV51 | Num | 8 | PFV51 fev6 |
| 44 | PFV52 | Num | 8 | PFV52 fef212 |
| 45 | PFV53 | Num | 8 | PFV53 fef2575 |
| 46 | PFV54 | Num | 8 | PFV54 flag_fef2575_best |
| 47 | PFV55 | Num | 8 | PFV55 fef25756 |
| 48 | PFV56 | Num | 8 | PFV56 fef25 |
| 49 | PFV57 | Num | 8 | PFV57 fef50 |
| 50 | PFV58 | Num | 8 | PFV58 fef506 |
| 51 | PFV59 | Num | 8 | PFV59 fef75 |
| 52 | PFV60 | Num | 8 | PFV60 fef756 |
| 53 | PFV61 | Num | 8 | PFV61 fef7585 |
| 54 | PFV62 | Num | 8 | PFV62 pefr |
| 55 | PFV63 | Num | 8 | PFV63 flag_pefr_best |
| 56 | PFV64 | Num | 8 | PFV64 met |
| 57 | PFV65 | Num | 8 | PFV65 peft |
| 58 | PFV66 | Num | 8 | PFV66 vext |
| 59 | PFV67 | Num | 8 | PFV67 pctvext |
| 60 | PFV68 | Num | 8 | PFV68 expt |
| 61 | PFV69 | Num | 8 | PFV69 RVSPCA |
| 62 | PFV70 | Char | 4 | PFV70 fevdiff |
| 63 | PFV71 | Num | 8 | PFV71 fivc |
| 64 | PFV72 | Num | 8 | PFV72 fiv05 |
| 65 | PFV73 | Num | 8 | PFV73 fiv05fivc |
| 66 | PFV74 | Num | 8 | PFV74 fiv1 |
| 67 | PFV75 | Num | 8 | PFV75 fiv1fivc |
| 68 | PFV76 | Num | 8 | PFV76 fiv3 |
| 69 | PFV77 | Num | 8 | PFV77 pifr |
| 70 | PFV78 | Num | 8 | PFV78 fif212 |
| 71 | PFV79 | Num | 8 | PFV79 fif2575 |
| 72 | PFV80 | Num | 8 | PFV80 mit |
| 73 | VERSION | Char | 21 | Version |
| 74 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 75 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 77 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v1_psq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | PSAQ7 | Char | 2000 | PSAQ7 Frequency of taking medication to sleep during the last month |
| 4 | PSAQ8 | Char | 2000 | PSAQ8 Frequency of having trouble staying awake during the last month |
| 5 | PSAQ9 | Char | 2000 | PSAQ9 Difficulty keeping up enthusiasm during the last month |
| 6 | VISIT | Char | 10 | Visit |
| 7 | PSQ01 | Char | 5 | PSQ01 Usual bedtime in the past month |
| 8 | PSQ01_AMPM | Char | 1 | PSQ01_AMPM bedtime AM/PM |
| 9 | PSQ02 | Num | 8 | PSQ02 Time taken to fall asleep in the past month |
| 10 | PSQ03 | Char | 5 | PQQ03 Waking hour in the past month |
| 11 | PSQ03_AMPM | Char | 1 | PSQ03_AMPM waking hour AM/PM |
| 12 | PSQ04 | Num | 8 | PSQ04 Hours of sleep per night in the past month |
| 13 | PSQ05A | Char | 1 | PSQ05A Trouble sleeping: Cannot get to sleep within 30 minutes |
| 14 | PSQ05B | Char | 1 | PSQ05B Trouble sleeping: Wake up in the middle of the night or early morning |
| 15 | PSQ05C | Char | 1 | PSQ05C Trouble sleeping: Have to get up to use the bathroom |
| 16 | PSQ05D | Char | 1 | PSQ05D Trouble sleeping: Cannot breathe comfortably |
| 17 | PSQ05E | Char | 1 | PSQ05E Trouble sleeping: Cough or snore loudly |
| 18 | PSQ05F | Char | 1 | PSQ05F Trouble sleeping: Feel too cold |
| 19 | PSQ05G | Char | 1 | PSQ05G Trouble sleeping: Feel too hot |
| 20 | PSQ05H | Char | 1 | PSQ05H Trouble sleeping: Have bad dreams |
| 21 | PSQ05I | Char | 1 | PSQ05I Trouble sleeping: Have pain |
| 22 | PSQ05J | Char | 1 | PSQ05J Trouble sleeping: Other reasons |
| 23 | PSQ06 | Char | 1 | PSQ06 Sleep quality during the last month |
| 24 | PSQ10 | Char | 1 | PSQ10 Bed partner/roommate |
| 25 | PSQ10A | Char | 1 | PSQ10A Bed partner/roommate reports: Loud snoring |
| 26 | PSQ10B | Char | 1 | PSQ10B Bed partner/roommate reports: Long pauses between breaths while asleep |
| 27 | PSQ10C | Char | 1 | PSQ10C Bed partner/roommate reports: Legs twitching or jerking while you sleep |
| 28 | PSQ10D | Char | 1 | PSQ10D Bed partner/roommate reports: Episodes of disorientation or confusion during sleep |
| 29 | PSQ10E | Char | 1 | PSQ10E Bed partner/roommate reports: Other restlessness while you sleep |
| 30 | PSQ10E1 | Char | 2000 | PSQ10E1 Describe other restlessness during sleep |
| 31 | VERSION | Char | 21 | Version |
| 32 | PSQ_TOTALSCORE01 | Num | 8 | Baseline Pittsburgh sleep total score |
| 33 | PSQ_DURATIONSLEEP01 | Num | 8 | Baseline PSQ Duration of sleep) |
| 34 | PSQ_SLEEPDISTURBANCE01 | Num | 8 | Baseline PSQ sleep disturbance |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 35 | PSQ_SLEEPLATENCY01 | Num | 8 | Baseline PSQ sleep latency |
| 36 | PSQ_DAYSLEEPYDYSFUNC01 | Num | 8 | Baseline PSQ day dysfunction due to sleepness |
| 37 | PSQ_SLEEPEFFICIENCY01 | Num | 8 | Baseline PSQ sleep efficiency |
| 38 | PSQ_OVERALLSLEEPQUALITY01 | Num | 8 | Baseline PSQ overall sleep quality |
| 39 | PSQ_NEEDMEDSTOSLEEP01 | Num | 8 | Baseline PSQ need meds to sleep |
| 40 | PSQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_psv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | PSV01 study_id |
| 5 | PSV10 | Char | 15 | PSV10 position |
| 6 | PSV12 | Num | 8 | PSV12 visit_num |
| 7 | PSV13 | Char | 15 | PSV13 interval_num |
| 8 | PSV14 | Num | 8 | PSV14 stage_num |
| 9 | PSV15 | Num | 8 | PSV15 seq_num |
| 10 | PSV16 | Char | 5 | PSV16 vlabel |
| 11 | PSV17 | Num | 8 | PSV17 repeats |
| 12 | PSV19 | Char | 15 | PSV19 qa_grade |
| 13 | PSV20 | Char | 15 | PSV20 qa_status |
| 14 | PSV22B | Char | 8 | PSV22B time |
| 15 | PSV23B | Char | 8 | PSV23B time_best |
| 16 | PSV24B | Char | 8 | PSV24B time_first |
| 17 | PSV25B | Char | 8 | PSV25B trials_time |
| 18 | PSV26 | Num | 8 | PSV26 trial_seq_num |
| 19 | PSV27 | Num | 8 | PSV27 ranking |
| 20 | PSV28 | Num | 8 | PSV28 temperature |
| 21 | PSV29 | Num | 8 | PSV29 barometric |
| 22 | PSV30 | Num | 8 | PSV30 humidity |
| 23 | PSV32 | Char | 5 | PSV32 tom |
| 24 | PSV33 | Num | 8 | PSV33 svc |
| 25 | PSV34 | Num | 8 | PSV34 svcpd |
| 26 | PSV35 | Num | 8 | PSV35 pctsvc |
| 27 | PSV36 | Num | 8 | PSV36 flag_svc_best |
| 28 | PSV37 | Num | 8 | PSV37 ic |
| 29 | PSV38 | Num | 8 | PSV38 irv |
| 30 | PSV39 | Num | 8 | PSV39 erv |
| 31 | PSV40 | Num | 8 | PSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v1_rds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | WHEEZINGAGE | Num | 8 | RDS08A Age of first wheezing/whistling in chest |
| 4 | NATURECONDITION | Char | 2000 | RDS15a Nature of condition causing inability to walk |
| 5 | VISIT | Char | 10 | Visit |
| 6 | RDS01 | Char | 1 | RDS01 Presence of cough |
| 7 | RDS01A | Char | 1 | RDS01A Frequency of cough |
| 8 | RDS02 | Char | 1 | RDS02 Presence of cough in the morning |
| 9 | RDS03 | Char | 1 | RDS03 Presence of cough during day/night |
| 10 | RDS03A | Char | 1 | RDS03A Severity of cough during the year |
| 11 | RDS03B | Num | 8 | RDS03B Number of years having cough |
| 12 | RDS04 | Char | 1 | RDS04 Bringing up phlegm from chest |
| 13 | RDS04A | Char | 1 | RDS04A Frequency of bringing up phlegm |
| 14 | RDS05 | Char | 1 | RDS05 Bringing up phlegm in the morning |
| 15 | RDS06 | Char | 1 | RDS06 Bringing up phlegm in the day/night |
| 16 | RDS06A | Char | 1 | RDS06A Bringing up phlegm during the year |
| 17 | RDS06B | Num | 8 | RDS06B Number of years having trouble with phlegm |
| 18 | RDS07 | Char | 1 | RDS07 Episodes of cough with phlegm |
| 19 | RDS07A | Num | 8 | RDS07A Number of episodes of cough with phlegm |
| 20 | RDS07B | Num | 8 | RDS07B Number of years having at least one episode |
| 21 | RDS08 | Char | 1 | RDS08 Wheezing/ whistling in chest |
| 22 | RDS09 | Char | 1 | RDS09 Shortness of breath from attack |
| 23 | RDS09A | Num | 8 | RDS09A Age of first attack |
| 24 | RDS09B | Char | 1 | RDS09B Two or more attacks |
| 25 | RDS09C | Char | 1 | RDS09C Required medicine for attacks |
| 26 | RDS10 | Char | 1 | RDS10 Wheezing/whistling in last 12 months |
| 27 | RDS10A1 | Char | 1 | RDS10A1 Recent wheezing with cold |
| 28 | RDS10A2 | Char | 1 | RDS10A2 Recent wheezing apart from colds |
| 29 | RDS10A3 | Char | 1 | RDS10A3 Recent wheezing more than once a week |
| 30 | RDS10A4 | Char | 1 | RDS10A4 Recent wheezing most days/nights |
| 31 | RDS11 | Char | 1 | RDS11 Sleep-disturbing cough |
| 32 | RDS12 | Char | 1 | RDS12 Shortness of breath during sleep |
| 33 | RDS13 | Char | 1 | RDS13 Recent wheezing/whistling |
| 34 | RDS14 | Char | 1 | RDS14 Eye irritation |
| 35 | RDS15 | Char | 1 | RDS15 Inability to walk not related to dyspnea |
| 36 | RDS16 | Char | 1 | RDS16 Asthma |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RDS16A | Num | 8 | RDS16A Age asthma started |
| 38 | RDS16A1 | Num | 8 | RDS16A1 Age asthma started not known |
| 39 | RDS16B | Char | 1 | RDS16B Diagnosis of asthma |
| 40 | RDS16C | Char | 1 | RDS16C Current asthma |
| 41 | RDS16D | Num | 8 | RDS16D Age asthma stopped |
| 42 | RDS16D1 | Num | 8 | RDS16D1 Age asthma stopped not known |
| 43 | RDS16E | Char | 1 | RDS16E Recent medical treatment for asthma |
| 44 | RDS17 | Char | 1 | RDS17 Nose/eye allergies |
| 45 | RDS17A | Num | 8 | RDS17A Age allergies started |
| 46 | RDS17A1 | Num | 8 | RDS17A1 Age allergies started not known |
| 47 | RDS17B | Char | 1 | RDS17B Diagnosis of allergies |
| 48 | RDS17C | Char | 1 | RDS17C Current allergies |
| 49 | RDS17D | Num | 8 | RDS17D Age allergies stopped |
| 50 | RDS17D1 | Num | 8 | RDS17D1 Age allergies stopped not known |
| 51 | RDS17E | Char | 1 | RDS17E Recent medical treatment for allergies |
| 52 | RDS18 | Char | 1 | RDS18 Attack of bronchitis |
| 53 | RDS18A | Char | 1 | RDS18A Diagnosis of bronchitis |
| 54 | RDS18B | Num | 8 | RDS18B Age first having bronchitis |
| 55 | RDS18B1 | Num | 8 | As a child; age not known (Check if appropriate) |
| 56 | RDS18C | Num | 8 | RDS18C Number of times having bronchitis |
| 57 | RDS19 | Char | 1 | RDS19 Pneumonia |
| 58 | RDS19A | Char | 1 | RDS19A Diagnosis of pneumonia |
| 59 | RDS19B | Num | 8 | RDS19B Age first having pneumonia |
| 60 | RDS19B1 | Num | 8 | RDS19B1 Age of first pneumonia not known |
| 61 | RDS19C | Num | 8 | RDS19C Number of times having pneumonia |
| 62 | RDS20 | Char | 1 | RDS20 Chronic bronchitis |
| 63 | RDS20A | Char | 1 | RDS20A Diagnosis of chronic bronchitis |
| 64 | RDS20B | Num | 8 | RDS20B Age chronic bronchitis started |
| 65 | RDS20C | Char | 1 | RDS20C Current chronic bronchitis |
| 66 | RDS20D | Char | 1 | RDS20D Recent medical treatment for chronic bronchitis |
| 67 | RDS21 | Char | 1 | RDS21 Emphysema |
| 68 | RDS21A | Char | 1 | RDS21A Diagnosis of emphysema |
| 69 | RDS21B | Num | 8 | RDS21B Age emphysema started |
| 70 | RDS21C | Char | 1 | RDS21C Current emphysema |
| 71 | RDS21D | Char | 1 | RDS21D Recent medical treatment for emphysema |
| 72 | RDS22 | Char | 1 | RDS22 COPD |
| 73 | RDS22A | Char | 1 | RDS22A Diagnosis of COPD |
| 74 | RDS22B | Num | 8 | RDS22B Age COPD started |
| 75 | RDS22C | Char | 1 | RDS22C Current COPD |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | RDS22D | Char | 1 | RDS22D Recent medical treatment for COPD |
| 77 | RDS23 | Char | 1 | RDS23 Sleep apnea |
| 78 | RDS23A | Char | 1 | RDS23A Diagnosis of sleep apnea |
| 79 | RDS23B | Num | 8 | RDS23B Age sleep apnea started |
| 80 | RDS23C | Char | 1 | RDS23C Current sleep apnea |
| 81 | RDS23D | Char | 1 | RDS23D Recent medical treatment for sleep apnea |
| 82 | RDS24A | Char | 1 | RDS24A Other chest illness |
| 83 | RDS24B | Char | 1 | RDS24B Chest operations |
| 84 | RDS24C | Char | 1 | RDS24C Chest injuries |
| 85 | RDS24C1 | Char | 2000 | RDS24C1 Other chest injuries Specify |
| 86 | RDS25A1 | Char | 1 | RDS25A1 Father had chronic bronchitis |
| 87 | RDS25B1 | Char | 1 | RDS25B1 Mother had chronic bronchitis |
| 88 | RDS25A2 | Char | 1 | RDS25A2 Father had emphysema |
| 89 | RDS25B2 | Char | 1 | RDS25B2 Mother had emphysema |
| 90 | RDS25A3 | Char | 1 | RDS25A3 Father had COPD |
| 91 | RDS25B3 | Char | 1 | RDS25B3 Mother had COPD |
| 92 | RDS25A4 | Char | 1 | RDS25A4 Father had asthma |
| 93 | RDS25B4 | Char | 1 | RDS25B4 Mother had asthma |
| 94 | RDS25A5 | Char | 1 | RDS25A5 Father had lung cancer |
| 95 | RDS25B5 | Char | 1 | RDS25B5 Mother han lung cancer |
| 96 | RDS26A | Char | 1 | RDS26A Father: smoked cigarettes |
| 97 | RDS26B | Char | 1 | RDS26B Mother: smoked cigarettes |
| 98 | RDS27 | Char | 1 | RDS27 Ever Smoked cigarettes |
| 99 | RDS28 | Num | 8 | RDS28 Age first started smoking |
| 100 | RDS29 | Char | 1 | RDS29 Currently smoking as of one month ago |
| 101 | RDS30 | Num | 8 | RDS30 Number Cigarettes smoked per day |
| 102 | RDS31 | Num | 8 | RDS31 Age stopped smoking |
| 103 | RDS32 | Num | 8 | RDS32 Average number cigarettes smoked per day |
| 104 | RDS33 | Num | 8 | RDS33 No cigarettes smoked in the past 24 hours |
| 105 | RDS33A | Num | 8 | RDS33A Number of cigarettes smoked in the last 24 hours |
| 106 | RDS33B | Num | 8 | RDS33B Number of cigarettes smoked in the last 2 hours |
| 107 | RDS33C | Num | 8 | RDS33C Number of cigarettes smoked in the last 1/2 hour |
| 108 | RDS34 | Char | 1 | RDS34 Ever smoked a pipe |
| 109 | RDS35 | Num | 8 | RDS35 Age first started smoking a pipe |
| 110 | RDS36 | Char | 1 | RDS36 Currently smoking pipe as of one month ago |
| 111 | RDS37 | Num | 8 | RDS37 Number of ounces of pipe tobacco smoked per day currently |
| 112 | RDS38 | Num | 8 | RDS38 Age stopped smoking a pipe |
| 113 | RDS39 | Num | 8 | RDS39 Average Pipe tobacco usage per week |
| 114 | RDS40 | Char | 1 | RDS40 Ever smoked cigars |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | RDS41 | Num | 8 | RDS41 Age first started smoking cigars |
| 116 | RDS42 | Char | 1 | RDS42 Currently smoking cigars as of one month ago |
| 117 | RDS43 | Num | 8 | RDS43 Cigars smoked per day currently |
| 118 | RDS44 | Num | 8 | RDS44 Age stopped smoking cigars |
| 119 | RDS45 | Num | 8 | RDS45 Cigars smoked per week |
| 120 | RDS46 | Char | 1 | RDS46 Approach to tobacco smoking in home |
| 121 | RDS47A | Num | 8 | RDS47A Years following approach to smoking in home |
| 122 | RDS47B | Char | 1 | RDS47B Refused or Don't Know number of year following approach to smoking in home |
| 123 | RDS48 | Char | 1 | RDS48 Currently living with tobacco smoker |
| 124 | RDS49 | Char | 1 | RDS49 Ever lived with a tobacco smoker as an adult (age 18) since adulthood |
| 125 | RDS50 | Num | 8 | RDS50 Number of individuals smoking in household |
| 126 | RDS51A | Num | 8 | RDS51A Years living in household with smoker as an adult |
| 127 | RDS51B | Char | 1 | RDS51B Refused or don't know number of years living in a household with a smoker |
| 128 | RDS52 | Char | 1 | RDS52 Ever lived with a tobacco smoker during childhood (prior to age 18) |
| 129 | RDS53FATHERCBI | Num | 8 | RDS53FATHERCBI Father smoked |
| 130 | RDS53MOTHERCBI | Num | 8 | RDS53MOTHERCBI Mother smoked |
| 131 | RDS53OTHERCBI | Num | 8 | RDS53OTHERCBI Other person smoked |
| 132 | RDS53REFUSEDCBI | Num | 8 | RDS53REFUSEDCBI Refused to indicate who smoked |
| 133 | RDS53NOTKNOWCBI | Num | 8 | RDS53NOTKNOWCBI Don't know person who smoked |
| 134 | RDS55 | Char | 1 | RDS55 Mother smoking during pregnancy |
| 135 | RDS55A | Num | 8 | RDS55A Years during childhood living with tobacco smoker |
| 136 | RDS55B | Char | 1 | RDS55B Refused or don't know number of years living with a smoker as a child |
| 137 | RDS56 | Char | 1 | RDS56 Anyone smoked in home in the last 7 days |
| 138 | RDS57 | Num | 8 | RDS57 House of tobacco smoke exposure in the home in the last 7 days |
| 139 | RDS58 | Char | 1 | RDS58 Visibly smokey room in the home in the last 7 days |
| 140 | RDS59 | Char | 1 | RDS59 Tobacco smell in home in the last 7 days |
| 141 | RDS60 | Char | 1 | RDS60 Eye irriation in the last 7 days after in-home exposure |
| 142 | RDS61 | Char | 1 | RDS61 Nose irriation in the last 7 days after in-home exposure |
| 143 | RDS62 | Char | 1 | RDS62 Coughing in the last 7 days after in-home exposure |
| 144 | RDS63 | Char | 1 | RDS63 Extra inhalers used in the last 7 days due to smoke in home |
| 145 | RDS64 | Char | 1 | RDS64 Visited home with indoor tobacco smokers in the last 7 days |
| 146 | RDS65 | Num | 8 | RDS65 Number of hours of exposure to second-hand smoke in anothers home in the last 7 days |
| 147 | RDS66 | Char | 1 | RDS66 Visibly smokey room when visiting another's home in the last 7 days |
| 148 | RDS67 | Char | 1 | RDS67 Tobacco smell when visiting another's home in the last 7 days |
| 149 | RDS68 | Char | 1 | RDS68 Eye irriation after smoke exposure when visiting another's home |
| 150 | RDS69 | Char | 1 | RDS69 Nose irriation after smoke exposure when visiting another's home |
| 151 | RDS70 | Char | 1 | RDS70 Coughing after smoke exposure when visiting another's home |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 152 | RDS71 | Char | 1 | RDS71 Extra inhalers used in the last 7 days due to smoke exposure when visiting another's home |
| 153 | RDS72 | Char | 1 | RDS72 Traveled by car or other vehicle in the last 7 days with someone who smokes |
| 154 | RDS73 | Num | 8 | RDS73 Hours spent traveling with tobacco smokers in the last 7 days |
| 155 | RDS74 | Char | 1 | RDS74 Eye irriation after smoke exposure in car |
| 156 | RDS75 | Char | 1 | RDS75 Nose irritation after smoke exposure in car |
| 157 | RDS76 | Char | 1 | RDS76 Coughing/wheezing after smoke exposure in car |
| 158 | RDS77 | Char | 1 | RDS77 Extra inhalers used after smoke exposure in car in the last 7 days |
| 159 | RDS78 | Char | 1 | RDS78 Exposure to tobacco smoke at indoors at work in the last 7 days |
| 160 | RDS79 | Num | 8 | RDS79 Hours exposed to tobacco smoke in doors at work in the last 7 days |
| 161 | RDS80 | Char | 1 | RDS80 Visibly smoky indoors at work in the last 7 days |
| 162 | RDS81 | Char | 1 | RDS81 Tobacco smell indoors at work in the last 7 days |
| 163 | RDS82 | Char | 1 | RDS82 Eye irritation after smoke exposure indoors at work |
| 164 | RDS83 | Char | 1 | RDS83 Nose irriation after smoke exposure indoors at work |
| 165 | RDS84 | Char | 1 | RDS84 Coughing/wheezing after smoke exposure indoors at work |
| 166 | RDS85 | Char | 1 | RDS85 Extra inhalers used in the last 7 days after smoke exposure indoors at work |
| 167 | RDS86 | Char | 1 | RDS86 Outdoor area for smokers at work |
| 168 | RDS87 | Num | 8 | RDS87 Number of times walking through outdoor smoker area in the last 7 days |
| 169 | RDS88 | Num | 8 | RDS88 Hours spent at outdoor smoking area in the last 7 days |
| 170 | RDS89 | Char | 1 | RDS89 Smell smoke in outdoor smokers area |
| 171 | RDS90 | Char | 1 | RDS90 Eye irritation after smoke exposure from outdoor area |
| 172 | RDS91 | Char | 1 | RDS91 Nose irritation after smoke exposure from outdoor area |
| 173 | RDS92 | Char | 1 | RDS92 Coughing/wheezing after smoke exposure from outdoor area |
| 174 | RDS93 | Char | 1 | RDS93 Extra inhalers used in the last 7 days after smoke exposure from outdoor smoking area |
| 175 | RDS94 | Char | 1 | RDS94 Work requires one or more hours of outdoor time a week |
| 176 | RDS95 | Num | 8 | RDS95 Hours spent in proximity to smoking coworkers in the last 7 days |
| 177 | RDS96 | Char | 1 | RDS96 Smell smoke while working outdoors in the last 7 days |
| 178 | RDS97 | Char | 1 | RDS97 Eye irritation after outdoor smoke exposure at work |
| 179 | RDS98 | Char | 1 | RDS98 Nose irritation after outdoor smoke exposure at work |
| 180 | RDS99 | Char | 1 | RDS99 Coughing/wheezing after outdoor smoke exposure at work |
| 181 | RDS100 | Char | 1 | RDS100 Extra inhalers used in the last 7 days after exposure to smoke outdoors |
| 182 | RDS101 | Char | 1 | RDS101 Exposure to tobacco smoke outdoors somewhere other than work in the last 7 days |
| 183 | RDS103 | Char | 1 | RDS103 Smell tobacco smoke at non-work outdoor location in the last 7 days |
| 184 | RDS104 | Num | 8 | RDS104 Hours of smoke exposure at non-work outdoor location in the last 7 days |
| 185 | RDS105 | Char | 1 | RDS105 Eye irritation after non-work outdoor smoke exposure |
| 186 | RDS106 | Char | 1 | RDS106 Nose irritation after non-work outdoor smoke exposure |
| 187 | RDS107 | Char | 1 | RDS107 Coughing/wheezing after non-work outdoor smoke exposure |
| 188 | RDS108 | Char | 1 | RDS108 Extra inhalers used in the last 7 days after non-work outdoor smoke exposure |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 189 | RDS109 | Char | 1 | RDS109 Exposure to tobacco smoke at place of entertainment in the last 7 days |
| 190 | RDS110 | Num | 8 | RDS110 Hours of exposure to smoke at place of entertainment in the last 7 days |
| 191 | RDS111 | Char | 1 | RDS111 Visibly smoky in place of entertainment in the last 7 days |
| 192 | RDS112 | Char | 1 | RDS112 Smell tobacco in place of entertainment in the last 7 days |
| 193 | RDS113 | Char | 1 | RDS113 Eye irritation after exposure in place of entertainment |
| 194 | RDS114 | Char | 1 | RDS114 Nose irritation after exposure in place of entertainment |
| 195 | RDS115 | Char | 1 | RDS115 Coughing/wheezing after exposure in place of entertainment |
| 196 | RDS116 | Char | 1 | RDS116 Extra inhalers used in the last 7 days after smoke exposure in place of entertainment |
| 197 | RDS117 | Char | 1 | RDS117 Other sites of exposure to tobacco smoke in the last 7 days |
| 198 | RDS119 | Num | 8 | RDS119 Hours of exposure to smoke at this other location in the last 7 days |
| 199 | RDS120 | Char | 1 | RDS120 Eye irritation after exposure from this other location |
| 200 | RDS121 | Char | 1 | RDS121 Nose irritation after exposure from this other location |
| 201 | RDS122 | Char | 1 | RDS122 Coughing/wheezing after exposure from this other location |
| 202 | RDS123 | Char | 1 | RSD123 Extra inhalers used in the last 7 days after smoke exposure in this other location |
| 203 | RDS124 | Char | 1 | RDS124 Ever smoked marijuana |
| 204 | RDS125 | Char | 1 | RDS125 Ever regularly smoked marijuana (at least five times in a year) |
| 205 | RDS126 | Num | 8 | RDS126 Average joints smoked per week |
| 206 | RDS127 | Num | 8 | RDS127 Average number of pipes smoked per week |
| 207 | RDS128 | Num | 8 | RDS128 Years smoking marijuana |
| 208 | RDS129 | Char | 1 | RDS129 Recent marijuana smoking (last 12 months) |
| 209 | RDS130 | 1 | 130 ) When was the last time you smoked marijuana? |  |
| 210 | VERSION | 21 | Version |  |
| 211 | RDS0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v1_rmu_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | RMU01 | Char | 1 | RMU01 Currently using Theophylline |
| 5 | RMU02 | Char | 1 | RMU02 Currently using Oral Corticosteroids |
| 6 | RMU02A1 | Num | 8 | RMU02A1 Years on oral corticosteroids |
| 7 | RMU02A2 | Num | 8 | RMU02A2 Days on oral corticosteroids |
| 8 | RMU03 | Char | 1 | RMU03 Supplemental oxygen usage |
| 9 | RMU03A | Num | 8 | RMU03A Hours using supplemental oxygen per day |
| 10 | RMU04 | Char | 1 | RMU04 Inhaled steroids usage in last three months |
| 11 | RMU04A1 | Char | 1 | RMU04A1 Inhaled steroids used in last 3 months: Azmacort (triamcinolone) |
| 12 | RMU04A1A | Num | 8 | RMU04A1A Azmacort (triamcinolone): Puffs/day? |
| 13 | RMU04A2 | Char | 1 | RMU04A2 Inhaled steroids used in last 3 months: Beclovent (beclomethasone) |
| 14 | RMU04A2A | Num | 8 | RMU04A2A Beclovent (beclomethasone): Puffs/day? |
| 15 | RMU04A3 | Char | 1 | RMU04A3 Inhaled steroids used in last 3 months: Vanceril (beclomethasone) |
| 16 | RMU04A3A | Num | 8 | RMU04A3A Vanceril (beclomethasone): Puffs/day? |
| 17 | RMU04A3B | Char | 1 | RMU04A3B Inhaled steroids used in last 3 months: Vanceril dose |
| 18 | RMU04A4 | Char | 1 | RMU04A4 Inhaled steroids used in last 3 months: AeroBid (blunisolide) |
| 19 | RMU04A4A | Num | 8 | RMU04A4A AeroBid (blunisolide): Puffs/day? |
| 20 | RMU04A5 | Char | 1 | RMU04A5 Inhaled steroids used in last 3 months: Flovent (fluticasone) |
| 21 | RMU04A5A | Num | 8 | RMU04A5A Flovent (fluticasone): Puffs/day? |
| 22 | RMU04A5B | Char | 1 | RMU04A5B Inhaled steroids used in last 3 months: Flovent dose |
| 23 | RMU04A6 | Char | 1 | RMU04A6 Inhaled steroids used in last 3 months: Pulmicort (budesonide) |
| 24 | RMU04A6A | Num | 8 | RMU04A6A Pulmicort (budesonide): Puffs/day? |
| 25 | RMU04A6B | Char | 1 | RMU04A6B Inhaled steroids used in last 3 months: Pulmicort dose |
| 26 | RMU04A7 | Char | 1 | RMU04A7 Inhaled steroids used in last 3 months: Qvar (beclomethasone) |
| 27 | RMU04A7A | Num | 8 | RMU04A7A Qvar (beclomethasone): Puffs/day? |
| 28 | RMU04A7B | Char | 1 | RMU04A7B Inhaled steroids used in last 3 months: Qvar dose |
| 29 | RMU04A8 | Char | 1 | RMU04A8 Inhaled steroids used in last 3 months: Advair (bluticasone/salmeterol) |
| 30 | RMU04A8A | Num | 8 | RMU04A8A Advair (bluticasone/salmeterol): Puffs/day? |
| 31 | RMU04A8B | Char | 1 | RMU04A8B Inhaled steroids used in last 3 months: Advair dose |
| 32 | RMU04A9 | Char | 1 | RMU04A9 Inhaled steroids used in last 3 months: Symbicort |
| 33 | RMU04A9A | Num | 8 | RMU04A9A Symbicort): Puffs/day? |
| 34 | RMU04A9B | Char | 1 | RMU04A9B Inhaled steroids used in last 3 months: Symbicort dose |
| 35 | RMU04A10 | Char | 1 | RMU04A10 Inhaled steroids used in last 3 months: Other, specify |
| 36 | RMU04A10A | Num | 8 | RMU04A10A Other, specify: Puffs/day? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RMU04A10B | Char | 50 | RMU04A10B Inhaled steroids used in last 3 months:Specify |
| 38 | RMU05 | Char | 1 | RMU05 Inhaled bronchodilators in last three months |
| 39 | RMU05A1 | Char | 1 | RMU05A1 Inhaled bronchodilators used in last 3 months: Albuterol (Proventil, Ventolin, ProAir) |
| 40 | RMU05A1A | Num | 8 | RMU05A1A Albuterol (Proventil, Ventolin, ProAir): Puffs/day? |
| 41 | RMU05A2 | Char | 1 | RMU05A2 Inhaled bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |
| 42 | RMU05A2A | Num | 8 | RMU05A2A ipratropium bromide (Atrovent): Puffs/day? |
| 43 | RMU05A3 | Char | 1 | RMU05A3 Inhaled bronchodilators used in last 3 months: ipratropium bromide/albuterol sulfate (Combivent) |
| 44 | RMU05A3A | Num | 8 | RMU05A3A ipratropium bromide/albuterol sulfate (Combivent): Puffs/day? |
| 45 | RMU05A4 | Char | 1 | RMU05A4 Inhaled bronchodilators used in last 3 months: terbutaline (Brethaire, Brethine, Bricanyl) |
| 46 | RMU05A4A | Num | 8 | RMU05A4A terbutaline (Brethaire, Brethine, Bricanyl): Puffs/day? |
| 47 | RMU05A5 | Char | 1 | RMU05A5 Inhaled bronchodilators used in last 3 months: formoterol (Foradil) |
| 48 | RMU05A5A | Num | 8 | RMU05A5A formoterol (Foradil): Puffs/day? |
| 49 | RMU05A6 | Char | 1 | RMU05A6 Inhaled bronchodilators used in last 3 months: tiotropium (Spiriva) |
| 50 | RMU05A6A | Num | 8 | RMU05A6A tiotropium (Spiriva): Puffs/day? |
| 51 | RMU05A7 | Char | 1 | RMU05A7 Inhaled bronchodilators used in last 3 months: Salmeterol (Serevent Diskus) |
| 52 | RMU05A7A | Num | 8 | RMU05A7A Salmeterol (Serevent Diskus): Puffs/day? |
| 53 | RMU05A8 | Char | 1 | RMU05A8 Inhaled bronchodilators used in last 3 months: Pirbuterol (Maxair) |
| 54 | RMU05A8A | Num | 8 | RMU05A8A Pirbuterol (Maxair): Puffs/day? |
| 55 | RMU05A9 | Char | 1 | RMU05A9 Inhaled bronchodilators used in last 3 months: Metaproterenol (Alupent, Metaprel) |
| 56 | RMU05A10 | Char | 1 | RMU05A10 Inhaled bronchodilators used in last 3 months: levalbuterol (Tomalate) |
| 57 | RMU05A10A | Num | 8 | RMU05A10A levalbuterol (Tomalate): Puffs/day? |
| 58 | RMU05A11 | Char | 1 | RMU05A11 Inhaled bronchodilators used in last 3 months: bitolterol (Tornalate) |
| 59 | RMU05A12 | Char | 1 | RMU05A12 Inhaled bronchodilators used in last 3 months: epinephrine (Primatene, Bronkaid) |
| 60 | RMU05A12A | Num | 8 | RMU05A12A epinephrine (Primatene, Bronkaid): Puffs/day? |
| 61 | RMU05A13 | Char | 1 | RMU05A13 Inhaled bronchodilators used in last 3 months: fluticasone/salmeterol (Advair Diskus) |
| 62 | RMU05A13A | Num | 8 | RMU05A13A fluticasone/salmeterol (Advair Diskus): Puffs/day? |
| 63 | RMU05A14 | Char | 1 | RMU05A14 Inhaled bronchodilators used in last 3 months: budesonide/formoterol (Symbicort) |
| 64 | RMU05A14A | Num | 8 | RMU05A14A budesonide/formoterol (Symbicort): Puffs/day? |
| 65 | RMU05A15 | Char | 1 | RMU05A15 Inhaled bronchodilators used in last 3 months: Other) |
| 66 | RMU05A15A | Num | 8 | RMU05A15A Other: Puffs/day? |
| 67 | RMU05A15B | Char | 50 | RMU05A15B Inhaled bronchodilators used in last 3 months:Specify |
| 68 | RMU06 | Char | 1 | RMU06 Nebulized bronchodilators usage in the last three months |
| 69 | RMU06A1 | Char | 1 | RMU06A1 nebulized bronchodilators used in last 3 months: formoterol (Perforomist) |
| 70 | RMU06A2 | Char | 1 | RMU06A2 nebulized bronchodilators used in last 3 months: arformoterol (Brovana) |
| 71 | RMU06A3 | Char | 1 | RMU06A3 nebulized bronchodilators used in last 3 months: albuterol and ipratropium bromide (DuoNeb) |
| 72 | RMU06A4 | Char | 1 | RMU06A4 nebulized bronchodilators used in last 3 months: albuterol (Proventil, Ventolin, ProAir) |
| 73 | RMU06A5 | Char | 1 | RMU06A5 nebulized bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | RMU07 | Char | 1 | RMU07 Leukotriene antagonist usage in the last 3 months |
| 75 | RMU08 | Char | 1 | RMU08 Statin medications usage in the last three months |
| 76 | RMU08A1 | Char | 1 | RMU08A1 statin used in last 3 months: Crestor (resuvastatin) |
| 77 | RMU08A2 | Char | 1 | RMU08A2 statin used in last 3 months: Lescol (fluvastatin) |
| 78 | RMU08A3 | Char | 1 | RMU08A3 statin used in last 3 months: Lipitor (atorvastatin) |
| 79 | RMU08A4 | Char | 1 | RMU08A4 statin used in last 3 months: Mevacor (lovastatin) |
| 80 | RMU08A5 | Char | 1 | RMU08A5 statin used in last 3 months: Pravachol (pravastatin) |
| 81 | RMU08A6 | Char | 1 | RMU08A6 statin used in last 3 months: Vytorin (ezetimibe, simvastatin) |
| 82 | RMU08A7 | Char | 1 | RMU08A7 statin used in last 3 months: Zocor (simvastatin) |
| 83 | RMU08A8 | Char | 1 | RMU08A8 statin used in last 3 months: Other |
| 84 | RMU08A8B | Char | 50 | RMU08A8B statin used in last 3 months:Specify |
| 85 | RMU09 | Char | 1 | RMU09 Beta-blocker medications usage in the last three months |
| 86 | RMU09A1 | Char | 1 | RMU09A1 beta blocker used in last 3 months: Atenolol (tenormin, tenoretic) |
| 87 | RMU09A2 | Char | 1 | RMU09A2 beta blocker used in last 3 months: Metoprolol (lopresor, toprol) |
| 88 | RMU09A3 | Char | 1 | RMU09A3 beta blocker used in last 3 months: Carvedilol (coreg) |
| 89 | RMU09A4 | Char | 1 | RMU09A4 beta blocker used in last 3 months: Labetalol (trandate, normodyne) |
| 90 | RMU09A5 | Char | 1 | RMU09A5 beta blocker used in last 3 months: Propranalol (Inderal, Inderide) |
| 91 | RMU09A6 | Char | 1 | RMU09A6 beta blocker used in last 3 months: Sotalol (Betapace, Sorine) |
| 92 | RMU09A7 | Char | 1 | RMU09A7 beta blocker used in last 3 months: Timolol (Blocadren, timolide) |
| 93 | RMU09A8 | Char | 1 | RMU09A8 beta blocker used in last 3 months: bisoprolol (zebeta, ziac) |
| 94 | RMU09A9 | Char | 1 | RMU09A9 beta blocker used in last 3 months: pindolol (visken) |
| 95 | RMU09A10 | Char | 1 | RMU09A10 beta blocker used in last 3 months: Other |
| 96 | RMU09A10B | Char | 50 | RMU09A10B beta blocker used in last 3 months:Specify |
| 97 | RMU10 | Char | 1 | RMU10 Oral anti-oxidant supplements usage in the past three months |
| 98 | RMU10A1 | Char | 1 | RMU10A1 oral anti-oxidants used in last 3 months: Vitamin C (ascorbic acid) |
| 99 | RMU10A2 | Char | 1 | RMU10A2 oral anti-oxidants used in last 3 months: Vitamin E (alpha-tocopherol) |
| 100 | RMU10A3 | Char | 1 | RMU10A3 oral anti-oxidants used in last 3 months: beta carotene |
| 101 | RMU10A4 | Char | 1 | RMU10A4 oral anti-oxidants used in last 3 months: zinc |
| 102 | RMU10A5 | Char | 1 | RMU10A5 oral anti-oxidants used in last 3 months: copper |
| 103 | RMU10A6 | Char | 1 | RMU10A6 oral anti-oxidants used in last 3 months: fish oil |
| 104 | RMU10A7 | Char | 1 | RMU10A7 oral anti-oxidants used in last 3 months: omega 3 |
| 105 | RMU10A8 | Char | 1 | RMU10A8 oral anti-oxidants used in last 3 months: Other |
| 106 | RMU11 | Char | 1 | RMU11 Aspirin usage |
| 107 | RMU12H | Char | 50 | RMU12H Other Medication taken in the last 3 months |
| 108 | RMU12I | Char | 50 | RMU12I Other Medication taken in the last 3 months |
| 109 | RMU13D | Char | 50 | RMU13D Other Supplement taken in the last 3 months |
| 110 | RMU13E | Char | 50 | RMU13E Other Supplement taken in the last 3 months |
| 111 | RMU13F | Char | 50 | RMU13F Other Supplement taken in the last 3 months |
| 112 | RMU13G | Char | 50 | RMU13G Other Supplement taken in the last 3 months |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 113 | RMU13H | Char | 50 | RMU13H Other Supplement taken in the last 3 months |
| 114 | RMU13I | Char | 50 | RMU13I Other Supplement taken in the last 3 months |
| 115 | VERSION | Char | 21 | VERSION |
| 116 | RMU0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v1_sdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SDF01 | Char | 1 | SDF01 Exhaled CO Measured |
| 5 | SDF01A | Num | 8 | SDF01A Monitor number |
| 6 | SDF01B | Num | 8 | SDF01B eCO Measurement 1 |
| 7 | SDF01C | Num | 8 | SDF01C eCO Measurement 2 |
| 8 | SDF02 | Char | 1 | SDF02 Pre-bronchodilator spirometry |
| 9 | SDF02A | Char | 5 | SDF02A Time pre-BD slow vital capacity procedure began |
| 10 | SDF02A_AMPM | Char | 1 | SDF02A_AMPM AM/PM |
| 11 | SDF03A | Num | 8 | SDF03A Pre-BD Inspiratory Capacity |
| 12 | SDF03B | Num | 8 | SDF03B Pre-BD Expiratory slow vital capacity |
| 13 | SDF03C | Num | 8 | SDF03C Pre-BD FEV1 |
| 14 | SDF03D | Num | 8 | SDF03D Pre-BD FVC |
| 15 | SDF04 | Char | 1 | SDF04 Post-bronchodilator spirometry |
| 16 | SDF04A | Char | 5 | SDF04A Time first puff of bronchodilator administered |
| 17 | SDF04A_AMPM | Char | 1 | SDF04A_AMPM AM/PM |
| 18 | SDF04B | Char | 5 | SDF04B Time post-BD slow vital capacity procedure began |
| 19 | SDF04B_AMPM | Char | 1 | SDF04B_AMPM AM/PM |
| 20 | SDF05A | Num | 8 | SDF05A Post-BD Inspiratory Capacity |
| 21 | SDF05B | Num | 8 | SDF05B Post-BD Expiratory slow vital capacity |
| 22 | SDF05C | Num | 8 | SDF05C Post-BD FEV1 |
| 23 | SDF05D | Num | 8 | SDF05D Post-BD FVC |
| 24 | SDF06 | Char | 1 | SDF06 Post-BD Meet ATS-ERS requirements |
| 25 | SDF07 | Char | 1 | SDF07 Complications during spirometry |
| 26 | VERSION | Char | 21 | Version |
| 27 | SDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v1_sfh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFH01 | Num | 8 | SFH01 General Health |
| 5 | SFH02A | Num | 8 | SFH02A Limitations on moderate activites |
| 6 | SFH02B | Num | 8 | SFH02B Limitations on difficult activities |
| 7 | SFH03A | Char | 1 | SFH03A Limited in accomplishing tasks |
| 8 | SFH03B | Char | 1 | SFH03B Limited in daily activities |
| 9 | SFH04A | Char | 1 | SFH04A Emotional limitations on activities |
| 10 | SFH04B | Char | 1 | SHF04B Emotional limitations on daily life |
| 11 | SFH05 | Num | 8 | SFH05 Pain interfering with normal work |
| 12 | SFH06A | Num | 8 | SFH06A Feeling calm |
| 13 | SFH06B | Num | 8 | SFH06B Energy level |
| 14 | SFH06C | Num | 8 | SFH06C Feeling depressed |
| 15 | SFH07 | Num | 8 | SFH07 Physical/emotional health interfering with social life |
| 16 | VERSION | Char | 21 | Version |
| 17 | SFH_BP01 | Num | 8 | Baseline SFH bodily pain |
| 18 | SFH_GH01 | Num | 8 | Baseline SFH general health |
| 19 | SFH_MCS01 | Num | 8 | Baseline SFH mental component summary |
| 20 | SFH_MH01 | Num | 8 | Baseline SFH mental health |
| 21 | SFH_PCS01 | Num | 8 | Baseline SFH physical component summary |
| 22 | SFH_PF01 | Num | 8 | Baseline SFH physical functioning |
| 23 | SFH_RE01 | Num | 8 | Baseline SFH role emotion |
| 24 | SFH_RP01 | Num | 8 | Baseline SFH role physical |
| 25 | SFH_SF01 | Num | 8 | Baseline SFH social functioning |
| 26 | SFH_VT01 | Num | 8 | Baseline SFH vitality |
| 27 | SFH0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v1_sfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | SFV01 study_id |
| 5 | SFV10 | Char | 15 | SFV10 Position |
| 6 | SFV12 | Num | 8 | SFV12 visit_num |
| 7 | SFV13 | Num | 8 | SFV13 interval_num |
| 8 | SFV14 | Num | 8 | SFV14 stage_num |
| 9 | SFV15 | Num | 8 | SFV15 seq_num |
| 10 | SFV16 | Char | 10 | SFV16 vlabel |
| 11 | SFV17 | Num | 8 | SFV17 repeats |
| 12 | SFV19 | Char | 15 | SFV19 qa_grade |
| 13 | SFV20 | Char | 15 | SFV20 qa_status |
| 14 | SFV22B | Char | 8 | SFV22B time |
| 15 | SFV23B | Char | 8 | SFV23B time_best |
| 16 | SFV24B | Char | 8 | SFV24B time_first |
| 17 | SFV25 | Num | 8 | SFV25 trial_seq_num |
| 18 | SFV26 | Num | 8 | SFV26 ranking |
| 19 | SFV27 | Num | 8 | SFV27 temperature |
| 20 | SFV28 | Num | 8 | SFV28 barometric |
| 21 | SFV29 | Num | 8 | SFV29 humidity |
| 22 | SFV30 | Num | 8 | SFV30 fevpd |
| 23 | SFV31 | Num | 8 | SFV31 fvcpd |
| 24 | SFV32 | Num | 8 | SFV32 fefpd |
| 25 | SFV33 | Num | 8 | SFV33 fev1_fvcpd |
| 26 | SFV34 | Num | 8 | SFV34 pefpd |
| 27 | SFV35 | Num | 8 | SFV35 pctfev |
| 28 | SFV36 | Num | 8 | SFV36 petfvc |
| 29 | SFV37 | Num | 8 | SFV37 pctfef2575 |
| 30 | SFV38 | Num | 8 | SFV38 pctpefr |
| 31 | SFV39 | Num | 8 | SFV39 pctfev_fvc |
| 32 | SFV40 | Num | 8 | SFV40 fvc |
| 33 | SFV41 | Num | 8 | SFV41 flag_fvc_best |
| 34 | SFV42B | Char | 8 | SFV42B trials_time |
| 35 | SFV43 | Num | 8 | SFV43 fev05 |
| 36 | SFV44 | Num | 8 | SFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV45 | Num | 8 | SFV45 fev1 |
| 38 | SFV46 | Num | 8 | SFV46 flag_fev_best |
| 39 | SFV47 | Num | 8 | SFV47 fev1fvc |
| 40 | SFV48 | Num | 8 | SFV48 flag_fevfvc_best |
| 41 | SFV49 | Num | 8 | SFV49 fev3 |
| 42 | SFV50 | Num | 8 | SFV50 fev3fvc |
| 43 | SFV51 | Num | 8 | SFV51 fev6 |
| 44 | SFV52 | Num | 8 | SFV52 fef212 |
| 45 | SFV53 | Num | 8 | SFV53 fef2575 |
| 46 | SFV54 | Num | 8 | SFV54 flag_fef2575_best |
| 47 | SFV55 | Num | 8 | SFV55 fef25756 |
| 48 | SFV56 | Num | 8 | SFV56 fef25 |
| 49 | SFV57 | Num | 8 | SFV57 fef50 |
| 50 | SFV58 | Num | 8 | SFV58 fef506 |
| 51 | SFV59 | Num | 8 | SFV59 fef75 |
| 52 | SFV60 | Num | 8 | SFV60 fef756 |
| 53 | SFV61 | Num | 8 | SFV61 fef7585 |
| 54 | SFV62 | Num | 8 | SFV62 pefr |
| 55 | SFV63 | Num | 8 | SFV63 flag_pefr_best |
| 56 | SFV64 | Num | 8 | SFV64 met |
| 57 | SFV65 | Num | 8 | SFV65 peft |
| 58 | SFV66 | Num | 8 | SFV66 vext |
| 59 | SFV67 | Num | 8 | SFV67 pctvext |
| 60 | SFV68 | Num | 8 | SFV68 expt |
| 61 | SFV71 | Num | 8 | SFV71 fivc |
| 62 | SFV72 | Num | 8 | SFV72 fiv05 |
| 63 | SFV73 | Num | 8 | SFV73 fiv05fivc |
| 64 | SFV74 | Num | 8 | SFV74 fiv1 |
| 65 | SFV75 | Num | 8 | SFV75 fiv1fivc |
| 66 | SFV76 | Num | 8 | SFV76 fiv3 |
| 67 | SFV77 | Num | 8 | SFV77 pifr |
| 68 | SFV78 | Num | 8 | SFV78 fif212 |
| 69 | SFV79 | Num | 8 | SFV79 fif2575 |
| 70 | SFV80 | Num | 8 | SFV80 mit |
| 71 | VERSION | Char | 21 | Version |
| 72 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 73 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 74 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 75 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v1_sgr_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SGR0 | Char | 1 | SGR01 Describe current health |
| 5 | SGR01 | Num | 8 | SGR01 chest trouble: I cough: |
| 6 | SGR02 | Num | 8 | SGR02 chest trouble: I bring up phlegm (sputum): |
| 7 | SGR03 | Num | 8 | SGR03 chest trouble: I have had shortness of breath: |
| 8 | SGR04 | Num | 8 | SGR04 chest trouble: I have attacks of wheezing: |
| 9 | SGR05 | Char | 1 | SGR05 Number of attacks |
| 10 | SGR06 | Char | 1 | SGR06 Days with little chest trouble |
| 11 | SGR07 | Char | 1 | SGR07 Wheeze in morning |
| 12 | SGR08 | Char | 1 | SGR08 Describe chest condition |
| 13 | SGR09A | Char | 1 | SGR09A Feel breathless:Getting washed or dressed |
| 14 | SGR09B | Char | 1 | SGR09B Feel breathless:Walking around the home |
| 15 | SGR09C | Char | 1 | SGR09C Feel breathless:Walking outside on the level |
| 16 | SGR09D | Char | 1 | SGR09D Feel breathless:Walking up a flight of stairs |
| 17 | SGR09E | Char | 1 | SGR09E Feel breathless:Walking up hills |
| 18 | SGR10A | Char | 1 | SGR10A About cough and breathlessness: Painful cough |
| 19 | SGR10B | Char | 1 | SGR10B About cough and breathlessness: Tiring cough |
| 20 | SGR10C | Char | 1 | SGR10C About cough and breathlessness: Breathless when talking |
| 21 | SGR10D | Char | 1 | SGR10D About cough and breathlessness: Breathless when bending over |
| 22 | SGR10E | Char | 1 | SGR10E About cough and breathlessness: Coughing/breathing disturbs sleep |
| 23 | SGR10F | Char | 1 | SGR10F About cough and breathlessness: Easily exhausted |
| 24 | SGR11A | Char | 1 | SGR11A Effect of chest trouble: Embarrassed in public |
| 25 | SGR11B | Char | 1 | SGR11B Effect of chest trouble: Chest trouble annoys others |
| 26 | SGR11C | Char | 1 | SGR11C Effect of chest trouble: Feeling panicked when out of breath |
| 27 | SGR11D | Char | 1 | SGR11D Effect of chest trouble: Chest problem beyond control |
| 28 | SGR11E | Char | 1 | SGR11E Effect of chest trouble: Frail/invalid |
| 29 | SGR11F | Char | 1 | SGR11F Effect of chest trouble: Exercise is unsafe |
| 30 | SGR11G | Char | 1 | SGR11G Effect of chest trouble: Effort |
| 31 | SGR12A | Char | 1 | SGR12A Activities effected by respiratory problems: Long time washing/dressing |
| 32 | SGR12B | Char | 1 | SGR12B Activities effected by respiratory problems: Long time bathing |
| 33 | SGR12C | Char | 1 | SGR12C Activities effected by respiratory problems: Walking slowly/pausing often |
| 34 | SGR12D | Char | 1 | SGR12D Activities effected by respiratory problems: Long time doing housework |
| 35 | SGR12E | Char | 1 | SGR12E Activities effected by respiratory problems: Walking up stairs |
| 36 | SGR12F | Char | 1 | SGR12F Activities effected by respiratory problems: Difficulty walking fast |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SGR12G | Char | 1 | SGR12G Activities effected by respiratory problems: Difficulty performing moderate <br> tasks |
| 38 | SGR12H | Char | 1 | SGR12H Activities effected by respiratory problems: Difficulty performing hard tasks |
| 39 | SGR13A | Char | 1 | SGR13A Activities usually effected by chest: Cannot play sports or games |
| 40 | SGR13B | Char | 1 | SGR13B Activities usually effected by chest: Cannot go out for recreation |
| 41 | SGR13C | Char | 1 | SGR13C Activities usually effected by chest: Cannot go out shopping |
| 42 | SGR13D | Char | 1 | SGR13DActivities usually effected by chest: Cannot do housework |
| 43 | SGR13E | Num | 8 | SGR14 Personal effects of chest trouble |
| 44 | SGR14 | Char | 21 | Version |
| 45 | VERSION | SGR13E Activities usually effected by chest: Cannot move far from bed/chair |  |  |
| 46 | SGR_SYMPTOMSCORE01 | Num | 8 | Baseline SGR symptom score |
| 47 | SGR_ACTIVITYSCORE01 | Num | 8 | Baseline SGR activity score |
| 48 | SGR_IMPACTSCORE01 | Num | 8 | Baseline SGR impact score |
| 49 | SGR_TOTALSCORE01 | Num | 8 | Baseline SGR total score |
| 50 | SGR0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v1_smw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SMW01 | Num | 8 | SMW01 Medications taken since post-bronchodilator spirometry |
| 5 | SMW01A1 | Char | 45 | SMW01A1 Medication name |
| 6 | SMW01A2 | Char | 20 | SMW01A2 Dose |
| 7 | SMW01A3 | Char | 5 | SMW01A3 Time |
| 8 | SMW01A3_AMPM | Char | 1 | SMW01A3_AMPM AM/PM |
| 9 | SMW01B1 | Char | 45 | SMW01B1 Medication name |
| 10 | SMW01B2 | Char | 20 | SMW01B2 Dose |
| 11 | SMW01B3 | Char | 5 | SMW01B3 Time |
| 12 | SMW01B3_AMPM | Char | 1 | SMW01B3_AMPM AM/PM |
| 13 | SMW01C1 | Char | 45 | SMW01C1 Medication name |
| 14 | SMW01C2 | Char | 20 | SMW01C2 Dose |
| 15 | SMW01C3 | Char | 5 | SMW01C3 Time |
| 16 | SMW01C3_AMPM | Char | 1 | SMW01C3_AMPM AM/PM |
| 17 | SMW02 | Char | 1 | SMW02 blood pressure taken more than 4 hours prior to SMW |
| 18 | SMW02A | Num | 8 | SMW02A Systolic |
| 19 | SMW02B | Num | 8 | SMW02B Diastolic |
| 20 | SMW03 | Char | 1 | SMW03 Supplemental Oxygen |
| 21 | SMW03A | Num | 8 | SMW03A Supplemental Oxygen Flow rate |
| 22 | SMW03B | Char | 1 | SMW03B Flow Type |
| 23 | SMW04A | Num | 8 | SMW04A Oxygen saturation (SpO2) at rest prior to SMW |
| 24 | SMW04B | Num | 8 | SMW04B Pulse at rest prior to SMW |
| 25 | SMW05 | Char | 1 | SMW05 Was continuous oximetry recorded? |
| 26 | SMW06 | Char | 5 | SMW06 Start time of 6MW |
| 27 | SMW06_AMPM | Char | 1 | SMW06_AMPM AM/PM |
| 28 | SMW07A | Num | 8 | SMW07A Oxygen saturation (SpO2) immediately following SMW |
| 29 | SMW07B | Num | 8 | SMW07B Pulse immediately following SMW |
| 30 | SMW07C | Num | 8 | SMW07C Breathlessness Score immediately following SMW |
| 31 | SMW07D | Num | 8 | SMW07D Exertion score immediately following SMW |
| 32 | SMW08A | Char | 1 | SMW08A Type of SMW course used (meters, feet, or other) |
| 33 | SMW08A1 | Char | 100 | SMW08A1 Specify other type of SMW course used |
| 34 | SMW08B | Num | 8 | SMW08B Number of full laps |
| 35 | SMW08C | Num | 8 | SMW08C Distance walked final partial lap |
| 36 | SMW09 | Char | 1 | SMW09 Stopped before 6 minutes |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SMW09A1 | Num | 8 | SMW09A1 Duration (minutes) |
| 38 | SMW09A2 | Num | 8 | SMW09A2 Duration (seconds) |
| 39 | SMW09B1 | Num | 8 | SMW09B1 Primary reason for stopping/not walking faster: Desaturation to LT 80\% |
| 40 | SMW09B2 | Num | 8 | SMW09B2 Primary reason for stopping/not walking faster: Orthopedic pain |
| 41 | SMW09B3 | Num | 8 | SMW09B3 Primary reason for stopping/not walking faster: Muscle pain |
| 42 | SMW09B4 | Num | 8 | SMW09B4 Primary reason for stopping/not walking faster: Breathlessness |
| 43 | SMW09B5 | Num | 8 | SMW09B5 Primary reason for stopping/not walking faster: Adverse Event |
| 44 | SMW09B5A | Num | 8 | SMW09B5A SMW related AE: Angina |
| 45 | SMW09B5B | Num | 8 | SMW09B5B SMW related AE: Lightheadedness |
| 46 | SMW09B5C | Num | 8 | SMW09B5C SMW related AE: Intolerable dyspnea |
| 47 | SMW09B5D | Num | 8 | SMW09B5D SMW related AE: Leg cramps |
| 48 | SMW09B5E | Num | 8 | SMW09B5E SMW related AE: Staggering |
| 49 | SMW09B5F | Num | 8 | SMW09B5F SMW related AE: Diaphoresis |
| 50 | SMW09B5G | Num | 8 | SMW09B5G SMW related AE: Pale or ashen appearance |
| 51 | SMW09B5H | Num | 8 | SMW09B5H SMW related AE: Mental confusion or headache |
| 52 | SMW09B5I | Num | 8 | SMW09B5I SMW related AE: Other |
| 53 | SMW09B5ISP | Char | 100 | SMW09B5ISP Explain other AE related to SMW |
| 54 | VERSION | Char | 21 | Version |
| 55 | SMW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v1_spw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SPW01 | Num | 8 | SPW01 Weight of entire sample |
| 5 | SPW02A | Num | 8 | SPW02A Salivary Contamination: Minimal |
| 6 | SPW02B | Num | 8 | SPW02B Salivary Contamination: Mild |
| 7 | SPW02C | Num | 8 | SPW02C Salivary Contamination: Moderate |
| 8 | SPW02D | Num | 8 | SPW02D Salivary Contamination: Excessive |
| 9 | SPW03A | Num | 8 | SPW03A Consistency: Watery |
| 10 | SPW03B | Num | 8 | SPW03B Consistency: Mucoid |
| 11 | SPW03C | Num | 8 | SPW03C Consistency: Purulent (puss) |
| 12 | SPW04A | Num | 8 | SPW04A Mucus plugs: Numerous |
| 13 | SPW04B | Num | 8 | SPW04B Mucus plugs: Moderate number |
| 14 | SPW04C | Num | 8 | SPW04C Mucus plugs: Sparse |
| 15 | SPW04D | Num | 8 | SPW04D Mucus plugs: Large |
| 16 | SPW04E | Num | 8 | SPW04E Mucus plugs: Small |
| 17 | SPW04F | Num | 8 | SPW04F Mucus plugs: Dense/flocculent |
| 18 | SPW04G | Num | 8 | SPW04G Mucus plugs: Diffuse opacity |
| 19 | SPW05A | Num | 8 | SPW05A Color of plugs: Clear |
| 20 | SPW05B | Num | 8 | SPW05B Color of plugs: White |
| 21 | SPW05C | Num | 8 | SPW05C Color of plugs: Yellow/Tan |
| 22 | SPW05D | Num | 8 | SPW05D Color of plugs: Brown |
| 23 | SPW05E | Num | 8 | SPW05E Color of plugs: Green |
| 24 | SPW07A | Num | 8 | SPW07A Mucin Method: SPW07A Weighing Trayweight in grams |
| 25 | SPW07B | Num | 8 | SPW07B Mucin Method: SPW07B Whole Sputumweight in grams |
| 26 | SPW07C | Num | 8 | SPW07C Mucin Method: SPW07C Guanidine Vol.weight in grams |
| 27 | SPW08A | Num | 8 | SPW08A Microbiology Method: SPW08A Microcentrifuge tubeweight in grams |
| 28 | SPW08B | Num | 8 | SPW08B Microbiology Method: SPW08B Whole sputumweight in grams |
| 29 | SPW09A | Num | 8 | SPW09A Viscoelastic Method: SPW09A Microcentrifuge tubeweight in grams |
| 30 | SPW09B | Num | 8 | SPW09B Viscoelastic Method: SPW09B Whole sputumweight in grams |
| 31 | SPW10A | Num | 8 | SPW10A EDTA processing: SPW10A Weight of centrifuge tube |
| 32 | SPW10B | Num | 8 | SPW10B EDTA processing: SPW10B Weight of sputum |
| 33 | SPW10C | Num | 8 | SPW10C EDTA processing: SPW10C 1\% sputolysin volume |
| 34 | SPW10D | Num | 8 | SPW10D EDTA processing: SPW10D Volume EDTA added |
| 35 | SPW10E | Char | 5 | SPW10E EDTA processing: SPW10E Time of 15 minute tumble |
| 36 | SPW10F | Num | 8 | SPW10F EDTA processing: SPW10F Volume EDTA added after tumble |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SPW10G | Char | 5 | SPW10G EDTA processing: SPW10G Time of 5 minute tumble |
| 38 | SPW11A | Num | 8 | SPW11A Supernatants: SPW11A Number of aliquots in SPW11A |
| 39 | SPW11B | Num | 8 | SPW11B Supernatants: SPW11B Volume stored in SPW11B |
| 40 | SPW11C | Num | 8 | SPW11C Supernatants: SPW11C Number of aliquots in SPW11C |
| 41 | SPW11D | Num | 8 | SPW11D Supernatants: SPW11D Volumbe stored in SPW11D |
| 42 | SPW11E | Num | 8 | SPW11E Supernatants: SPW11E Volume of Hanks added |
| 43 | SPW12A1 | Num | 8 | SPW12A1 Cell counts: SPW12A1 Dead cell count in SPW12A1 |
| 44 | SPW12A2 | Num | 8 | SPW12A2 Cell counts: SPW12A2 Live cell count in SPW12A2 |
| 45 | SPW12A3 | Num | 8 | SPW12A3 Cell counts: SPW12A3 Total cell count in SPW12A3 |
| 46 | SPW12B1 | Num | 8 | SPW12B1 Cell counts: SPW12B1 Dead cell count in SPW12B1 |
| 47 | SPW12B2 | Num | 8 | SPW12B2 Cell counts: SPW12B2 Live cell count in SPW12B2 |
| 48 | SPW12B3 | Num | 8 | SPW12B3 Cell counts: SPW12B3 Total cell count in SPW12B3 |
| 49 | SPW12C1 | Num | 8 | SPW12C1 Cell counts: SPW12C1 Dead cell count in SPW12C1 |
| 50 | SPW12C2 | Num | 8 | SPW12C2 Cell counts: SPW12C2 Live cell count in SPW12C2 |
| 51 | SPW12C3 | Num | 8 | SPW12C3 Cell counts: SPW12C3 Dead cell count in SPW12C3 |
| 52 | SPW12D1 | Num | 8 | SPW12D1 Cell counts: SPW12D1 Dead cell count in SPW12D1 |
| 53 | SPW12D2 | Num | 8 | SPW12D2 Cell counts: SPW12D2 Live cell count in SPW12D2 |
| 54 | SPW12D3 | Num | 8 | SPW12D3 Cell counts: SPW12D3 Total cell count in SPW12D3 |
| 55 | SPW12E1 | Num | 8 | SPW12E1 Cell counts: SPW12E1 Dead cell count in SPW12E1 |
| 56 | SPW12E2 | Num | 8 | SPW12E2 Cell counts: SPW12E2 Live cell count in SPW12E2 |
| 57 | SPW12E3 | Num | 8 | SPW12E3 Cell counts: SPW12F Totals |
| 58 | SPW12F | Num | 8 | SPW12F Cell counts: SPW12F TCC |
| 59 | SPW12G | Num | 8 | SPW12G Cell counts: SPW12G TCC/Weight of selected sample |
| 60 | SPW12H | Num | 8 | SPW12H Cell counts: SPW12H Viability |
| 61 | SPW13 | Num | 8 | SPW13 Hema 3 stained slides |
| 62 | SPW14 | Num | 8 | SPW14 Trizol Cell Pellet: Number of cells |
| 63 | SPW06A | Char | 1 | 6a) Sputum processing method |
| 64 | SPW0D | Char | 5 | Processing Started |
| 65 | SPW0D_AMPM | Char | 1 | AM/PM |
| 66 | SPW0E | Char | 5 | Processing Ended |
| 67 | SPW0E_AMPM | Char | 1 | AM/PM |
| 68 | VERSION | Char | 21 | Version |
| 69 | SPW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 70 | SPW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v1_ssv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | SSV01 study_id |
| 5 | SSV10 | Char | 15 | SSV10 position |
| 6 | SSV12 | Num | 8 | SSV12 visit_num |
| 7 | SSV13 | Num | 8 | SSV13 interval_num |
| 8 | SSV14 | Num | 8 | SSV14 stage_num |
| 9 | SSV15 | Num | 8 | SSV15 seq_num |
| 10 | SSV16 | Char | 5 | SSV16 vlabel |
| 11 | SSV17 | Num | 8 | SSV17 repeats |
| 12 | SSV19 | Char | 15 | SSV19 qa_grade |
| 13 | SSV20 | Char | 15 | SSV20 qa_status |
| 14 | SSV22B | Char | 8 | SSV22B time |
| 15 | SSV23B | Char | 8 | SSV23B time_best |
| 16 | SSV24B | Char | 8 | SSV24B time_first |
| 17 | SSV25B | Char | 8 | SSV25B trials_time |
| 18 | SSV26 | Num | 8 | SSV26 trial_seq_num |
| 19 | SSV27 | Num | 8 | SSV27 ranking |
| 20 | SSV28 | Num | 8 | SSV28 temperature |
| 21 | SSV29 | Num | 8 | SSV29 barometric |
| 22 | SSV30 | Num | 8 | SSV30 humidity |
| 23 | SSV31 | Num | 8 | SSV31 pre_washout_1 |
| 24 | SSV33 | Num | 8 | SSV33 svc |
| 25 | SSV34 | Num | 8 | SSV34 svcpd |
| 26 | SSV35 | Num | 8 | SSV35 petsvc |
| 27 | SSV36 | Num | 8 | SSV36 flag_svc_best |
| 28 | SSV37 | Num | 8 | SSV37 ic |
| 29 | SSV38 | Num | 8 | SSV38 irv |
| 30 | SSV39 | Num | 8 | SSV39 erv |
| 31 | SSV40 | Num | 8 | SSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v1_vsa_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | VSA01 | Char | 1 | VSA01 1 MET |
| 5 | VSA02 | Char | 1 | VSA02 2 METs |
| 6 | VSA03 | Char | 1 | VSA03 3 METs |
| 7 | VSA04 | Char | 1 | VSA04 4 METs |
| 8 | VSA05 | Char | 1 | VSA05 5 METs |
| 9 | VSA06 | Char | 1 | VSA06 6 METs |
| 10 | VSA07 | Char | 1 | VSA07 7 METs |
| 11 | VSA08 | Char | 1 | VSA08 8 METs |
| 12 | VSA09 | Char | 1 | VSA09 9 METs |
| 13 | VSA10 | Char | 1 | VSA10 10 METs |
| 14 | VSA11 | Char | 1 | VSA11 11 METs |
| 15 | VSA12 | Char | 1 | VSA12 12 METs |
| 16 | VSA13 | Char | 1 | VSA13 13 METs |
| 17 | VERSION | Char | 21 | Version |
| 18 | VSASCORE01 | Num | 8 | Baseline veteran specific activity score |
| 19 | VSA0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v2_ant_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ANT01 | Char | 1 | ANT01 Assessment of ability to stand |
| 5 | ANT02 | Num | 8 | ANT02 Standing Height (cm) |
| 6 | ANT03 | Num | 8 | ANT03 Weight (kg) |
| 7 | ANT04 | Num | 8 | ANT04 BMI |
| 8 | ANT05 | Num | 8 | ANT05 Arm Span (cm) |
| 9 | ANT06A | Num | 8 | ANT06A Waist (cm) |
| 10 | ANT06B | Num | 8 | ANT06B Hip (cm) |
| 11 | ANT06C | Num | 8 | ANT06C Neck (cm) |
| 12 | VERSION | Char | 21 | Version |
| 13 | ANT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_bio_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BIO01 | Char | 1 | BIO01 Fasting before appointment? |
| 5 | BIO02 | Char | 5 | BIO02 Time most recently eaten |
| 6 | BIO02_AMPM | Char | 1 | BIO02_AMPM Recently eaten AM/PM |
| 7 | BIO04 | Char | 5 | BIO04 Collection time |
| 8 | BIO04_AMPM | Char | 1 | BIO04_AMPM Blood collection time AM/PM |
| 9 | BIO05 | Num | 8 | BIO05 Number of venipuncture attempts |
| 10 | BIO06 | Char | 1 | BIO06 Incidents/Problems drawing blood? |
| 11 | BIO07A1 | Num | 8 | BIO07A1 Tube 1 Sample Not Drawn |
| 12 | BIO07A2 | Num | 8 | BIO07A2 Tube 2 Sample Not Drawn |
| 13 | BIO07A3 | Num | 8 | BIO07A3 Tube 3 Sample Not Drawn |
| 14 | BIO07A4 | Num | 8 | BIO07A4 Tube 4 Sample Not Drawn |
| 15 | BIO07A5 | Num | 8 | BIO07A5 Tube 5 Sample Not Drawn |
| 16 | BIO07A6 | Num | 8 | BIO07A6 Tube 6 Sample Not Drawn |
| 17 | BIO07A7 | Num | 8 | BIO07A7 Tube 7 Sample Not Drawn |
| 18 | BIO07A8 | Num | 8 | BIO07A8 Tube 8 Sample Not Drawn |
| 19 | BIO07A9 | Num | 8 | BIO07A9 Tube 9 Sample Not Drawn |
| 20 | BIO07B1 | Num | 8 | BIO07B1 Tube 1 Partial sample drawn |
| 21 | BIO07B2 | Num | 8 | BIO07B2 Tube 2 Partial sample drawn |
| 22 | BIO07B3 | Num | 8 | BIO07B3 Tube 3 Partial sample drawn |
| 23 | BIO07B4 | Num | 8 | BIO07B4 Tube 4 Partial sample drawn |
| 24 | BIO07B5 | Num | 8 | BIO07B5 Tube 5 Partial sample drawn |
| 25 | BIO07B6 | Num | 8 | BIO07B6 Tube 6 Partial sample drawn |
| 26 | BIO07B7 | Num | 8 | BIO07B7 Tube 7 Partial sample drawn |
| 27 | BIO07B8 | Num | 8 | BIO07B8 Tube 8 Partial sample drawn |
| 28 | BIO07B9 | Num | 8 | BIO07B9 Tube 9 Partial sample drawn |
| 29 | BIO07C1 | Num | 8 | BIO07C1 Tube 1 Tourniquet reapplied |
| 30 | BIO07C2 | Num | 8 | BIO07C2 Tube 2 Tourniquet reapplied |
| 31 | BIO07C3 | Num | 8 | BIO07C3 Tube 3 Tourniquet reapplied |
| 32 | BIO07C4 | Num | 8 | BIO07C4 Tube 4 Tourniquet reapplied |
| 33 | BIO07C5 | Num | 8 | BIO07C5 Tube 5 Tourniquet reapplied |
| 34 | BIO07C6 | Num | 8 | BIO07C6 Tube 6 Tourniquet reapplied |
| 35 | BIO07C7 | Num | 8 | BIO07C7 Tube 7 Tourniquet reapplied |
| 36 | BIO07C8 | Num | 8 | BIO07C8 Tube 8 Tourniquet reapplied |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BIO07C9 | Num | 8 | BIO07C9 Tube 9 Tourniquet reapplied |
| 38 | BIO07D1 | Num | 8 | BIO07D1 Tube 1 Fist clenching |
| 39 | BIO07D2 | Num | 8 | BIO07D2 Tube 2 Fist clenching |
| 40 | BIO07D3 | Num | 8 | BIO07D3 Tube 3 Fist clenching |
| 41 | BIO07D4 | Num | 8 | BIO07D4 Tube 4 Fist clenching |
| 42 | BIO07D5 | Num | 8 | BIO07D5 Tube 5 Fist clenching |
| 43 | BIO07D6 | Num | 8 | BIO07D6 Tube 6 Fist clenching |
| 44 | BIO07D7 | Num | 8 | BIO07D7 Tube 7 Fist clenching |
| 45 | BIO07D8 | Num | 8 | BIO07D8 Tube 8 Fist clenching |
| 46 | BIO07D9 | Num | 8 | BIO07D9 Tube 9 Fist clenching |
| 47 | BIO07E1 | Num | 8 | BIO07E1 Tube 1 Needle movement |
| 48 | BIO07E2 | Num | 8 | BIO07E2 Tube 2 Needle movement |
| 49 | BIO07E3 | Num | 8 | BIO07E3 Tube 3 Needle movement |
| 50 | BIO07E4 | Num | 8 | BIO07E4 Tube 4 Needle movement |
| 51 | BIO07E5 | Num | 8 | BIO07E5 Tube 5 Needle movement |
| 52 | BIO07E6 | Num | 8 | BIO07E6 Tube 6 Needle movement |
| 53 | BIO07E7 | Num | 8 | BIO07E7 Tube 7 Needle movement |
| 54 | BIO07E8 | Num | 8 | BIO07E8 Tube 8 Needle movement |
| 55 | BIO07E9 | Num | 8 | BIO07E9 Tube 9 Needle movement |
| 56 | BIO07F1 | Num | 8 | BIO07F1 Tube 1 Participant reclining |
| 57 | BIO07F2 | Num | 8 | BIO07F2 Tube 2 Participant reclining |
| 58 | BIO07F3 | Num | 8 | BIO07F3 Tube 3 Participant reclining |
| 59 | BIO07F4 | Num | 8 | BIO07F4 Tube 4 Participant reclining |
| 60 | BIO07F5 | Num | 8 | BIO07F5 Tube 5 Participant reclining |
| 61 | BIO07F6 | Num | 8 | BIO07F6 Tube 6 Participant reclining |
| 62 | BIO07F7 | Num | 8 | BIO07F7 Tube 7 Participant reclining |
| 63 | BIO07F8 | Num | 8 | BIO07F8 Tube 8 Participant reclining |
| 64 | BIO07F9 | Num | 8 | BIO07F9 Tube 9 Participant reclining |
| 65 | BIO10A | Char | 5 | BIO10A Tube 1: Time processed |
| 66 | BIO10A_AMPM | Char | 1 | BIO10A_AMPM Tube 1: Processed AM/PM |
| 67 | BIO10B | Char | 1 | BIO10B Tube 1: Problems Processing? |
| 68 | BIO10B1 | Num | 8 | BIO10B1 Tube 1: Broken tube |
| 69 | BIO10B2 | Num | 8 | BIO10B2 Tube 1: Sample re-centrifuged |
| 70 | BIO10B3 | Num | 8 | BIO10B3 Tube 1: Clotted |
| 71 | BIO10B4 | Num | 8 | BIO10B4 Tube 1: Hemolyzed |
| 72 | BIO10B5 | Num | 8 | BIO10B5 Tube 1: Lipemic |
| 73 | BIO10B6 | Num | 8 | BIO10B6 Tube 1: Other |
| 74 | BIO10B6A | Char | 30 | BIO10B6A Tube 1:Specify Problem Processing |
| 75 | BIO10C | Num | 8 | BIO10C Tube 1: Number of aliquots |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BIO10D | Num | 8 | BIO10D Tube 1: Volume in last four aliquots |
| 77 | BIO10E | Num | 8 | BIO10E Tube 1: Freezer box number |
| 78 | BIO10F | Char | 5 | BIO10F Tube 1: Time aliquots placed in freezer |
| 79 | BIO10F_AMPM | Char | 1 | BIO10F_AMPM Tube 1: Freezer AM/PM |
| 80 | BIO11A | Char | 5 | BIO11A Tube 2: Time processed |
| 81 | BIO11A_AMPM | Char | 1 | BIO11A_AMPM Tube 2: Processed AM/PM |
| 82 | BIO11B | Char | 1 | BIO11B Tube 2: Problems processing? |
| 83 | BIO11B1 | Num | 8 | BIO11B1 Tube 2: Broken tube |
| 84 | BIO11B2 | Num | 8 | BIO11B2 Tube 2: Sample re-centrifuged |
| 85 | BIO11B3 | Num | 8 | BIO11B3 Tube 2: Clotted |
| 86 | BIO11B4 | Num | 8 | BIO11B4 Tube 2: Hemolyzed |
| 87 | BIO11B5 | Num | 8 | BIO11B5 Tube 2: Lipemic |
| 88 | BIO11B6 | Num | 8 | BIO11B6 Tube 2: Other |
| 89 | BIO11B6A | Char | 30 | BIO11B6A Tube 2:Specify Problem Processing |
| 90 | BIO11C | Num | 8 | BIO11C Tube 2: Number of aliquots |
| 91 | BIO11D | Num | 8 | BIO11D Tube 2: Volume in last four aliquots |
| 92 | BIO11E | Num | 8 | BIO11E Tube 2: Freezer box number |
| 93 | BIO11F | Char | 5 | BIO11F Tube 2: Time aliquots placed in freezer |
| 94 | BIO11F_AMPM | Char | 1 | BIO11F_AMPM Tube 2: Freezer AM/PM |
| 95 | BIO12A | Char | 5 | BIO12A Tube 3: Time processed |
| 96 | BIO12A_AMPM | Char | 1 | BIO12A_AMPM Tube 3: Processed AM/PM |
| 97 | BIO12B | Char | 1 | BIO12B Tube 3: Problems processing? |
| 98 | BIO12B1 | Num | 8 | BIO12B1 Tube 3: Broken tube |
| 99 | BIO12B2 | Num | 8 | BIO12B2 Tube 3: Sample re-centrifuged |
| 100 | BIO12B3 | Num | 8 | BIO12B3 Tube 3: Clotted |
| 101 | BIO12B4 | Num | 8 | BIO12B4 Tube 3: Hemolyzed |
| 102 | BIO12B5 | Num | 8 | BIO12B5 Tube 3: Lipemic |
| 103 | BIO12B6 | Num | 8 | BIO12B6 Tube 3: Other |
| 104 | BIO12B6A | Char | 30 | BIO12B6A Tube 3:Specify Problem Processing |
| 105 | BIO12C | Num | 8 | BIO12C Tube 3: Number of aliquots |
| 106 | BIO12D | Num | 8 | BIO12D Tube 3: Volume in last four aliquots |
| 107 | BIO12E | Num | 8 | BIO12E Tube 3: Freezer box number |
| 108 | BIO12F | Char | 5 | BIO12F Tube 3: Time aliquots placed in freezer |
| 109 | BIO12F_AMPM | Char | 1 | BIO12F_AMPM Tube 3: Freezer AM/PM |
| 110 | BIO13A | Char | 5 | BIO13A Tube 4: Time processed |
| 111 | BIO13A_AMPM | Char | 1 | BIO13A_AMPM Tube 4:Processed AM/PM |
| 112 | BIO13B | Char | 1 | BIO13B Tube 4: Problems processing? |
| 113 | BIO13B1 | Num | 8 | BIO13B1 Tube 4: Broken tube |
| 114 | BIO13B2 | Num | 8 | BIO13B2 Tube 4: Sample re-centrifuged |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BIO13B3 | Num | 8 | BIO13B3 Tube 4: Clotted |
| 116 | BIO13B4 | Num | 8 | BIO13B4 Tube 4: Hemolyzed |
| 117 | BIO13B5 | Num | 8 | BIO13B5 Tube 4: Lipemic |
| 118 | BIO13B6 | Num | 8 | BIO13B6 Tube 4: Other |
| 119 | BIO13B6A | Char | 30 | BIO13B6A Tube 4:Specify Problem Processing |
| 120 | BIO13C | Num | 8 | BIO13C Tube 4: Number of aliquots |
| 121 | BIO13D | Num | 8 | BIO13D Tube 4: Volume in last four aliquots |
| 122 | BIO13E | Num | 8 | BIO13E Tube 4: Freezer box number |
| 123 | BIO13F | Char | 5 | BIO13F Tube 4: Time aliquots placed in freezer |
| 124 | BIO13F_AMPM | Char | 1 | BIO13F_AMPM Tube 4:Freezer AM/PM |
| 125 | BIO14A | Char | 5 | BIO14A Tube 5: Time processed |
| 126 | BIO14A_AMPM | Char | 1 | BIO14A_AMPM Tube 5:Processed AM/PM |
| 127 | BIO14B | Char | 1 | BIO14B Tube 5: Problems processing? |
| 128 | BIO14B1 | Num | 8 | BIO14B1 Tube 5: Broken tube |
| 129 | BIO14B2 | Num | 8 | BIO14B2 Tube 5: Sample re-centrifuged |
| 130 | BIO14B3 | Num | 8 | BIO14B3 Tube 5: Clotted |
| 131 | BIO14B4 | Num | 8 | BIO14B4 Tube 5: Hemolyzed |
| 132 | BIO14B5 | Num | 8 | BIO14B5 Tube 5: Lipemic |
| 133 | BIO14B6 | Num | 8 | BIO14B6 Tube 5: Other |
| 134 | BIO14B6A | Char | 30 | BIO14B6A Tube 5:Specify Problem Processing |
| 135 | BIO14C | Num | 8 | BIO14C Tube 5: Number of aliquots |
| 136 | BIO14D | Num | 8 | BIO14D Tube 5: Volume in last four aliquots |
| 137 | BIO14E | Num | 8 | BIO14E Tube 5: Freezer box number |
| 138 | BIO14F | Char | 5 | BIO14F Tube 5: Time aliquots placed in freezer |
| 139 | BIO14F_AMPM | Char | 1 | BIO14F_AMPM Tube 5:Freezer AM/PM |
| 140 | BIO15A | Char | 5 | BIO15A Tube 6: Time processed |
| 141 | BIO15A_AMPM | Char | 1 | BIO15A_AMPM Tube 6:Processed AM/PM |
| 142 | BIO15B | Char | 1 | BIO15B Tube 6: Problems processing? |
| 143 | BIO15B1 | Num | 8 | BIO15B1 Tube 6: Broken tube |
| 144 | BIO15B2 | Num | 8 | BIO15B2 Tube 6: Sample re-centrifuged |
| 145 | BIO15B3 | Num | 8 | BIO15B3 Tube 6: Clotted |
| 146 | BIO15B4 | Num | 8 | BIO15B4 Tube 6: Hemolyzed |
| 147 | BIO15B5 | Num | 8 | BIO15B5 Tube 6: Lipemic |
| 148 | BIO15B6 | Num | 8 | BIO15B6 Tube 6: Other |
| 149 | BIO15C | Num | 8 | BIO15C Tube 6: Number of aliquots |
| 150 | BIO15D | Num | 8 | BIO15D Tube 6: Volume in last four aliquots |
| 151 | BIO15E | Num | 8 | BIO15E Tube 6: Freezer box number |
| 152 | BIO15F | Char | 5 | BIO15F Tube 6: Time aliquots placed in freezer |
| 153 | BIO15F_AMPM | Char | 1 | BIO15F_AMPM Tube 6:Freezer AM/PM |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | BIO16A | Char | 5 | BIO16A Tube 7: Time sent to clinical center lab: |
| 155 | BIO16A_AMPM | Char | 1 | BIO16A_AMPM Tube 7: Sent to clinical lab AM/PM |
| 156 | BIO17A | Char | 5 | BIO17A Tube 8: Time processed |
| 157 | BIO17A_AMPM | Char | 1 | BIO17A_AMPM Tube 8:Processed AM/PM |
| 158 | BIO17B | Char | 1 | BIO17B Tube 8: Problems processing? |
| 159 | BIO17B1 | Num | 8 | BIO17B1 Tube 8: Broken tube |
| 160 | BIO17B2 | Num | 8 | BIO17B2 Tube 8: Sample re-centrifuged |
| 161 | BIO17B3 | Num | 8 | BIO17B3 Tube 8: Clotted |
| 162 | BIO17B4 | Num | 8 | BIO17B4 Tube 8: Hemolyzed |
| 163 | BIO17B5 | Num | 8 | BIO17B5 Tube 8: Lipemic |
| 164 | BIO17B6 | Num | 8 | BIO17B6 Tube 8: Other |
| 165 | BIO17B6A | Char | 30 | BIO17B6A Tube 8:Specify Problem Processing |
| 166 | BIO17C | Num | 8 | BIO17C Tube 8: Number of aliquots |
| 167 | BIO17D | Num | 8 | BIO17D Tube 8: Volume in last four aliquots |
| 168 | BIO17E | Num | 8 | BIO17E Tube 8: Freezer box number |
| 169 | BIO17F | Char | 5 | BIO17F Tube 8: Time aliquots placed in freezer |
| 170 | BIO17F_AMPM | Char | 1 | BIO17F_AMPM Tube 8:Freezer AM/PM |
| 171 | BIO18B | Char | 5 | BIO18B Tube 9: Time placed in freezer |
| 172 | BIO18B_AMPM | Char | 1 | BIO18B_AMPM Tube 9:Freezer AM/PM |
| 173 | BIO18C | Char | 1 | BIO18C Tube 9: Problems processing? |
| 174 | BIO18C1 | Num | 8 | BIO18C1 Tube 9: Broken tube |
| 175 | BIO18C2 | Num | 8 | BIO18C2 Tube 9: Sample re-centrifuged |
| 176 | BIO18C3 | Num | 8 | BIO18C3 Tube 9: Clotted |
| 177 | BIO18C4 | Num | 8 | BIO18C4 Tube 9: Hemolyzed |
| 178 | BIO18C5 | Num | 8 | BIO18C5 Tube 9: Lipemic |
| 179 | BIO18C6 | Num | 8 | BIO18C6 Tube 9: Other |
| 180 | BIO18C6A | Char | 30 | BIO18C6A Tube 9:Specify Problem Processing |
| 181 | BIO18D | Num | 8 | BIO18D Tube 9: Freezer box number |
| 182 | BIO19 | Char | 1 | BIO19 Urine sample collected |
| 183 | BIO21 | Char | 5 | BIO21 Time urine sample collected |
| 184 | BIO21_AMPM | Char | 1 | BIO21_AMPM urine sample collected AM/PM |
| 185 | BIO22 | Char | 5 | BIO22 Time urine sample processed |
| 186 | BIO22_AMPM | Char | 1 | BIO22 AMPM urine sample processed AM/PM |
| 187 | BIO23 | Num | 8 | BIO23 Number of aliquots with preservative: |
| 188 | BIO24 | Num | 8 | BIO24 Number of aliquots without preservative: |
| 189 | BIO25 | Char | 1 | BIO25 Able to become pregnant? |
| 190 | BIO26 | Char | 1 | BIO26 Pregnancy test requested? |
| 191 | BIO26A | Char | 1 | BIO26A Pregnant? |
| 192 | BIO24A | Char | 5 | BIO24A Time urine sample entered freezer |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 193 | BIO24A_AMPM | Char | 1 | BIO24A_AMPM |
| 194 | VERSION | Char | 21 | Version |
| 195 | BIO0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 196 | BIO03_DAYS | Num | 8 | BIO03 Date of blood collection - Days from enrollment |
| 197 | BIO18A_DAYS | Num | 8 | BIO18A Tube 9: Date placed in freezer - Days from enrollment |
| 198 | BIO20_DAYS | Num | 8 | BIO20 Date of urine sample: - Days from enrollment |

Data Set Name: v2_bpf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BPF01 | Char | 1 | BPF01 Right arm blood pressure |
| 5 | BPF02 | Num | 8 | BPF02 Arm circumference |
| 6 | BPF03 | Char | 1 | BPF03 Cuff size |
| 7 | BPF04 | Num | 8 | BPF04 Respiration Rate |
| 8 | BPF05 | Char | 5 | BPF05 Time first blood pressure taken |
| 9 | BPF05_AMPM | Char | 1 | BPF05_AMPM first bp measurement AM/PM |
| 10 | BPF05A | Num | 8 | BPF05A First Systolic |
| 11 | BPF05B | Num | 8 | BPF05B First Diastolic |
| 12 | BPF05C | Num | 8 | BPF05C First Heart Rate |
| 13 | BPF06 | Char | 5 | BPF06 Time second blood pressure taken: |
| 14 | BPF06_AMPM | Char | 1 | BPF06_AMPM second BP measurement AM/PM |
| 15 | BPF06A | Num | 8 | BPF05A Second Systolic |
| 16 | BPF06B | Num | 8 | BPF05B Second Diastolic |
| 17 | BPF06C | Num | 8 | BPF05C Second Heart Rate |
| 18 | BPF07 | Char | 5 | BPF07 Time third blood pressure taken: |
| 19 | BPF07_AMPM | Char | 1 | BPF07_AMPM third BP measurement AM/PM |
| 20 | BPF07A | Num | 8 | BPF05A Third Systolic |
| 21 | BPF07B | Num | 8 | BPF05B Third Diastolic |
| 22 | BPF07C | Num | 8 | BPF05C Third Heart Rate |
| 23 | BPF08A | Num | 8 | BPF08A Average Systolic |
| 24 | BPF08B | Num | 8 | BPF08B Average Diastolic |
| 25 | BPF08C | Num | 8 | BPF08C Average Heart Rate |
| 26 | VERSION | Char | 21 | Version |
| 27 | BPF0A_DAYS | Num | 8 | BPF0A Form Date - Days from enrollment |
|  |  |  |  |  |
|  |  | BPa |  |  |

## Data Set Name: v2_bsq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BSQ01 | Char | 1 | BSQ01 Snore |
| 5 | BSQ02 | Num | 8 | BSQ02 Describe snore |
| 6 | BSQ03 | Num | 8 | BSQ03 Snoring frequency |
| 7 | BSQ04 | Char | 1 | BSQ04 Bothersome snoring |
| 8 | BSQ05 | Num | 8 | BSQ05 Breathing during sleep |
| 9 | BSQ06 | Char | 1 | BSQ06 Fatigue after sleep |
| 10 | BSQ07 | Char | 1 | BSQ07 Fatigue during waking time |
| 11 | BSQ08 | Char | 1 | BSQ08 Fatigue while driving |
| 12 | BSQ09 | Char | 1 | BSQ09 Frequency of fatigue while driving |
| 13 | BSQ10 | Char | 1 | BSQ10 High blood pressure |
| 14 | VERSION | Char | 21 | Version |
| 15 | BSQ_APNEARISK02 | Char | 5 | Year 1 Berlin Sleep apnea risk |
| 16 | BSQ0A_DAYS | Num | 8 | FORM Date - Days from enrollment |

Data Set Name: v2_cat_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CAT01 | Char | 1 | CAT01 Never cough |
| 5 | CAT02 | Char | 1 | CAT02 No phlegm |
| 6 | CAT03 | Char | 1 | CAT03 No chest tightness |
| 7 | CAT04 | Char | 1 | CAT04 Not out of breath |
| 8 | CAT05 | Char | 1 | CAT05 Not limited at home |
| 9 | CAT06 | Char | 1 | CAT06 Confidence leaving home |
| 10 | CAT07 | Char | 1 | CAT07 Sound sleeping |
| 11 | CAT08 | Char | 1 | CAT08 Energy level |
| 12 | VERSION | Char | 21 | Version |
| 13 | CAT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_ct_airtlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | CISIT | Char | 10 |  |
| 3 | MANUFACTURER | 18 | Manufacturer of scanner - (0000,0070) Manufacturer |  |
| 4 | MODEL | Char | 24 | Model of scanner - (0008,1090) ManufacturersModelName |
| 5 | KERNEL | Char | 13 | Convolution kernel used when reconstructing this scan - (0018,1210) <br> ConvolutionKernel |
| 6 | AIRWAY_ISSUE | Char |  |  |
| airway |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 27 | AVGMAJORINNERDIAM | Num | 8 | The greatest inner (lumen) diameter is measured at each centerline-voxel position. The average major inner diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 28 | AVGINNERAREA | Num | 8 | The lumen area is measured at each centerline voxel position. The average inner (lumen) area represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 29 | AVGAVGWALLTHICKNESS | Num | 8 | At every centerline voxel position the wall thickness at every every half-degree, for total of 720 measurements. These average values are averaged along the middle $1 / 3$ of the airway segment to obtain the Average Average Wall Thickness. |
| 30 | AVGMINOROUTERDIAM | Num | 8 | The smallest outer diameter ismeasured at each centerline voxel position. The average minor outer diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 31 | AVGMAJOROUTERDIAM | Num | 8 | The greatest outer diameter is measured at each centerline voxel position. The average major outer diameter represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 32 | AVGOUTERAREA | Num | 8 | The area enclosed by the outer airway border is measured at each centerline voxel position. The average outer area represents the average of these measurements along the middle $1 / 3$ of the segment. |
| 33 | WALL_AREA | Num | 8 | Wall area (avgouterarea - avginnerarea) |
| 34 | WALL_AREA_PERC | Num | 8 | Wall area \% ((avgouterarea - avginnerarea)/avgouterarea) |
| 35 | AVGINNERPERIMETER | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the inner perimeter is measured. These measurements are then averaged into Average Inner Perimeter. |
| 36 | AVGOUTERPERIMETER | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the Average Outer Perimeter measurement. These measurements are then averaged into Average Outer Perimeter. |
| 37 | AVGWALLAREAFRACTION | Num | 8 | At every centerline voxel position along the middle $1 / 3$ of the airway segment the wall area fraction is determined. These measurements are then averaged into Average Wall Area Fraction. |
| 38 | MINORINNERDIAM_30 | Num | 8 | The smallest lumen diameter at the $30 \%$ point within the segment. |
| 39 | MAJORINNERDIAM_30 | Num | 8 | The largest lumen diameter at the $30 \%$ point within the segment. |
| 40 | INNERCROSSSECAREA_30 | Num | 8 | The lumen area at the $30 \%$ point within the segment. |
| 41 | MINOROUTERDIAM_30 | Num | 8 | The smallest diameter measured at the outer airway wall at the $30 \%$ point within the segment. |
| 42 | MAJOROUTERDIAM_30 | Num | 8 | The largest diameter measured at the outer airway wall at the $30 \%$ point within the segment. |
| 43 | OUTERCROSSSECAREA_30 | Num | 8 | The area enclosed by the outer airway wall at the $30 \%$ point within the segment. |
| 44 | AVGWALLTHICKNESS_30 | Num | 8 | The average wall thickness at the $30 \%$ point within the segment. |
| 45 | INNERPERIMETER_30 | Num | 8 | The lumen perimeter at the $30 \%$ point within the segment. |
| 46 | OUTERPERIMETER_30 | Num | 8 | The perimeter of the outer airway wall at the $30 \%$ point within the segment. |
| 47 | MINORINNERDIAM_40 | Num | 8 | The smallest lumen diameter at the $40 \%$ point within the segment. |
| 48 | MAJORINNERDIAM_40 | Num | 8 | The largest lumen diameter at the $40 \%$ point within the segment. |
| 49 | INNERCROSSSECAREA_40 | Num | 8 | The lumen area at the $40 \%$ point within the segment. |
| 50 | MINOROUTERDIAM_40 | Num | 8 | The smallest diameter measured at the outer airway wall at the $40 \%$ point within the segment. |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 51 | MAJOROUTERDIAM_40 | Num | 8 | The largest diameter measured at the outer airway wall at the $40 \%$ point <br> within the segment. |
| 52 | OUTERCROSSSECAREA_40 | Num | 8 | The area enclosed by the outer airway wall at the $40 \%$ point within the <br> segment. |
| 53 | AVGWALLTHICKNESS_40 | Num | 8 | The average wall thickness at the $40 \%$ point within the segment. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 83 | INEQCIRDIA_50 | Num | 8 | innerequivalentcirclediameter_50 |
| 84 | STDDEVINNERAREA | Num | 8 | Standard deviation of the inner area measurements along the middle $1 / 3$ of the segment. |
| 85 | STDDEVOUTERAREA | Num | 8 | Standard deviation of the Outer Area measurements along the middle $1 / 3$ of the airway segment. |
| 86 | TAPER_RATIO | Num | 8 | Tapering ratio (comparing lumen area or diameter at $30 \%$ and $70 \%$ distances along a segment) |
| 87 | ASPECT_RATIO | Num | 8 | Aspect ratio calculated by float(float(float(i['centerLineLength'])/ (float(float(i['avgMajorInnerDiam'])+ float(i['avgMinorInnerDiam']))/2))) |
| 88 | AVGINNERAREA_ECCENTRICITY | Num | 8 | Calculated by float(float(i['avgMinorInnerDiam']) / float(i['avgMajorInnerDiam'])) |
| 89 | CENTERPOINT_X | Num | 8 | The $x$-component of the respective center-line voxel coordinate. If the value is in integers then the unit is voxels, if the value is in floating point numbers then the unit is millimeters |
| 90 | CENTERPOINT_Y | Num | 8 | The $y$-component of the respective center-line voxel coordinate. If the value is in integers then the unit is voxels, if the value is in floating point numbers then the unit is millimeters |
| 91 | CENTERPOINT_Z | Num | 8 | The z-component of the respective center-line voxel coordinate. If the value is in integers then the unit is voxels, if the value is in floating point numbers then the unit is millimeters |
| 92 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 93 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v2_ct_corepeelrv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 27 | B_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for both lungs at residual volume (RV) |
| 28 | B_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for both lungs at residual volume (RV) |
| 29 | B_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for both lungs at residual volume (RV) |
| 30 | B_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for both lungs at residual volume (RV) |
| 31 | B_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for both lungs at residual volume (RV) |
| 32 | B_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for both lungs at residual volume (RV) |
| 33 | B_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for both lungs at residual volume (RV) |
| 34 | B_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for both lungs at residual volume (RV) |
| 35 | B_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for both lungs at residual volume (RV) |
| 36 | B_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for both lungs at residual volume (RV) |
| 37 | B_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for both lungs at residual volume (RV) |
| 38 | B_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for both lungs at residual volume (RV) |
| 39 | B_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for both lungs at residual volume (RV) |
| 40 | B_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for both lungs at residual volume (RV) |
| 41 | B_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for both lungs at residual volume (RV) |
| 42 | B_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for both lungs at residual volume (RV) |
| 43 | B_MEAN | Num | 8 | Average pixel values within both lungs (HU) at residual volume (RV) |
| 44 | B_MED | Num | 8 | Median pixel values within both lungs (HU) at residual volume (RV) |
| 45 | B_VAR | Num | 8 | Variance of pixel values within both lungs at residual volume (RV) |
| 46 | B_SD | Num | 8 | Standard deviation of pixel values within both lungs at residual volume (RV) |
| 47 | B_SKEW | Num | 8 | Skewness of pixel values in both lungs at residual volume (RV) |
| 48 | B_KURT | Num | 8 | Kurtosis of pixel values in both lungs at residual volume (RV) |
| 49 | B_FWHM | Num | 8 | Full width, half max (HU) for both lungs at residual volume (RV) |
| 50 | B_AIR_V | Num | 8 | Total volume of air in both lungs (milliliters) at residual volume (RV) |
| 51 | B_TIS_V | Num | 8 | Total volume of tissue in both lungs (ml) at residual volume (RV) |
| 52 | B_TOT_V | Num | 8 | Total volume of both lungs (ml) at residual volume (RV) |
| 53 | B_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for both lungs at residual volume (RV) |
| 54 | B_A_SLP | Num | 8 | The slope of the line at the ankle for both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- | :--- |
| 55 | B_A_INT | Num | 8 | The interecept of the line at the ankle for both lungs at residual volume (RV) |$|$| 56 | B_KNEE | Num | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for both lungs at residual volume (RV) |
| ---: | :--- | ---: | :--- | :--- |
| 57 | B_K_SLP | 8 | The slope of the line at the knee for both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 80 | BC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for core section of both lungs at residual volume (RV) |
| 81 | BC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for core section of both lungs at residual volume (RV) |
| 82 | BC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for core section of both lungs at residual volume (RV) |
| 83 | BC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for core section of both lungs at residual volume (RV) |
| 84 | BC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for core section of both lungs at residual volume (RV) |
| 85 | BC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for core section of both lungs at residual volume (RV) |
| 86 | BC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for core section of both lungs at residual volume (RV) |
| 87 | BC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for core section of both lungs at residual volume (RV) |
| 88 | BC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for core section of both lungs at residual volume (RV) |
| 89 | BC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for core section of both lungs at residual volume (RV) |
| 90 | BC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for core section of both lungs at residual volume (RV) |
| 91 | BC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for core section of both lungs at residual volume (RV) |
| 92 | BC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for core section of both lungs at residual volume (RV) |
| 93 | BC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for core section of both lungs at residual volume (RV) |
| 94 | BC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for core section of both lungs at residual volume (RV) |
| 95 | BC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for core section of both lungs at residual volume (RV) |
| 96 | BC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for core section of both lungs at residual volume (RV) |
| 97 | BC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of both lungs at residual volume (RV) |
| 98 | BC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for core section of both lungs at residual volume (RV) |
| 99 | BC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for core section of both lungs at residual volume (RV) |
| 100 | BC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for core section of both lungs at residual volume (RV) |
| 101 | BC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for core section of both lungs at residual volume (RV) |
| 102 | BC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for core section of both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 103 | BC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for core section of both lungs at residual volume (RV) |
| 104 | BC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for core section of both lungs at residual volume (RV) |
| 105 | BC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for core section of both lungs at residual volume (RV) |
| 106 | BC_MEAN | Num | 8 | Average pixel values within core section of both lungs (HU) at residual volume (RV) |
| 107 | BC_MED | Num | 8 | Median pixel values within core region of both lungs (HU) at residual volume (RV) |
| 108 | BC_VAR | Num | 8 | Variance of pixel values within core region of both lungs at residual volume (RV) |
| 109 | BC_SD | Num | 8 | Standard deviation of pixel values within core region of both lungs at residual volume (RV) |
| 110 | BC_SKEW | Num | 8 | Skewness of pixel values in core region of both lungs at residual volume (RV) |
| 111 | BC_KURT | Num | 8 | Kurtosis of pixel values in core section of both lungs at residual volume (RV) |
| 112 | BC_FWHM | Num | 8 | Full width, half max (HU) for core section of both lungs at residual volume (RV) |
| 113 | BC_AIR_V | Num | 8 | Total volume of air in core section of both lungs (milliliters) at residual volume (RV) |
| 114 | BC_TIS_V | Num | 8 | Total volume of tissue in core region of both lungs (ml) at residual volume (RV) |
| 115 | BC_TOT_V | Num | 8 | Total volume of core region of both lungs (ml) at residual volume (RV) |
| 116 | BC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of both lungs at residual volume (RV) |
| 117 | BC_A_SLP | Num | 8 | The slope of the line at the ankle for core section of both lungs at residual volume (RV) |
| 118 | BC_A_INT | Num | 8 | The interecept of the line at the ankle for core section of both lungs at residual volume (RV) |
| 119 | BC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of both lungs at residual volume (RV) |
| 120 | BC_K_SLP | Num | 8 | The slope of the line at the knee for core section of both lungs at residual volume (RV) |
| 121 | BC_K_INT | Num | 8 | The intercept of the line at the knee for core section of both lungs at residual volume (RV) |
| 122 | BC_C_CUTOFF_HU | Num | 8 | Core section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 123 | BC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 124 | BC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels. at residual volume (RV) |
| 125 | BC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels. at residual volume (RV) |
| 126 | BC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 127 | BC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 128 | BC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 129 | BC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |
| 130 | BC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 131 | BC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 132 | BC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 133 | BC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of both lungs at residual volume (RV) |
| 134 | BC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core region of both lungs at residual volume (RV) |
| 135 | BC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for core region of both lungs at residual volume (RV) |
| 136 | BP_TOT_VX | Num | 8 | Total number of voxels in peel region of both lungs at residual volume (RV) |
| 137 | BP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for peel section of both lungs at residual volume (RV) |
| 138 | BP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs at residual volume (RV) |
| 139 | BP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs at residual volume (RV) |
| 140 | BP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for peel section of both lungs at residual volume (RV) |
| 141 | BP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for peel section of both lungs at residual volume (RV) |
| 142 | BP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for peel section of both lungs at residual volume (RV) |
| 143 | BP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for peel section of both lungs at residual volume (RV) |
| 144 | BP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for peel section of both lungs at residual volume (RV) |
| 145 | BP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for peel section of both lungs at residual volume (RV) |
| 146 | BP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for peel section of both lungs at residual volume (RV) |
| 147 | BP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for peel section of both lungs at residual volume (RV) |
| 148 | BP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for peel section of both lungs at residual volume (RV) |
| 149 | BP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for peel section of both lungs at residual volume (RV) |
| 150 | BP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for peel section of both lungs at residual volume (RV) |
| 151 | BP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for peel section of both lungs at residual volume (RV) |
| 152 | BP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for peel section of both lungs at residual volume (RV) |
| 153 | BP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of both lungs at residual volume (RV) |
| 154 | BP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of both lungs at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 155 | BP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 156 | BP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 157 | BP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 158 | BP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 159 | BP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 160 | BP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for peel section of both lungs <br> at residual volume (RV) |
| 161 | BP_AE_50 | Num | Num | 8 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 182 | BP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of both lungs at residual volume (RV) |
| 183 | BP_K_SLP | Num | 8 | The slope of the line at the knee for peel section of both lungs at residual volume (RV) |
| 184 | BP_K_INT | Num | 8 | The intercept of the line at the knee for peel section of both lungs at residual volume <br> (RV) |
| 185 | BP_C_CUTOFF_HU | Num | 8 | Peel section of both lungs: definition of emphysema cutoff value (HU) values less than <br> this are considered emphysema at residual volume (RV) |
| 186 | BP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of the peel section of both lungs to <br> emphysema voxels at residual volume (RV) |
| 187 | BP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of the peel section <br> of both lungs to emphysema voxels. at residual volume (RV) |
| 188 | BP_C_V_X_M | Num | 8 | 8 |
| 203 | Num | The X component of the mean vector drawn from the centroid of the peel section of both <br> lungs to emphysema voxels. at residual volume (RV) |  |  |
| 189 | BP_C_V_X_SD | Num | Number of voxels below or equal to -910 hounsfield units for left lung at residual |  |
| volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 206 | L_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for left lung at residual volume (RV) |
| 207 | L_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for left lung at residual volume (RV) |
| 208 | L_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for left lung at residual volume (RV) |
| 209 | L_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for left lung at residual volume (RV) |
| 210 | L_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for left lung at residual volume (RV) |
| 211 | L_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for left lung at residual volume (RV) |
| 212 | L_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for left lung at residual volume (RV) |
| 213 | L_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for left lung at residual volume (RV) |
| 214 | L_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for left lung at residual volume (RV) |
| 215 | L_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for left lung at residual volume (RV) |
| 216 | L_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for left lung at residual volume (RV) |
| 217 | L_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for left lung at residual volume (RV) |
| 218 | L_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for left lung at residual volume (RV) |
| 219 | L_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for left lung at residual volume (RV) |
| 220 | L_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for left lung at residual volume (RV) |
| 221 | L_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for left lung at residual volume (RV) |
| 222 | L_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for left lung at residual volume (RV) |
| 223 | L_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for left lung at residual volume (RV) |
| 224 | L_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for left lung at residual volume (RV) |
| 225 | L_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for left lung at residual volume (RV) |
| 226 | L_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for left lung at residual volume (RV) |
| 227 | L_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for left lung at residual volume (RV) |
| 228 | L_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 229 | L_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for left lung at residual <br> volume (RV) |
| 230 | L_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for left lung at residual <br> volume (RV) |
| 231 | L_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for left lung at residual <br> volume (RV) |
| 232 | L_MEAN | Num | 8 | Average pixel values within left lung (HU) at residual volume (RV) |
| 233 | L_MED | Num | 8 | Median pixel values within left lung (HU) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 258 | L_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for left lung at residual <br> volume (RV) |
| 259 | L_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for left lung at residual <br> volume (RV) |
| 260 | L_VESSEL_VX | Num | 8 | Total number of vessel voxels in left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 282 | LC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for core section of left lung at <br> residual volume (RV) |
| 283 | LC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for core section of left lung at <br> residual volume (RV) |
| 284 | LC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for core section of left lung at <br> residual volume (RV) |
| 285 | LC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for core section of left lung at <br> residual volume (RV) |
| 286 | LC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of left lung at <br> residual volume (RV) |
| 307 | LC_AE_50 | Num | 8 | 8 |
| 309 | LC_K_K_SLP | Number of voxels above or equal to -50 hounsfield units for core section of left lung at |  |  |
| residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | LC_K_INT | Num | 8 | The intercept of the line at the knee for core section of left lung at residual volume (RV) |
| 311 | LC_C_CUTOFF_HU | Num | 8 | Core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 312 | LC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 313 | LC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of core section of left lung to emphysema voxels. at residual volume (RV) |
| 314 | LC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels. at residual volume (RV) |
| 315 | LC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 316 | LC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 317 | LC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 318 | LC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 319 | LC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at residual volume (RV) |
| 320 | LC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of left lung at residual volume (RV) |
| 321 | LC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of left lung at residual volume (RV) |
| 322 | LC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of left lung at residual volume (RV) |
| 323 | LC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core section of left lung at residual volume (RV) |
| 324 | LC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) core section of left lung at residual volume (RV) |
| 325 | LL_TOT_VX | Num | 8 | Total number of voxels in lower part of left lung at residual volume (RV) |
| 326 | LL_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of left lung at residual volume (RV) |
| 327 | LL_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of left lung at residual volume (RV) |
| 328 | LL_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of left lung at residual volume (RV) |
| 329 | LL_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of left lung at residual volume (RV) |
| 330 | LL_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of left lung at residual volume (RV) |
| 331 | LL_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of left lung at residual volume (RV) |
| 332 | LL_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of left lung at residual volume (RV) |
| 333 | LL_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 334 | LL_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of left lung at residual volume (RV) |
| 335 | LL_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of left lung at residual volume (RV) |
| 336 | LL_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of left lung at residual volume (RV) |
| 337 | LL_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for lower part of left lung at residual volume (RV) |
| 338 | LL_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for lower part of left lung at residual volume (RV) |
| 339 | LL_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for lower part of left lung at residual volume (RV) |
| 340 | LL_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for lower part of left lung at residual volume (RV) |
| 341 | LL_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for lower part of left lung at residual volume (RV) |
| 342 | LL_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for lower part of left lung at residual volume (RV) |
| 343 | LL_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for lower part of left lung at residual volume (RV) |
| 344 | LL_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for lower part of left lung at residual volume (RV) |
| 345 | LL_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for lower part of left lung at residual volume (RV) |
| 346 | LL_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for lower part of left lung at residual volume (RV) |
| 347 | LL_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for lower part of left lung at residual volume (RV) |
| 348 | LL_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for lower part of left lung at residual volume (RV) |
| 349 | LL_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for lower part of left lung at residual volume (RV) |
| 350 | LL_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of left lung at residual volume (RV) |
| 351 | LL_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for lower part of left lung at residual volume (RV) |
| 352 | LL_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for lower part of left lung at residual volume (RV) |
| 353 | LL_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for lower part of left lung at residual volume (RV) |
| 354 | LL_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of left lung at residual volume (RV) |
| 355 | LL_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of left lung at residual volume (RV) |
| 356 | LL_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 357 | LL_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of left lung at <br> residual volume (RV) |
| 358 | LL_MEAN | Num | 8 | Average pixel values within lower part of left lung (HU) at residual volume (RV) |
| 359 | LL_MED | Num | 8 | Median pixel values within lower part of left lung (HU) at residual volume (RV) |
| 360 | LL_VAR | Num | 8 | Variance of pixel values within lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 386 | LL_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 410 | LLC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 411 | LLC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 412 | LLC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for lower part of core section <br> of left lung at residual volume (RV) |
| 413 | LLC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of <br> left lung at residual volume (RV) |
| 414 | LLC_AE_100 | Num | 8 | Num |
| 415 | LLC_AE_150 | Number of voxels above or equal to -100 hounsfield units for lower part of core section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 434 | LLC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of left lung at residual volume (RV) |
| 435 | LLC_K_SLP | Num | 8 | The slope of the line at the knee for lower part of core section of left lung at residual volume (RV) |
| 436 | LLC_K_INT | Num | 8 | The intercept of the line at the knee for lower part of core section of left lung at residual volume (RV) |
| 437 | LLC_C_CUTOFF_HU | Num | 8 | Lower part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 438 | LLC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 439 | LLC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 440 | LLC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 441 | LLC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 442 | LLC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 443 | LLC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 444 | LLC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 445 | LLC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of left lung to emphysema voxels at residual volume (RV) |
| 446 | LLC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 447 | LLC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 448 | LLC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of left lung at residual volume (RV) |
| 449 | LLC_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of core section of left lung at residual volume (RV) |
| 450 | LLC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) lower part of core section of left lung at residual volume (RV) |
| 451 | LLP_TOT_VX | Num | 8 | Total number of voxels in lower part of peel section of left lung at residual volume (RV) |
| 452 | LLP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 453 | LLP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 454 | LLP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 455 | LLP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 456 | LLP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 457 | LLP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 458 | LLP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 459 | LLP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 460 | LLP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section <br> of left lung at residual volume (RV) |
| 461 | LLP_BE_856 | Num | 8 | Num |
| 462 | LLP_BE_850 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 480 | LLP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 481 | LLP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 482 | LLP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 483 | LLP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section of left lung at residual volume (RV) |
| 484 | LLP_MEAN | Num | 8 | Average pixel values within lower part of peel section of left lung (HU) at residual volume (RV) |
| 485 | LLP_MED | Num | 8 | Median pixel values within lower part of peel section of left lung (HU) at residual volume (RV) |
| 486 | LLP_VAR | Num | 8 | Variance of pixel values within lower part of peel section of left lung at residual volume (RV) |
| 487 | LLP_SD | Num | 8 | Standard deviation of pixel values within lower part of peel section of left lung at residual volume (RV) |
| 488 | LLP_SKEW | Num | 8 | Skewness of pixel values in lower part of peel section of left lung at residual volume (RV) |
| 489 | LLP_KURT | Num | 8 | Kurtosis of pixel values in lower part of peel section of left lung at residual volume (RV) |
| 490 | LLP_FWHM | Num | 8 | Full width, half max (HU) for lower part of peel section of left lung at residual volume (RV) |
| 491 | LLP_AIR_V | Num | 8 | Total volume of air in lower part of peel section of left lung (milliliters) at residual volume (RV) |
| 492 | LLP_TIS_V | Num | 8 | Total volume of tissue in lower part of peel section of left lung (ml) at residual volume (RV) |
| 493 | LLP_TOT_V | Num | 8 | Total volume of lower part of peel section of left lung (ml) at residual volume (RV) |
| 494 | LLP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of left lung at residual volume (RV) |
| 495 | LLP_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of peel section of left lung at residual volume (RV) |
| 496 | LLP_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of peel section of left lung at residual volume (RV) |
| 497 | LLP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of left lung at residual volume (RV) |
| 498 | LLP_K_SLP | Num | 8 | The slope of the line at the knee for lower part of peel section of left lung at residual volume (RV) |
| 499 | LLP_K_INT | Num | 8 | The intercept of the line at the knee for lower part of peel section of left lung at residual volume (RV) |
| 500 | LLP_C_CUTOFF_HU | Num | 8 | Lower part of peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 501 | LLP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 502 | LLP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 503 | LLP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels. at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 504 | LLP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 505 | LLP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 506 | LLP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 507 | LLP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 508 | LLP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 509 | LLP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 510 | LLP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 511 | LLP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of left lung at residual volume (RV) |
| 512 | LLP_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of peel section of left lung at residual volume (RV) |
| 513 | LLP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of left lung at residual volume (RV) |
| 514 | LM_TOT_VX | Num | 8 | Total number of voxels in middle part of left lung at residual volume (RV) |
| 515 | LM_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of left lung at residual volume (RV) |
| 516 | LM_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of left lung at residual volume (RV) |
| 517 | LM_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of left lung at residual volume (RV) |
| 518 | LM_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of left lung at residual volume (RV) |
| 519 | LM_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of left lung at residual volume (RV) |
| 520 | LM_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of left lung at residual volume (RV) |
| 521 | LM_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of left lung at residual volume (RV) |
| 522 | LM_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of left lung at residual volume (RV) |
| 523 | LM_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of left lung at residual volume (RV) |
| 524 | LM_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of left lung at residual volume (RV) |
| 525 | LM_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of left lung at residual volume (RV) |
| 526 | LM_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of left lung at residual volume (RV) |
| 527 | LM_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 528 | LM_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of left lung at residual volume (RV) |
| 529 | LM_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of left lung at residual volume (RV) |
| 530 | LM_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of left lung at residual volume (RV) |
| 531 | LM_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of left lung at residual volume (RV) |
| 532 | LM_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of left lung at residual volume (RV) |
| 533 | LM_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of left lung at residual volume (RV) |
| 534 | LM_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of left lung at residual volume (RV) |
| 535 | LM_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of left lung at residual volume (RV) |
| 536 | LM_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for middle part of left lung at residual volume (RV) |
| 537 | LM_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of left lung at residual volume (RV) |
| 538 | LM_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of left lung at residual volume (RV) |
| 539 | LM_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of left lung at residual volume (RV) |
| 540 | LM_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of left lung at residual volume (RV) |
| 541 | LM_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of left lung at residual volume (RV) |
| 542 | LM_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of left lung at residual volume (RV) |
| 543 | LM_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of left lung at residual volume (RV) |
| 544 | LM_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of left lung at residual volume (RV) |
| 545 | LM_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of left lung at residual volume (RV) |
| 546 | LM_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of left lung at residual volume (RV) |
| 547 | LM_MEAN | Num | 8 | Average pixel values within middle part of left lung (HU) at residual volume (RV) |
| 548 | LM_MED | Num | 8 | Median pixel values within middle part of left lung (HU) at residual volume (RV) |
| 549 | LM_VAR | Num | 8 | Variance of pixel values within middle part of left lung at residual volume (RV) |
| 550 | LM_SD | Num | 8 | Standard deviation of pixel values within middle part of left lung at residual volume (RV) |
| 551 | LM_SKEW | Num | 8 | Skewness of pixel values in middle part of left lung at residual volume (RV) |
| 552 | LM_KURT | Num | 8 | Kurtosis of pixel values in middle part of left lung at residual volume (RV) |
| 553 | LM_FWHM | Num | 8 | Full width, half max (HU) for middle part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 554 | LM_AIR_V | Num | 8 | Total volume of air in middle part of left lung (milliliters) at residual volume (RV) |
| 555 | LM_TIS_V | Num | 8 | Total volume of tissue in middle part of left lung (ml) at residual volume (RV) |
| 556 | LM_TOT_V | Num | 8 | Total volume of middle part of left lung (ml) at residual volume (RV) |
| 557 | LM_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of left lung at residual volume (RV) |
| 558 | LM_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of left lung at residual volume (RV) |
| 559 | LM_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of left lung at residual volume (RV) |
| 560 | LM_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of left lung at residual volume (RV) |
| 561 | LM_K_SLP | Num | 8 | The slope of the line at the knee for middle part of left lung at residual volume (RV) |
| 562 | LM_K_INT | Num | 8 | The intercept of the line at the knee for middle part of left lung at residual volume (RV) |
| 563 | LM_C_CUTOFF_HU | Num | 8 | Middle part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 564 | LM_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 565 | LM_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of left lung to emphysema voxels. at residual volume (RV) |
| 566 | LM_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels. at residual volume (RV) |
| 567 | LM_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 568 | LM_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 569 | LM_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 570 | LM_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 571 | LM_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of left lung to emphysema voxels at residual volume (RV) |
| 572 | LM_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 573 | LM_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 574 | LM_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of left lung at residual volume (RV) |
| 575 | LM_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of left lung at residual volume (RV) |
| 576 | LM_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of left lung at residual volume (RV) |
| 577 | LMC_TOT_VX | Num | 8 | Total number of voxels in middle part of core section of left lung at residual volume (RV) |
| 578 | LMC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 579 | LMC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 580 | LMC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 581 | LMC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 582 | LMC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 583 | LMC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 584 | LMC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 585 | LMC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 586 | LMC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 587 | LMC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 588 | LMC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 589 | LMC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 590 | LMC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 591 | LMC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 592 | LMC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 593 | LMC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 594 | LMC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 595 | LMC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 596 | LMC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 597 | LMC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 598 | LMC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 599 | LMC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 600 | LMC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 601 | LMC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 602 | LMC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 603 | LMC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 604 | LMC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 605 | LMC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 606 | LMC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 607 | LMC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 608 | LMC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 609 | LMC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of core section of left lung at residual volume (RV) |
| 610 | LMC_MEAN | Num | 8 | Average pixel values within middle part of core section of left lung (HU) at residual volume (RV) |
| 611 | LMC_MED | Num | 8 | Median pixel values within middle part of core section of left lung (HU) at residual volume (RV) |
| 612 | LMC_VAR | Num | 8 | Variance of pixel values within middle part of core section of left lung at residual volume (RV) |
| 613 | LMC_SD | Num | 8 | Standard deviation of pixel values within middle part of core section of left lung at residual volume (RV) |
| 614 | LMC_SKEW | Num | 8 | Skewness of pixel values in middle part of core section of left lung at residual volume (RV) |
| 615 | LMC_KURT | Num | 8 | Kurtosis of pixel values in middle part of core section of left lung at residual volume (RV) |
| 616 | LMC_FWHM | Num | 8 | Full width, half max (HU) for middle part of core section of left lung at residual volume (RV) |
| 617 | LMC_AIR_V | Num | 8 | Total volume of air in middle part of core section of left lung (milliliters) at residual volume (RV) |
| 618 | LMC_TIS_V | Num | 8 | Total volume of tissue in middle part of core section of left lung (ml) at residual volume (RV) |
| 619 | LMC_TOT_V | Num | 8 | Total volume of middle part of core section of left lung (ml) at residual volume (RV) |
| 620 | LMC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of core section of left lung at residual volume (RV) |
| 621 | LMC_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of core section of left lung at residual volume (RV) |
| 622 | LMC_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of core section of left lung at residual volume (RV) |
| 623 | LMC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of core section of left lung at residual volume (RV) |
| 624 | LMC_K_SLP | Num | 8 | The slope of the line at the knee for middle part of core section of left lung at residual volume (RV) |
| 625 | LMC_K_INT | Num | 8 | The intercept of the line at the knee for middle part of core section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 626 | LMC_C_CUTOFF_HU | Num | 8 | Middle part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 627 | LMC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 628 | LMC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 629 | LMC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels. at residual volume (RV) |
| 630 | LMC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 631 | LMC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 632 | LMC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 633 | LMC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 634 | LMC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of core section of left lung to emphysema voxels at residual volume (RV) |
| 635 | LMC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 636 | LMC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 637 | LMC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core section of left lung at residual volume (RV) |
| 638 | LMC_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of core section of left lung at residual volume (RV) |
| 639 | LMC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of core section of left lung at residual volume (RV) |
| 640 | LMP_TOT_VX | Num | 8 | Total number of voxels in middle part of peel section of left lung at residual volume (RV) |
| 641 | LMP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 642 | LMP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 643 | LMP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 644 | LMP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 645 | LMP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 646 | LMP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 647 | LMP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 648 | LMP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 649 | LMP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 650 | LMP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 651 | LMP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 652 | LMP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 653 | LMP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 654 | LMP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 655 | LMP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 656 | LMP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 657 | LMP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 658 | LMP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 659 | LMP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 660 | LMP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 661 | LMP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 662 | LMP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 663 | LMP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 664 | LMP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 665 | LMP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 666 | LMP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 667 | LMP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 668 | LMP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 669 | LMP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 670 | LMP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 671 | LMP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 672 | LMP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of peel section of left lung at residual volume (RV) |
| 673 | LMP_MEAN | Num | 8 | Average pixel values within middle part of peel section of left lung (HU) at residual volume (RV) |
| 674 | LMP_MED | Num | 8 | Median pixel values within middle part of peel section of left lung (HU) at residual volume (RV) |
| 675 | LMP_VAR | Num | 8 | Variance of pixel values within middle part of peel section of left lung at residual volume (RV) |
| 676 | LMP_SD | Num | 8 | Standard deviation of pixel values within middle part of peel section of left lung at residual volume (RV) |
| 677 | LMP_SKEW | Num | 8 | Skewness of pixel values in middle part of peel section of left lung at residual volume (RV) |
| 678 | LMP_KURT | Num | 8 | Kurtosis of pixel values in middle part of peel section of left lung at residual volume (RV) |
| 679 | LMP_FWHM | Num | 8 | Full width, half max (HU) for middle part of peel section of left lung at residual volume (RV) |
| 680 | LMP_AIR_V | Num | 8 | Total volume of air in middle part of peel section of left lung (milliliters) at residual volume (RV) |
| 681 | LMP_TIS_V | Num | 8 | Total volume of tissue in middle part of peel section of left lung (ml) at residual volume (RV) |
| 682 | LMP_TOT_V | Num | 8 | Total volume of middle part of peel section of left lung (ml) at residual volume (RV) |
| 683 | LMP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of left lung at residual volume (RV) |
| 684 | LMP_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of peel section of left lung at residual volume (RV) |
| 685 | LMP_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of peel section of left lung at residual volume (RV) |
| 686 | LMP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of left lung at residual volume (RV) |
| 687 | LMP_K_SLP | Num | 8 | The slope of the line at the knee for middle part of peel section of left lung at residual volume (RV) |
| 688 | LMP_K_INT | Num | 8 | The intercept of the line at the knee for middle part of peel section of left lung at residual volume (RV) |
| 689 | LMP_C_CUTOFF_HU | Num | 8 | Middle part of peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 690 | LMP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 691 | LMP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 692 | LMP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 693 | LMP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 694 | LMP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 695 | LMP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 696 | LMP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 697 | LMP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of peel section of left lung to emphysema voxels at residual volume (RV) |
| 698 | LMP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 699 | LMP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 700 | LMP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of peel section of left lung at residual volume (RV) |
| 701 | LMP_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of peel section of left lung at residual volume (RV) |
| 702 | LMP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of peel section of left lung at residual volume (RV) |
| 703 | LP_TOT_VX | Num | 8 | Total number of voxels in peel section of left lung at residual volume (RV) |
| 704 | LP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for peel section of left lung at residual volume (RV) |
| 705 | LP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at residual volume (RV) |
| 706 | LP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at residual volume (RV) |
| 707 | LP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for peel section of left lung at residual volume (RV) |
| 708 | LP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for peel section of left lung at residual volume (RV) |
| 709 | LP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for peel section of left lung at residual volume (RV) |
| 710 | LP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for peel section of left lung at residual volume (RV) |
| 711 | LP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for peel section of left lung at residual volume (RV) |
| 712 | LP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for peel section of left lung at residual volume (RV) |
| 713 | LP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for peel section of left lung at residual volume (RV) |
| 714 | LP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for peel section of left lung at residual volume (RV) |
| 715 | LP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for peel section of left lung at residual volume (RV) |
| 716 | LP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for peel section of left lung at residual volume (RV) |
| 717 | LP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for peel section of left lung at residual volume (RV) |
| 718 | LP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 719 | LP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for peel section of left lung at residual volume (RV) |
| 720 | LP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of left lung at residual volume (RV) |
| 721 | LP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of left lung at residual volume (RV) |
| 722 | LP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of left lung at residual volume (RV) |
| 723 | LP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of left lung at residual volume (RV) |
| 724 | LP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of left lung at residual volume (RV) |
| 725 | LP_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for peel section of left lung at residual volume (RV) |
| 726 | LP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for peel section of left lung at residual volume (RV) |
| 727 | LP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for peel section of left lung at residual volume (RV) |
| 728 | LP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for peel section of left lung at residual volume (RV) |
| 729 | LP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for peel section of left lung at residual volume (RV) |
| 730 | LP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for peel section of left lung at residual volume (RV) |
| 731 | LP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for peel section of left lung at residual volume (RV) |
| 732 | LP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for peel section of left lung at residual volume (RV) |
| 733 | LP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for peel section of left lung at residual volume (RV) |
| 734 | LP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for peel section of left lung at residual volume (RV) |
| 735 | LP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for peel section of left lung at residual volume (RV) |
| 736 | LP_MEAN | Num | 8 | Average pixel values within peel section of left lung (HU) at residual volume (RV) |
| 737 | LP_MED | Num | 8 | Median pixel values within peel section of left lung (HU) at residual volume (RV) |
| 738 | LP_VAR | Num | 8 | Variance of pixel values within peel section of left lung at residual volume (RV) |
| 739 | LP_SD | Num | 8 | Standard deviation of pixel values within peel section of left lung at residual volume (RV) |
| 740 | LP_SKEW | Num | 8 | Skewness of pixel values in peel section of left lung at residual volume (RV) |
| 741 | LP_KURT | Num | 8 | Kurtosis of pixel values in peel section of left lung at residual volume (RV) |
| 742 | LP_FWHM | Num | 8 | Full width, half max (HU) for peel section of left lung at residual volume (RV) |
| 743 | LP_AIR_V | Num | 8 | Total volume of air in peel section of left lung (milliliters) at residual volume (RV) |
| 744 | LP_TIS_V | Num | 8 | Total volume of tissue in peel section of left lung (ml) at residual volume (RV) |
| 745 | LP_TOT_V | Num | 8 | Total volume of peel section of left lung (ml) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 746 | LP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for peel section of left lung at residual volume (RV) |
| 747 | LP_A_SLP | Num | 8 | The slope of the line at the ankle for peel section of left lung at residual volume (RV) |
| 748 | LP_A_INT | Num | 8 | The interecept of the line at the ankle for peel section of left lung at residual volume (RV) |
| 749 | LP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for peel section of left lung at residual volume (RV) |
| 750 | LP_K_SLP | Num | 8 | The slope of the line at the knee for peel section of left lung at residual volume (RV) |
| 751 | LP_K_INT | Num | 8 | The intercept of the line at the knee for peel section of left lung at residual volume (RV) |
| 752 | LP_C_CUTOFF_HU | Num | 8 | Peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema at residual volume (RV) |
| 753 | LP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 754 | LP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 755 | LP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels. at residual volume (RV) |
| 756 | LP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 757 | LP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 758 | LP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 759 | LP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 760 | LP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at residual volume (RV) |
| 761 | LP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for peel section of left lung at residual volume (RV) |
| 762 | LP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for peel section of left lung at residual volume (RV) |
| 763 | LP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for peel section of left lung at residual volume (RV) |
| 764 | LP_VESSEL_VX | Num | 8 | Total number of vessel voxels in peel section of left lung at residual volume (RV) |
| 765 | LP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for peel section of left lung at residual volume (RV) |
| 766 | LU_TOT_VX | Num | 8 | Total number of voxels in upper part of left lung at residual volume (RV) |
| 767 | LU_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of left lung at residual volume (RV) |
| 768 | LU_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of left lung at residual volume (RV) |
| 769 | LU_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of left lung at residual volume (RV) |
| 770 | LU_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 771 | LU_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of left lung at <br> residual volume (RV) |
| 772 | LU_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of left lung at <br> residual volume (RV) |
| 773 | LU_BE_900 | Num | 8 | number of voxels below or equal to -900 hounsfield units for upper part of left lung at <br> residual volume (RV) |
| 774 | LU_BE_890 | Num | 8 | Number |
| 775 | LU_BE_870 | Number of voxels below or equal to -890 hounsfield units for upper part of left lung at |  |  |
| residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 794 | LU_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of left lung at residual volume (RV) |
| 795 | LU_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of left lung at residual volume (RV) |
| 796 | LU_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of left lung at residual volume (RV) |
| 797 | LU_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of left lung at residual volume (RV) |
| 798 | LU_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of left lung at residual volume (RV) |
| 799 | LU_MEAN | Num | 8 | Average pixel values within upper part of left lung (HU) at residual volume (RV) |
| 800 | LU_MED | Num | 8 | Median pixel values within upper part of left lung (HU) at residual volume (RV) |
| 801 | LU_VAR | Num | 8 | Variance of pixel values within upper part of left lung at residual volume (RV) |
| 802 | LU_SD | Num | 8 | Standard deviation of pixel values within upper part of left lung at residual volume (RV) |
| 803 | LU_SKEW | Num | 8 | Skewness of pixel values in upper part of left lung at residual volume (RV) |
| 804 | LU_KURT | Num | 8 | Kurtosis of pixel values in upper part of left lung at residual volume (RV) |
| 805 | LU_FWHM | Num | 8 | Full width, half max (HU) for upper part of left lung at residual volume (RV) |
| 806 | LU_AIR_V | Num | 8 | Total volume of air in upper part of left lung (milliliters) at residual volume (RV) |
| 807 | LU_TIS_V | Num | 8 | Total volume of tissue in upper part of left lung (ml) at residual volume (RV) |
| 808 | LU_TOT_V | Num | 8 | Total volume of upper part of left lung (ml) at residual volume (RV) |
| 809 | LU_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of left lung at residual volume (RV) |
| 810 | LU_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of left lung at residual volume (RV) |
| 811 | LU_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of left lung at residual volume (RV) |
| 812 | LU_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of left lung at residual volume (RV) |
| 813 | LU_K_SLP | Num | 8 | The slope of the line at the knee for upper part of left lung at residual volume (RV) |
| 814 | LU_K_INT | Num | 8 | The intercept of the line at the knee for upper part of left lung at residual volume (RV) |
| 815 | LU_C_CUTOFF_HU | Num | 8 | Upper part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 816 | LU_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 817 | LU_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of left lung to emphysema voxels. at residual volume (RV) |
| 818 | LU_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels. at residual volume (RV) |
| 819 | LU_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 820 | LU_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 821 | LU_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |
| 822 | LU_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 823 | LU_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of upper part <br> of left lung to emphysema voxels at residual volume (RV) |
| 824 | LU_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for upper part of left lung <br> at residual volume (RV) |
| 825 | LU_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for upper part of left lung <br> at residual volume (RV) |
| 826 | LU_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for upper part of left lung <br> at residual volume (RV) |
| 827 | LU_VESSEL_VX | Num | 8 | Num |
| 828 | LU_VESSEL_PERCENT | Num number of vessel voxels in upper part of left lung at residual volume (RV) | 8 | 8 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 847 | LUC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of core section <br> of left lung at residual volume (RV) |
| 848 | LUC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of core section <br> of left lung at residual volume (RV) |
| 849 | LUC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of core section <br> of left lung at residual volume (RV) |
| 850 | LUC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of core section <br> of left lung at residual volume (RV) |
| 851 | LUC_BE_350 | Num | Num | Num |
| 852 | LUC_BE_300 | Number of voxels below or equal to -350 hounsfield units for upper part of core section |  |  |
| of left lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- | :--- |
| 871 | LUC_TOT_V | Num | 8 | Total volume of upper part of core section of left lung (ml) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 894 | LUP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 895 | LUP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 896 | LUP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 897 | LUP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 898 | LUP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 899 | LUP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 900 | LUP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 901 | LUP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 902 | LUP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 903 | LUP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 904 | LUP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 905 | LUP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 906 | LUP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 907 | LUP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 908 | LUP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 909 | LUP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 910 | LUP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 911 | LUP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 912 | LUP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 913 | LUP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 914 | LUP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 915 | LUP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 916 | LUP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 917 | LUP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 918 | LUP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 919 | LUP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 920 | LUP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 921 | LUP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 922 | LUP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 923 | LUP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 924 | LUP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of left lung at residual volume (RV) |
| 925 | LUP_MEAN | Num | 8 | Average pixel values within upper part of peel section of left lung (HU) at residual volume (RV) |
| 926 | LUP_MED | Num | 8 | Median pixel values within upper part of peel section of left lung (HU) at residual volume (RV) |
| 927 | LUP_VAR | Num | 8 | Variance of pixel values within upper part of peel section of left lung at residual volume (RV) |
| 928 | LUP_SD | Num | 8 | Standard deviation of pixel values within upper part of peel section of left lung at residual volume (RV) |
| 929 | LUP_SKEW | Num | 8 | Skewness of pixel values in upper part of peel section of left lung at residual volume (RV) |
| 930 | LUP_KURT | Num | 8 | Kurtosis of pixel values in upper part of peel section of left lung at residual volume (RV) |
| 931 | LUP_FWHM | Num | 8 | Full width, half max (HU) for upper part of peel section of left lung at residual volume (RV) |
| 932 | LUP_AIR_V | Num | 8 | Total volume of air in upper part of peel section of left lung (milliliters) at residual volume (RV) |
| 933 | LUP_TIS_V | Num | 8 | Total volume of tissue in upper part of peel section of left lung (ml) at residual volume (RV) |
| 934 | LUP_TOT_V | Num | 8 | Total volume of upper part of peel section of left lung (ml) at residual volume (RV) |
| 935 | LUP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at residual volume (RV) |
| 936 | LUP_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of peel section of left lung at residual volume (RV) |
| 937 | LUP_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of peel section of left lung at residual volume (RV) |
| 938 | LUP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at residual volume (RV) |
| 939 | LUP_K_SLP | Num | 8 | The slope of the line at the knee for upper part of peel section of left lung at residual volume (RV) |
| 940 | LUP_K_INT | Num | 8 | The intercept of the line at the knee for upper part of peel section of left lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 941 | LUP_C_CUTOFF_HU | Num | 8 | Upper part of peel section of left lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 942 | LUP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of peel section of left lung <br> to emphysema voxels at residual volume (RV) |
| 943 | LUP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of left lung to emphysema voxels. at residual volume (RV) |
| 944 | LUP_C_V_X_M | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 965 | R_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for right lung at residual volume (RV) |
| 966 | R_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for right lung at residual volume (RV) |
| 967 | R_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for right lung at residual volume (RV) |
| 968 | R_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for right lung at residual volume (RV) |
| 969 | R_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for right lung at residual volume (RV) |
| 970 | R_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for right lung at residual volume (RV) |
| 971 | R_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for right lung at residual volume (RV) |
| 972 | R_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for right lung at residual volume (RV) |
| 973 | R_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for right lung at residual volume (RV) |
| 974 | R_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for right lung at residual volume (RV) |
| 975 | R_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for right lung at residual volume (RV) |
| 976 | R_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for right lung at residual volume (RV) |
| 977 | R_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for right lung at residual volume (RV) |
| 978 | R_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for right lung at residual volume (RV) |
| 979 | R_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for right lung at residual volume (RV) |
| 980 | R_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for right lung at residual volume (RV) |
| 981 | R_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for right lung at residual volume (RV) |
| 982 | R_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for right lung at residual volume (RV) |
| 983 | R_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for right lung at residual volume (RV) |
| 984 | R_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for right lung at residual volume (RV) |
| 985 | R_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for right lung at residual volume (RV) |
| 986 | R_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for right lung at residual volume (RV) |
| 987 | R_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for right lung at residual volume (RV) |
| 988 | R_MEAN | Num | 8 | Average pixel values within right lung (HU) at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 989 | R_MED | Num | 8 | Median pixel values within right lung (HU) at residual volume (RV) |
| 990 | R_VAR | Num | 8 | Variance of pixel values within right lung at residual volume (RV) |
| 991 | R_SD | Num | 8 | Standard deviation of pixel values within right lung at residual volume (RV) |
| 992 | R_SKEW | Num | 8 | Skewness of pixel values in right lung at residual volume (RV) |
| 993 | R_KURT | Num | 8 | Kurtosis of pixel values in right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1018 | RC_TOT_VX | Num | 8 | Total number of voxels in core section of right lung at residual volume (RV) |
| 1019 | RC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for core section of right lung at residual volume (RV) |
| 1020 | RC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for core section of right lung at residual volume (RV) |
| 1021 | RC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for core section of right lung at residual volume (RV) |
| 1022 | RC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for core section of right lung at residual volume (RV) |
| 1023 | RC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for core section of right lung at residual volume (RV) |
| 1024 | RC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for core section of right lung at residual volume (RV) |
| 1025 | RC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for core section of right lung at residual volume (RV) |
| 1026 | RC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for core section of right lung at residual volume (RV) |
| 1027 | RC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for core section of right lung at residual volume (RV) |
| 1028 | RC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for core section of right lung at residual volume (RV) |
| 1029 | RC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for core section of right lung at residual volume (RV) |
| 1030 | RC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for core section of right lung at residual volume (RV) |
| 1031 | RC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for core section of right lung at residual volume (RV) |
| 1032 | RC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for core section of right lung at residual volume (RV) |
| 1033 | RC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for core section of right lung at residual volume (RV) |
| 1034 | RC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for core section of right lung at residual volume (RV) |
| 1035 | RC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for core section of right lung at residual volume (RV) |
| 1036 | RC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for core section of right lung at residual volume (RV) |
| 1037 | RC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for core section of right lung at residual volume (RV) |
| 1038 | RC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for core section of right lung at residual volume (RV) |
| 1039 | RC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for core section of right lung at residual volume (RV) |
| 1040 | RC_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for core section of right lung at residual volume (RV) |
| 1041 | RC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1042 | RC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for core section of right lung at residual volume (RV) |
| 1043 | RC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for core section of right lung at residual volume (RV) |
| 1044 | RC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for core section of right lung at residual volume (RV) |
| 1045 | RC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for core section of right lung at residual volume (RV) |
| 1046 | RC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for core section of right lung at residual volume (RV) |
| 1047 | RC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for core section of right lung at residual volume (RV) |
| 1048 | RC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for core section of right lung at residual volume (RV) |
| 1049 | RC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for core section of right lung at residual volume (RV) |
| 1050 | RC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for core section of right lung at residual volume (RV) |
| 1051 | RC_MEAN | Num | 8 | Average pixel values within core section of right lung (HU) at residual volume (RV) |
| 1052 | RC_MED | Num | 8 | Median pixel values within core section of right lung (HU) at residual volume (RV) |
| 1053 | RC_VAR | Num | 8 | Variance of pixel values within core section of right lung at residual volume (RV) |
| 1054 | RC_SD | Num | 8 | Standard deviation of pixel values within core section of right lung at residual volume (RV) |
| 1055 | RC_SKEW | Num | 8 | Skewness of pixel values in core section of right lung at residual volume (RV) |
| 1056 | RC_KURT | Num | 8 | Kurtosis of pixel values in core section of right lung at residual volume (RV) |
| 1057 | RC_FWHM | Num | 8 | Full width, half max (HU) for core section of right lung at residual volume (RV) |
| 1058 | RC_AIR_V | Num | 8 | Total volume of air in core section of right lung (milliliters) at residual volume (RV) |
| 1059 | RC_TIS_V | Num | 8 | Total volume of tissue in core section of right lung (ml) at residual volume (RV) |
| 1060 | RC_TOT_V | Num | 8 | Total volume of core section of right lung (ml) at residual volume (RV) |
| 1061 | RC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of right lung at residual volume (RV) |
| 1062 | RC_A_SLP | Num | 8 | The slope of the line at the ankle for core section of right lung at residual volume (RV) |
| 1063 | RC_A_INT | Num | 8 | The interecept of the line at the ankle for core section of right lung at residual volume (RV) |
| 1064 | RC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of right lung at residual volume (RV) |
| 1065 | RC_K_SLP | Num | 8 | The slope of the line at the knee for core section of right lung at residual volume (RV) |
| 1066 | RC_K_INT | Num | 8 | The intercept of the line at the knee for core section of right lung at residual volume (RV) |
| 1067 | RC_C_CUTOFF_HU | Num | 8 | Core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1068 | RC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1069 | RC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of core section of right lung to emphysema voxels. at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1070 | RC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1071 | RC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1072 | RC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1073 | RC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1074 | RC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1075 | RC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of core section of right lung to emphysema voxels at residual volume (RV) |
| 1076 | RC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1077 | RC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1078 | RC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for core section of right lung at residual volume (RV) |
| 1079 | RC_VESSEL_VX | Num | 8 | Total number of vessel voxels in core section of right lung at residual volume (RV) |
| 1080 | RC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for core section of right lung at residual volume (RV) |
| 1081 | RL_TOT_VX | Num | 8 | Total number of voxels in lower part of right lung at residual volume (RV) |
| 1082 | RL_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of right lung at residual volume (RV) |
| 1083 | RL_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at residual volume (RV) |
| 1084 | RL_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at residual volume (RV) |
| 1085 | RL_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of right lung at residual volume (RV) |
| 1086 | RL_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of right lung at residual volume (RV) |
| 1087 | RL_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of right lung at residual volume (RV) |
| 1088 | RL_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of right lung at residual volume (RV) |
| 1089 | RL_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of right lung at residual volume (RV) |
| 1090 | RL_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of right lung at residual volume (RV) |
| 1091 | RL_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of right lung at residual volume (RV) |
| 1092 | RL_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of right lung at residual volume (RV) |
| 1093 | RL_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for lower part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1094 | RL_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for lower part of right lung at residual volume (RV) |
| 1095 | RL_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for lower part of right lung at residual volume (RV) |
| 1096 | RL_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for lower part of right lung at residual volume (RV) |
| 1097 | RL_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for lower part of right lung at residual volume (RV) |
| 1098 | RL_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for lower part of right lung at residual volume (RV) |
| 1099 | RL_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for lower part of right lung at residual volume (RV) |
| 1100 | RL_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for lower part of right lung at residual volume (RV) |
| 1101 | RL_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for lower part of right lung at residual volume (RV) |
| 1102 | RL_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for lower part of right lung at residual volume (RV) |
| 1103 | RL_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for lower part of right lung at residual volume (RV) |
| 1104 | RL_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for lower part of right lung at residual volume (RV) |
| 1105 | RL_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for lower part of right lung at residual volume (RV) |
| 1106 | RL_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of right lung at residual volume (RV) |
| 1107 | RL_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for lower part of right lung at residual volume (RV) |
| 1108 | RL_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for lower part of right lung at residual volume (RV) |
| 1109 | RL_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for lower part of right lung at residual volume (RV) |
| 1110 | RL_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of right lung at residual volume (RV) |
| 1111 | RL_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of right lung at residual volume (RV) |
| 1112 | RL_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of right lung at residual volume (RV) |
| 1113 | RL_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of right lung at residual volume (RV) |
| 1114 | RL_MEAN | Num | 8 | Average pixel values within lower part of right lung (HU) at residual volume (RV) |
| 1115 | RL_MED | Num | 8 | Median pixel values within lower part of right lung (HU) at residual volume (RV) |
| 1116 | RL_VAR | Num | 8 | Variance of pixel values within lower part of right lung at residual volume (RV) |
| 1117 | RL_SD | Num | 8 | Standard deviation of pixel values within lower part of right lung at residual volume (RV) |
| 1118 | RL_SKEW | Num | 8 | Skewness of pixel values in lower part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1119 | RL_KURT | Num | 8 | Kurtosis of pixel values in lower part of right lung at residual volume (RV) |
| 1120 | RL_FWHM | Num | 8 | Full width, half max (HU) for lower part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1146 | RLC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1147 | RLC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1148 | RLC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1149 | RLC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of core section <br> of right lung at residual volume (RV) |
| 1150 | RLC_BE_910 | Num | 8 | Num |
| 1151 | RLC_BE_900 | Number of voxels below or equal to -910 hounsfield units for lower part of core section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1169 | RLC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1170 | RLC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1171 | RLC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1172 | RLC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1173 | RLC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1174 | RLC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1175 | RLC_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1176 | RLC_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of core section of right lung at residual volume (RV) |
| 1177 | RLC_MEAN | Num | 8 | Average pixel values within lower part of core section of right lung (HU) at residual volume (RV) |
| 1178 | RLC_MED | Num | 8 | Median pixel values within lower part of core section of right lung (HU) at residual volume (RV) |
| 1179 | RLC_VAR | Num | 8 | Variance of pixel values within lower part of core section of right lung at residual volume (RV) |
| 1180 | RLC_SD | Num | 8 | Standard deviation of pixel values within lower part of core section of right lung at residual volume (RV) |
| 1181 | RLC_SKEW | Num | 8 | Skewness of pixel values in lower part of core section of right lung at residual volume (RV) |
| 1182 | RLC_KURT | Num | 8 | Kurtosis of pixel values in lower part of core section of right lung at residual volume (RV) |
| 1183 | RLC_FWHM | Num | 8 | Full width, half max (HU) for lower part of core section of right lung at residual volume (RV) |
| 1184 | RLC_AIR_V | Num | 8 | Total volume of air in lower part of core section of right lung (milliliters) at residual volume (RV) |
| 1185 | RLC_TIS_V | Num | 8 | Total volume of tissue in lower part of core section of right lung (ml) at residual volume (RV) |
| 1186 | RLC_TOT_V | Num | 8 | Total volume of lower part of core section of right lung (ml) at residual volume (RV) |
| 1187 | RLC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at residual volume (RV) |
| 1188 | RLC_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of core section of right lung at residual volume (RV) |
| 1189 | RLC_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of core section of right lung at residual volume (RV) |
| 1190 | RLC_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at residual volume (RV) |
| 1191 | RLC_K_SLP | Num | 8 | The slope of the line at the knee for lower part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1192 | RLC_K_INT | Num | 8 | The intercept of the line at the knee for lower part of core section of right lung at residual volume (RV) |
| 1193 | RLC_C_CUTOFF_HU | Num | 8 | Lower part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1194 | RLC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1195 | RLC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1196 | RLC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1197 | RLC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1198 | RLC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1199 | RLC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1200 | RLC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1201 | RLC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1202 | RLC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1203 | RLC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1204 | RLC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of right lung at residual volume (RV) |
| 1205 | RLC_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of core section of right lung at residual volume (RV) |
| 1206 | RLC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of core section of right lung at residual volume (RV) |
| 1207 | RLP_TOT_VX | Num | 8 | Total number of voxels in lower part of peel section of right lung at residual volume (RV) |
| 1208 | RLP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1209 | RLP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1210 | RLP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1211 | RLP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1212 | RLP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1213 | RLP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1214 | RLP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1215 | RLP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1216 | RLP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1217 | RLP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1218 | RLP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section <br> of right lung at residual volume (RV) |
| 1219 | RLP_BE_830 | Num | 8 | Num |
| 1220 | RLP_BE_810 | Number of voxels below or equal to -830 hounsfield units for lower part of peel section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1238 | RLP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1239 | RLP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section of right lung at residual volume (RV) |
| 1240 | RLP_MEAN | Num | 8 | Average pixel values within lower part of peel section of right lung (HU) at residual volume (RV) |
| 1241 | RLP_MED | Num | 8 | Median pixel values within lower part of peel section of right lung (HU) at residual volume (RV) |
| 1242 | RLP_VAR | Num | 8 | Variance of pixel values within lower part of peel section of right lung at residual volume (RV) |
| 1243 | RLP_SD | Num | 8 | Standard deviation of pixel values within lower part of peel section of right lung at residual volume (RV) |
| 1244 | RLP_SKEW | Num | 8 | Skewness of pixel values in lower part of peel section of right lung at residual volume (RV) |
| 1245 | RLP_KURT | Num | 8 | Kurtosis of pixel values in lower part of peel section of right lung at residual volume (RV) |
| 1246 | RLP_FWHM | Num | 8 | Full width, half max (HU) for lower part of peel section of right lung at residual volume (RV) |
| 1247 | RLP_AIR_V | Num | 8 | Total volume of air in lower part of peel section of right lung (milliliters) at residual volume (RV) |
| 1248 | RLP_TIS_V | Num | 8 | Total volume of tissue in lower part of peel section of right lung (ml) at residual volume (RV) |
| 1249 | RLP_TOT_V | Num | 8 | Total volume of lower part of peel section of right lung (ml) at residual volume (RV) |
| 1250 | RLP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at residual volume (RV) |
| 1251 | RLP_A_SLP | Num | 8 | The slope of the line at the ankle for lower part of peel section of right lung at residual volume (RV) |
| 1252 | RLP_A_INT | Num | 8 | The interecept of the line at the ankle for lower part of peel section of right lung at residual volume (RV) |
| 1253 | RLP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at residual volume (RV) |
| 1254 | RLP_K_SLP | Num | 8 | The slope of the line at the knee for lower part of peel section of right lung at residual volume (RV) |
| 1255 | RLP_K_INT | Num | 8 | The intercept of the line at the knee for lower part of peel section of right lung at residual volume (RV) |
| 1256 | RLP_C_CUTOFF_HU | Num | 8 | Lower part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1257 | RLP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1258 | RLP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1259 | RLP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1260 | RLP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1261 | RLP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1262 | RLP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1263 | RLP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1264 | RLP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1265 | RLP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1266 | RLP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1267 | RLP_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of right lung at residual volume (RV) |
| 1268 | RLP_VESSEL_VX | Num | 8 | Total number of vessel voxels in lower part of peel section of right lung at residual volume (RV) |
| 1269 | RLP_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of right lung at residual volume (RV) |
| 1270 | RM_TOT_VX | Num | 8 | Total number of voxels in middle part of right lung at residual volume (RV) |
| 1271 | RM_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of right lung at residual volume (RV) |
| 1272 | RM_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of right lung at residual volume (RV) |
| 1273 | RM_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of right lung at residual volume (RV) |
| 1274 | RM_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of right lung at residual volume (RV) |
| 1275 | RM_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of right lung at residual volume (RV) |
| 1276 | RM_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of right lung at residual volume (RV) |
| 1277 | RM_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of right lung at residual volume (RV) |
| 1278 | RM_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of right lung at residual volume (RV) |
| 1279 | RM_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of right lung at residual volume (RV) |
| 1280 | RM_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of right lung at residual volume (RV) |
| 1281 | RM_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of right lung at residual volume (RV) |
| 1282 | RM_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of right lung at residual volume (RV) |
| 1283 | RM_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of right lung at residual volume (RV) |
| 1284 | RM_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1285 | RM_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1286 | RM_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1287 | RM_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1288 | RM_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of right lung at <br> residual volume (RV) |
| 1289 | RM_BE_500 | Num | 8 | Num | | Number of voxels below or equal to -500 hounsfield units for middle part of right lung at |
| :--- |
| residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1311 | RM_TIS_V | Num | 8 | Total volume of tissue in middle part of right lung (ml) at residual volume (RV) |
| 1312 | RM_TOT_V | Num | 8 | Total volume of middle part of right lung (ml) at residual volume (RV) |
| 1313 | RM_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of right lung at residual volume (RV) |
| 1314 | RM_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of right lung at residual volume (RV) |
| 1315 | RM_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of right lung at residual volume (RV) |
| 1316 | RM_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of right lung at residual volume (RV) |
| 1317 | RM_K_SLP | Num | 8 | The slope of the line at the knee for middle part of right lung at residual volume (RV) |
| 1318 | RM_K_INT | Num | 8 | The intercept of the line at the knee for middle part of right lung at residual volume (RV) |
| 1319 | RM_C_CUTOFF_HU | Num | 8 | Middle part of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1320 | RM_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1321 | RM_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of right lung to emphysema voxels. at residual volume (RV) |
| 1322 | RM_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels. at residual volume (RV) |
| 1323 | RM_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1324 | RM_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1325 | RM_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1326 | RM_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1327 | RM_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of right lung to emphysema voxels at residual volume (RV) |
| 1328 | RM_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1329 | RM_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1330 | RM_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of right lung at residual volume (RV) |
| 1331 | RM_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of right lung at residual volume (RV) |
| 1332 | RM_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of right lung at residual volume (RV) |
| 1333 | RMC_TOT_VX | Num | 8 | Total number of voxels in middle part of core section of right lung at residual volume (RV) |
| 1334 | RMC_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1335 | RMC_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1336 | RMC_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1337 | RMC_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1338 | RMC_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1339 | RMC_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1340 | RMC_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1341 | RMC_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1342 | RMC_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1343 | RMC_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1344 | RMC_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1345 | RMC_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1346 | RMC_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1347 | RMC_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1348 | RMC_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1349 | RMC_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1350 | RMC_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1351 | RMC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1352 | RMC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1353 | RMC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1354 | RMC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1355 | RMC_BE_350 | Num | 8 | Number of voxels below or equal to - 350 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1356 | RMC_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1357 | RMC_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1358 | RMC_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of core section of right lung at residual volume (RV) |
| 1359 | RMC_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of core section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1360 | RMC_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1361 | RMC_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1362 | RMC_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1363 | RMC_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of core section <br> of right lung at residual volume (RV) |
| 1364 | RMC_AE_500 | Num | 8 | Num |
| 1365 | RMC_AE_600 | Number of voxels above or equal to -500 hounsfield units for middle part of core section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1383 | RMC_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1384 | RMC_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1385 | RMC_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels. at residual volume (RV) |
| 1386 | RMC_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1387 | RMC_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1388 | RMC_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1389 | RMC_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1390 | RMC_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle part of core section of right lung to emphysema voxels at residual volume (RV) |
| 1391 | RMC_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1392 | RMC_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1393 | RMC_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core section of right lung at residual volume (RV) |
| 1394 | RMC_VESSEL_VX | Num | 8 | Total number of vessel voxels in middle part of core section of right lung at residual volume (RV) |
| 1395 | RMC_VESSEL_PERCENT | Num | 8 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of core section of right lung at residual volume (RV) |
| 1396 | RMP_TOT_VX | Num | 8 | Total number of voxels in middle part of peel section of right lung at residual volume (RV) |
| 1397 | RMP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1398 | RMP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1399 | RMP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1400 | RMP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1401 | RMP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1402 | RMP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1403 | RMP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1404 | RMP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1405 | RMP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for middle part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1406 | RMP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1407 | RMP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1408 | RMP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1409 | RMP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1410 | RMP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1411 | RMP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1412 | RMP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1413 | RMP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1414 | RMP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1415 | RMP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1416 | RMP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1417 | RMP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1418 | RMP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1419 | RMP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1420 | RMP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1421 | RMP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1422 | RMP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1423 | RMP_AE_150 | Num | 8 | Number of voxels above or equal to - 150 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1424 | RMP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1425 | RMP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1426 | RMP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1427 | RMP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for middle part of peel section of right lung at residual volume (RV) |
| 1428 | RMP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for middle part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1429 | RMP_MEAN | Num | 8 | Average pixel values within middle part of peel section of right lung (HU) at residual volume (RV) |
| 1430 | RMP_MED | Num | 8 | Median pixel values within middle part of peel section of right lung (HU) at residual volume (RV) |
| 1431 | RMP_VAR | Num | 8 | Variance of pixel values within middle part of peel section of right lung at residual volume (RV) |
| 1432 | RMP_SD | Num | 8 | Standard deviation of pixel values within middle part of peel section of right lung at residual volume (RV) |
| 1433 | RMP_SKEW | Num | 8 | Skewness of pixel values in middle part of peel section of right lung at residual volume (RV) |
| 1434 | RMP_KURT | Num | 8 | Kurtosis of pixel values in middle part of peel section of right lung at residual volume (RV) |
| 1435 | RMP_FWHM | Num | 8 | Full width, half max (HU) for middle part of peel section of right lung at residual volume (RV) |
| 1436 | RMP_AIR_V | Num | 8 | Total volume of air in middle part of peel section of right lung (milliliters) at residual volume (RV) |
| 1437 | RMP_TIS_V | Num | 8 | Total volume of tissue in middle part of peel section of right lung (ml) at residual volume (RV) |
| 1438 | RMP_TOT_V | Num | 8 | Total volume of middle part of peel section of right lung (ml) at residual volume (RV) |
| 1439 | RMP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at residual volume (RV) |
| 1440 | RMP_A_SLP | Num | 8 | The slope of the line at the ankle for middle part of peel section of right lung at residual volume (RV) |
| 1441 | RMP_A_INT | Num | 8 | The interecept of the line at the ankle for middle part of peel section of right lung at residual volume (RV) |
| 1442 | RMP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at residual volume (RV) |
| 1443 | RMP_K_SLP | Num | 8 | The slope of the line at the knee for middle part of peel section of right lung at residual volume (RV) |
| 1444 | RMP_K_INT | Num | 8 | The intercept of the line at the knee for middle part of peel section of right lung at residual volume (RV) |
| 1445 | RMP_C_CUTOFF_HU | Num | 8 | Middle part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1446 | RMP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1447 | RMP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1448 | RMP_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1449 | RMP_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1450 | RMP_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1451 | RMP_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1452 | RMP_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of middle part of peel <br> section of right lung to emphysema voxels at residual volume (RV) |
| 1453 | RMP_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1454 | RMP_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel <br> section of right lung at residual volume (RV) |
| 1455 | RMP_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for middle part of peel <br> section of right lung at residual volume (RV) |
| 1456 | RMP_HU20 | Num | Num | Num |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1476 | RP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1477 | RP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1478 | RP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1479 | RP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1480 | RP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for peel section of right lung <br> at residual volume (RV) |
| 1482 | RP_BE_350 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1503 | RP_A_SLP | Num | 8 | The slope of the line at the ankle for peel section of right lung at residual volume (RV) |
| 1504 | RP_A_INT | Num | 8 | The interecept of the line at the ankle for peel section of right lung at residual volume <br> (RV) |
| 1505 | RP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of right lung at residual volume (RV) |
| 1506 | RP_K_SLP | Num | 8 | The slope of the line at the knee for peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1528 | RU_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of right lung at residual volume (RV) |
| 1529 | RU_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of right lung at residual volume (RV) |
| 1530 | RU_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of right lung at residual volume (RV) |
| 1531 | RU_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of right lung at residual volume (RV) |
| 1532 | RU_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of right lung at residual volume (RV) |
| 1533 | RU_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of right lung at residual volume (RV) |
| 1534 | RU_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of right lung at residual volume (RV) |
| 1535 | RU_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of right lung at residual volume (RV) |
| 1536 | RU_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of right lung at residual volume (RV) |
| 1537 | RU_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of right lung at residual volume (RV) |
| 1538 | RU_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of right lung at residual volume (RV) |
| 1539 | RU_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of right lung at residual volume (RV) |
| 1540 | RU_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of right lung at residual volume (RV) |
| 1541 | RU_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of right lung at residual volume (RV) |
| 1542 | RU_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of right lung at residual volume (RV) |
| 1543 | RU_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of right lung at residual volume (RV) |
| 1544 | RU_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of right lung at residual volume (RV) |
| 1545 | RU_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of right lung at residual volume (RV) |
| 1546 | RU_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of right lung at residual volume (RV) |
| 1547 | RU_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of right lung at residual volume (RV) |
| 1548 | RU_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of right lung at residual volume (RV) |
| 1549 | RU_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of right lung at residual volume (RV) |
| 1550 | RU_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1551 | RU_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of right lung at residual volume (RV) |
| 1552 | RU_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of right lung at residual volume (RV) |
| 1553 | RU_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of right lung at residual volume (RV) |
| 1554 | RU_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of right lung at residual volume (RV) |
| 1555 | RU_MEAN | Num | 8 | Average pixel values within upper part of right lung (HU) at residual volume (RV) |
| 1556 | RU_MED | Num | 8 | Median pixel values within upper part of right lung (HU) at residual volume (RV) |
| 1557 | RU_VAR | Num | 8 | Variance of pixel values within upper part of right lung at residual volume (RV) |
| 1558 | RU_SD | Num | 8 | Standard deviation of pixel values within upper part of right lung at residual volume (RV) |
| 1559 | RU_SKEW | Num | 8 | Skewness of pixel values in upper part of right lung at residual volume (RV) |
| 1560 | RU_KURT | Num | 8 | Kurtosis of pixel values in upper part of right lung at residual volume (RV) |
| 1561 | RU_FWHM | Num | 8 | Full width, half max (HU) for upper part of right lung at residual volume (RV) |
| 1562 | RU_AIR_V | Num | 8 | Total volume of air in upper part of right lung (milliliters) at residual volume (RV) |
| 1563 | RU_TIS_V | Num | 8 | Total volume of tissue in upper part of right lung (ml) at residual volume (RV) |
| 1564 | RU_TOT_V | Num | 8 | Total volume of upper part of right lung (ml) at residual volume (RV) |
| 1565 | RU_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of right lung at residual volume (RV) |
| 1566 | RU_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of right lung at residual volume (RV) |
| 1567 | RU_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of right lung at residual volume (RV) |
| 1568 | RU_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of right lung at residual volume (RV) |
| 1569 | RU_K_SLP | Num | 8 | The slope of the line at the knee for upper part of right lung at residual volume (RV) |
| 1570 | RU_K_INT | Num | 8 | The intercept of the line at the knee for upper part of right lung at residual volume (RV) |
| 1571 | RU_C_CUTOFF_HU | Num | 8 | Upper part of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1572 | RU_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |
| 1573 | RU_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of right lung to emphysema voxels. at residual volume (RV) |
| 1574 | RU_C_V_X_M | Num | 8 | The X component of the mean vector drawn from the centroid of upper part of right lung to emphysema voxels. at residual volume (RV) |
| 1575 | RU_C_V_X_SD | Num | 8 | The X component of the standard deviation of the vectors from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |
| 1576 | RU_C_V_Y_M | Num | 8 | The Y component of the mean vector drawn from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |
| 1577 | RU_C_V_Y_SD | Num | 8 | The Y component of the standard deviation of the vectors from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |
| 1578 | RU_C_V_Z_M | Num | 8 | The Z component of the mean vector drawn from the centroid of upper part of right lung to emphysema voxels at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | ---: | ---: | :--- |
| 1579 | RU_C_V_Z_SD | Num | 8 | The Z component of the standard deviation of the vectors from the centroid of upper part <br> of right lung to emphysema voxels at residual volume (RV) |
| 1580 | RU_HU10 | Num | 8 | Value of the pixel that is at the 10th percentile of pixel values for upper part of right lung <br> at residual volume (RV) |
| 1581 | RU_HU15 | Num | 8 | Value of the pixel that is at the 15th percentile of pixel values for upper part of right lung <br> at residual volume (RV) |
| 1582 | RU_HU20 | Num | 8 | Value of the pixel that is at the 20th percentile of pixel values for upper part of right lung <br> at residual volume (RV) |
| 1583 | RU_VESSEL_VX | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1603 | RUC_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of core section <br> of right lung at residual volume (RV) |
| 1604 | RUC_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of core section <br> of right lung at residual volume (RV) |
| 1605 | RUC_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of core section <br> of right lung at residual volume (RV) |
| 1606 | RUC_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of core section <br> of right lung at residual volume (RV) |
| 1607 | RUC_BE_350 | Num | 8 | Num |
| 1608 | RUC_BE_300 | Number of voxels below or equal to -350 hounsfield units for upper part of core section |  |  |
| of right lung at residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1626 | RUC_TIS_V | Num | 8 | Total volume of tissue in upper part of core section of right lung (ml) at residual volume <br> (RV) |
| 1627 | RUC_TOT_V | Num | 8 | Total volume of upper part of core section of right lung (ml) at residual volume (RV) |
| 1628 | RUC_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for upper part of core section of right lung at residual volume (RV) |
| 1629 | RUC_A_SLP | Num | 8 <br> 8he slope of the line at the ankle for upper part of core section of right lung at residual <br> volume (RV) |  |
| 1630 | RUC_A_INT |  |  |  |
| residual volume (RV) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1649 | RUP_BE_960 | Num | 8 | Number of voxels below or equal to -960 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1650 | RUP_BE_950 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1651 | RUP_BE_940 | Num | 8 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1652 | RUP_BE_930 | Num | 8 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1653 | RUP_BE_920 | Num | 8 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1654 | RUP_BE_910 | Num | 8 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1655 | RUP_BE_900 | Num | 8 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1656 | RUP_BE_890 | Num | 8 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1657 | RUP_BE_870 | Num | 8 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1658 | RUP_BE_856 | Num | 8 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1659 | RUP_BE_850 | Num | 8 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1660 | RUP_BE_830 | Num | 8 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1661 | RUP_BE_810 | Num | 8 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1662 | RUP_BE_660 | Num | 8 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1663 | RUP_BE_640 | Num | 8 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1664 | RUP_BE_620 | Num | 8 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1665 | RUP_BE_600 | Num | 8 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1666 | RUP_BE_550 | Num | 8 | Number of voxels below or equal to -550 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1667 | RUP_BE_500 | Num | 8 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1668 | RUP_BE_450 | Num | 8 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1669 | RUP_BE_400 | Num | 8 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1670 | RUP_BE_350 | Num | 8 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1671 | RUP_BE_300 | Num | 8 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1672 | RUP_BE_250 | Num | 8 | Number of voxels below or equal to -250 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1673 | RUP_AE_50 | Num | 8 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1674 | RUP_AE_100 | Num | 8 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1675 | RUP_AE_150 | Num | 8 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1676 | RUP_AE_200 | Num | 8 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1677 | RUP_AE_250 | Num | 8 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1678 | RUP_AE_400 | Num | 8 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1679 | RUP_AE_500 | Num | 8 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1680 | RUP_AE_600 | Num | 8 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of right lung at residual volume (RV) |
| 1681 | RUP_MEAN | Num | 8 | Average pixel values within upper part of peel section of right lung (HU) at residual volume (RV) |
| 1682 | RUP_MED | Num | 8 | Median pixel values within upper part of peel section of right lung (HU) at residual volume (RV) |
| 1683 | RUP_VAR | Num | 8 | Variance of pixel values within upper part of peel section of right lung at residual volume (RV) |
| 1684 | RUP_SD | Num | 8 | Standard deviation of pixel values within upper part of peel section of right lung at residual volume (RV) |
| 1685 | RUP_SKEW | Num | 8 | Skewness of pixel values in upper part of peel section of right lung at residual volume (RV) |
| 1686 | RUP_KURT | Num | 8 | Kurtosis of pixel values in upper part of peel section of right lung at residual volume (RV) |
| 1687 | RUP_FWHM | Num | 8 | Full width, half max (HU) for upper part of peel section of right lung at residual volume (RV) |
| 1688 | RUP_AIR_V | Num | 8 | Total volume of air in upper part of peel section of right lung (milliliters) at residual volume (RV) |
| 1689 | RUP_TIS_V | Num | 8 | Total volume of tissue in upper part of peel section of right lung (ml) at residual volume (RV) |
| 1690 | RUP_TOT_V | Num | 8 | Total volume of upper part of peel section of right lung (ml) at residual volume (RV) |
| 1691 | RUP_ANKL | Num | 8 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at residual volume (RV) |
| 1692 | RUP_A_SLP | Num | 8 | The slope of the line at the ankle for upper part of peel section of right lung at residual volume (RV) |
| 1693 | RUP_A_INT | Num | 8 | The interecept of the line at the ankle for upper part of peel section of right lung at residual volume (RV) |
| 1694 | RUP_KNEE | Num | 8 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at residual volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1695 | RUP_K_SLP | Num | 8 | The slope of the line at the knee for upper part of peel section of right lung at residual <br> volume (RV) |
| 1696 | RUP_K_INT | Num | 8 | The intercept of the line at the knee for upper part of peel section of right lung at residual <br> volume (RV) |
| 1697 | RUP_C_CUTOFF_HU | Num | 8 | Upper part of peel section of right lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 1698 | RUP_C_V_M | Num | 8 | Mean length of vectors drawn from the centroid of upper part of peel section of right <br> lung to emphysema voxels at residual volume (RV) |
| 1699 | RUP_C_V_SD | Num | 8 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of right lung to emphysema voxels. at residual volume (RV) |
| 1700 | RUP_C_V_X_M | Rum | 8 | The X component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels. at residual volume (RV) |
| 1702 | RUP_C_V_Y_M | Num | 8 | The X component of the standard deviation of the vectors from the centroid of upper part <br> of peel section of right lung to emphysema voxels at residual volume (RV) |
| 1703 | RUP_C_V_Y_SD | Num | 8 | The Y component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels at residual volume (RV) |
| 1712 | SERIES_DATE_DAYS | Num | 8 | 8 |

## Data Set Name: v2_ct_corepeeltlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |
| 3 | STUDY_TIME | Char | 20 | Time of scan - (0008,0030) StudyTime at Total Lung Capacity (TLC) |
| 4 | SERIES_NAME | Char | 20 | Series name - (0008,103e) SeriesDescription at Total Lung Capacity (TLC) |
| 5 | SERIES_TIME | Char the series was reconstructed - (0008,0031) SeriesTime at Total Lung Capacity |  |  |
| (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 27 | B_BE810 | Char | 20 | Number of voxels below or equal to - 810 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 28 | B_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 29 | B_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 30 | B_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 31 | B_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for both lungs at Total Lung <br> Capacity (TLC) |
| 32 | Ch_BE550 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 53 | B_KURT | Char | 20 | Kurtosis of pixel values in both lungs at Total Lung Capacity (TLC) |
| 54 | B_FWHM | Char | 20 | Full width, half max (HU) for both lungs at Total Lung Capacity (TLC) |
| 55 | B_AIRV | 20 | Total volume of air in both lungs (milliliters) at Total Lung Capacity (TLC) |  |
| 56 | B_TISV | Char | 20 | Total volume of tissue in both lungs (ml) at Total Lung Capacity (TLC) |
| 57 | B_TOTV | 20 | Total volume of both lungs (ml) at Total Lung Capacity (TLC) |  |


$\left.$| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 82 | BC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 83 | BC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section both lungs |
| 84 | BC_B1000 | 20 | Number of voxels below or equal to -1000 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |  |
| 85 | BC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of both lungs |
| 86 | BC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 87 | BC_BE950 | Char | 20 | 20 | | Number of voxels below or equal to -950 hounsfield units for core section of both |
| :--- |
| lungs at Total Lung Capacity (TLC) | \right\rvert\, | Number of voxels below or equal to -940 hounsfield units for core section of both |
| :--- |
| lungs at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 106 | BC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 107 | BC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 108 | BC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 109 | BC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for core section of both <br> lungs at Total Lung Capacity (TLC) |
| 110 | BC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for core section of both lungs <br> at Total Lung Capacity (TLC) |
| 111 | BC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for core section of both lungs <br> at Total Lung Capacity (TLC) |
| 112 | BC_AE150 | Char | 20 | Char |
| 113 | BC_AE200 | Char | The interecept of the line at the ankle for core section of both lungs at Total Lung <br> Capacity (TLC) |  |
| 120 | Charels above or equal to -150 hounsfield units for core section of both lungs |  |  |  |
| 120 | BC_TOTV | Chapacity (TLC) |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 132 | BC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of both lungs at Total Lung Capacity (TLC) |
| 133 | BC_KSLP | Char | 20 | The slope of the line at the knee for core section of both lungs at Total Lung Capacity (TLC) |
| 134 | BC_KINT | Char | 20 | The intercept of the line at the knee for core section of both lungs at Total Lung Capacity (TLC) |
| 135 | BC_CCUTOFF | Char | 20 | Core section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 136 | BC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 137 | BC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the core section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 138 | BC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 139 | BC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 140 | BC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 141 | BC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 142 | BC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 143 | BC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of the core section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 144 | BC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 145 | BC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 146 | BC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for core section of both lungs at Total Lung Capacity (TLC) |
| 147 | BC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of both lungs |
| 148 | BC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of both lungs |
| 149 | BC_VESSELVX | Char | 20 | Total number of vessel voxels in core region of both lungs at Total Lung Capacity (TLC) |
| 150 | BC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for core region of both lungs at Total Lung Capacity (TLC) |
| 151 | BP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of both lungs |
| 152 | BP_TOTVX | Char | 20 | Total number of voxels in peel region of both lungs at Total Lung Capacity (TLC) |
| 153 | BP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 154 | BP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of both lungs |
| 155 | BP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for peel section of both lungs at Total Lung Capacity (TLC) |
| 156 | BP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of both lungs |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 157 | BP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of both lungs <br> at Total Lung Capacity (TLC) |
| 158 | BP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of both lungs <br> at Total Lung Capacity (TLC) |
| 159 | BP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for peel section of both lungs <br> at Total Lung Capacity (TLC) |
| 160 | BP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of both lungs <br> at Total Lung Capacity (TLC) |
| 161 | BP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of both lungs <br> at Total Lung Capacity (TLC) |
| 162 | BP_BE910 | Char | 20 | Char |

\(\left.$$
\begin{array}{|r|l|l|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\
\hline 180 & \text { BP_BE250 } & \text { Char } & 20 & \begin{array}{l}\text { Number of voxels below or equal to -250 hounsfield units for peel section of both lungs } \\
\text { at Total Lung Capacity (TLC) }\end{array} \\
\hline 181 & \text { BP_AE50 } & \text { Char } & 20 & \begin{array}{l}\text { Number of voxels above or equal to -50 hounsfield units for peel section of both lungs } \\
\text { at Total Lung Capacity (TLC) }\end{array} \\
\hline 182 & \text { BP_AE100 } & \text { Char } & 20 & \begin{array}{l}\text { Number of voxels above or equal to -100 hounsfield units for peel section of both lungs } \\
\text { at Total Lung Capacity (TLC) }\end{array} \\
\hline 183 & \text { BP_AE150 } & \text { Char } & 20 & \begin{array}{l}\text { Number of voxels above or equal to -150 hounsfield units for peel section of both lungs } \\
\text { at Total Lung Capacity (TLC) }\end{array} \\
\hline 184 & \text { BP_AE200 } & \text { Char } & 20 & \begin{array}{l}\text { Number of voxels above or equal to -200 hounsfield units for peel section of both lungs } \\
\text { at Total Lung Capacity (TLC) }\end{array} \\
\hline 185 & \text { BP_AE250 } & \text { Char } & 20 & 20\end{array}
$$ \begin{array}{l}Number of voxels above or equal to -250 hounsfield units for peel section of both lungs <br>

at Total Lung Capacity (TLC)\end{array}\right]\)| The intercept of the line at the knee for peel section of both lungs at Total Lung |
| :--- |
| Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 206 | BP_CCUTOFF | Char | 20 | Peel section of both lungs: definition of emphysema cutoff value (HU) values less than this are considered emphysema at Total Lung Capacity (TLC) |
| 207 | BP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 208 | BP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the peel section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 209 | BP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels. at Total Lung Capacity (TLC) |
| 210 | BP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 211 | BP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 212 | BP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 213 | BP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 214 | BP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of the peel section of both lungs to emphysema voxels at Total Lung Capacity (TLC) |
| 215 | BP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 216 | BP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 217 | BP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for peel section of both lungs at Total Lung Capacity (TLC) |
| 218 | BP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of both lungs |
| 219 | BP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of both lungs |
| 220 | BP_VESSELVX | Char | 20 | Total number of vessel voxels in peel region of both lungs at Total Lung Capacity (TLC) |
| 221 | BP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for peel region of both lungs at Total Lung Capacity (TLC) |
| 222 | L_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in left lung |
| 223 | L_TOTVX | Char | 20 | Total number of voxels in left lung at Total Lung Capacity (TLC) |
| 224 | L_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 225 | L_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for left lung |
| 226 | L_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 227 | L_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for left lung |
| 228 | L_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 229 | L_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 230 | L_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 231 | L_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | L_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 233 | L_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 234 | L_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 235 | L_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 236 | L_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 237 | L_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 238 | L_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 239 | L_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 240 | L_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 241 | L_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 242 | L_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 243 | L_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 244 | L_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 245 | L_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 246 | L_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 247 | L_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 248 | L_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 249 | L_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 250 | L_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 251 | L_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 252 | L_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 253 | L_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 254 | L_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 255 | L_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 256 | L_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 257 | L_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 258 | L_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 259 | L_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for left lung at Total Lung Capacity (TLC) |
| 260 | L_MEAN | Char | 20 | Average pixel values within left lung (HU) at Total Lung Capacity (TLC) |
| 261 | L_MED | Char | 20 | Median pixel values within left lung (HU) at Total Lung Capacity (TLC) |
| 262 | L_VAR | Char | 20 | Variance of pixel values within left lung at Total Lung Capacity (TLC) |
| 263 | L_SDEV | Char | 20 | Standard deviation of pixel values within left lung |
| 264 | L_ADEV | Char | 20 | Average deviation of pixel values within left lung |
| 265 | L_SKEW | Char | 20 | Skewness of pixel values in left lung at Total Lung Capacity (TLC) |
| 266 | L_KURT | Char | 20 | Kurtosis of pixel values in left lung at Total Lung Capacity (TLC) |
| 267 | L_FWHM | Char | 20 | Full width, half max (HU) for left lung at Total Lung Capacity (TLC) |
| 268 | L_AIRV | Char | 20 | Total volume of air in left lung (milliliters) at Total Lung Capacity (TLC) |
| 269 | L_TISV | Char | 20 | Total volume of tissue in left lung (ml) at Total Lung Capacity (TLC) |
| 270 | L_TOTV | Char | 20 | Total volume of left lung (ml) at Total Lung Capacity (TLC) |
| 271 | L_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for left lung at Total Lung Capacity (TLC) |
| 272 | L_ASLP | Char | 20 | The slope of the line at the ankle for left lung at Total Lung Capacity (TLC) |
| 273 | L_AINT | Char | 20 | The interecept of the line at the ankle for left lung at Total Lung Capacity (TLC) |
| 274 | L_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for left lung at Total Lung Capacity (TLC) |
| 275 | L_KSLP | Char | 20 | The slope of the line at the knee for left lung at Total Lung Capacity (TLC) |
| 276 | L_KINT | Char | 20 | The intercept of the line at the knee for left lung at Total Lung Capacity (TLC) |
| 277 | L_CCUTOFF | Char | 20 | Left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 278 | L_CVM | Char | 20 | Mean length of vectors drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 279 | L_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 280 | L_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 281 | L_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 282 | L_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 283 | L_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 284 | L_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 285 | L_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 286 | L_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 287 | L_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 288 | L_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for left lung at Total Lung Capacity (TLC) |
| 289 | L_AIRWAYVX | Char | 20 | Total number of airway voxels in left lung |
| 290 | L_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the left lung |
| 291 | L_VESSELVX | Char | 20 | Total number of vessel voxels in left lung at Total Lung Capacity (TLC) |
| 292 | L_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for left lung at Total Lung Capacity (TLC) |
| 293 | LC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of left lung |
| 294 | LC_TOTVX | Char | 20 | Total number of voxels in core section of left lung at Total Lung Capacity (TLC) |
| 295 | LC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 296 | LC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of left lung |
| 297 | LC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 298 | LC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of left lung |
| 299 | LC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 300 | LC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 301 | LC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 302 | LC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 303 | LC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 304 | LC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 305 | LC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 306 | LC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 307 | LC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 308 | LC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 309 | LC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | LC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 311 | LC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 312 | LC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 313 | LC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 314 | LC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 315 | LC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 316 | LC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 317 | LC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 318 | LC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 319 | LC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 320 | LC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 321 | LC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 322 | LC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 323 | LC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 324 | LC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 325 | LC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 326 | LC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 327 | LC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 328 | LC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 329 | LC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 330 | LC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for core section of left lung at Total Lung Capacity (TLC) |
| 331 | LC_MEAN | Char | 20 | Average pixel values within core section of left lung (HU) at Total Lung Capacity (TLC) |
| 332 | LC_MED | Char | 20 | Median pixel values within of core section of left lung (HU) at Total Lung Capacity (TLC) |
| 333 | LC_VAR | Char | 20 | Variance of pixel values within core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 334 | LC_SDEV | Char | 20 | Standard deviation of pixel values within core section of left lung |
| 335 | LC_ADEV | Char | 20 | Average deviation of pixel values within core section of left lung |
| 336 | LC_SKEW | Char | 20 | Skewness of pixel values in core section of left lung at Total Lung Capacity (TLC) |
| 337 | LC_KURT | Char | 20 | Kurtosis of pixel values in core section of left lung at Total Lung Capacity (TLC) |
| 338 | LC_FWHM | Char | 20 | Full width, half max (HU) for core section of left lung at Total Lung Capacity (TLC) |
| 339 | LC_AIRV | Char | 20 | Total volume of air in core section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 340 | LC_TISV | Char | 20 | Total volume of tissue in core section of left lung (ml) at Total Lung Capacity (TLC) |
| 341 | LC_TOTV | Char | 20 | Total volume of core section of left lung (ml) at Total Lung Capacity (TLC) |
| 342 | LC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for core section of left lung at Total Lung Capacity (TLC) |
| 343 | LC_ASLP | Char | 20 | The slope of the line at the ankle for core section of left lung at Total Lung Capacity (TLC) |
| 344 | LC_AINT | Char | 20 | The interecept of the line at the ankle for core section of left lung at Total Lung Capacity (TLC) |
| 345 | LC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for core section of left lung at Total Lung Capacity (TLC) |
| 346 | LC_KSLP | Char | 20 | The slope of the line at the knee for core section of left lung at Total Lung Capacity (TLC) |
| 347 | LC_KINT | Char | 20 | The intercept of the line at the knee for core section of left lung at Total Lung Capacity (TLC) |
| 348 | LC_CCUTOFF | Char | 20 | Core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 349 | LC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 350 | LC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 351 | LC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 352 | LC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 353 | LC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 354 | LC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 355 | LC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 356 | LC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 357 | LC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for core section of left lung at Total Lung Capacity (TLC) |
| 358 | LC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for core section of left lung at Total Lung Capacity (TLC) |
| 359 | LC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 360 | LC_AIRWAYVX | Char | 20 | Total number of airway voxels in the core section of left lung |
| 361 | LC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of left lung |
| 362 | LC_VESSELVX | Char | 20 | Total number of vessel voxels in core section of left lung at Total Lung Capacity (TLC) |
| 363 | LC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) core section of left lung at Total Lung Capacity (TLC) |
| 364 | LP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of left lung |
| 365 | LP_TOTVX | Char | 20 | Total number of voxels in peel section of left lung at Total Lung Capacity (TLC) |
| 366 | LP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 367 | LP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of left lung |
| 368 | LP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 369 | LP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of left lung |
| 370 | LP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 371 | LP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 372 | LP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 373 | LP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 374 | LP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 375 | LP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 376 | LP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 377 | LP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 378 | LP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 379 | LP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 380 | LP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 381 | LP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 382 | LP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 383 | LP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 384 | LP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 385 | LP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 386 | LP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 387 | LP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 388 | LP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 389 | LP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 390 | LP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 391 | LP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 392 | LP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 393 | LP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 394 | LP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 395 | LP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 396 | LP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 397 | LP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 398 | LP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 399 | LP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 400 | LP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 401 | LP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for peel section of left lung at Total Lung Capacity (TLC) |
| 402 | LP_MEAN | Char | 20 | Average pixel values within peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 403 | LP_MED | Char | 20 | Median pixel values within peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 404 | LP_VAR | Char | 20 | Variance of pixel values within peel section of left lung at Total Lung Capacity (TLC) |
| 405 | LP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of left lung |
| 406 | LP_ADEV | Char | 20 | Average deviation of pixel values within peel section of left lung |
| 407 | LP_SKEW | Char | 20 | Skewness of pixel values in peel section of left lung at Total Lung Capacity (TLC) |
| 408 | LP_KURT | Char | 20 | Kurtosis of pixel values in peel section of left lung at Total Lung Capacity (TLC) |
| 409 | LP_FWHM | Char | 20 | Full width, half max (HU) for peel section of left lung at Total Lung Capacity (TLC) |
| 410 | LP_AIRV | Char | 20 | Total volume of air in peel section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 411 | LP_TISV | Char | 20 | Total volume of tissue in peel section of left lung (ml) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 412 | LP_TOTV | Char | 20 | Total volume of peel section of left lung (ml) at Total Lung Capacity (TLC) |
| 413 | LP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for peel section of left lung at Total Lung Capacity (TLC) |
| 414 | LP_ASLP | Char | 20 | The slope of the line at the ankle for peel section of left lung at Total Lung Capacity (TLC) |
| 415 | LP_AINT | Char | 20 | The interecept of the line at the ankle for peel section of left lung at Total Lung Capacity (TLC) |
| 416 | LP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for peel section of left lung at Total Lung Capacity (TLC) |
| 417 | LP_KSLP | Char | 20 | The slope of the line at the knee for peel section of left lung at Total Lung Capacity (TLC) |
| 418 | LP_KINT | Char | 20 | The intercept of the line at the knee for peel section of left lung at Total Lung Capacity (TLC) |
| 419 | LP_CCUTOFF | Char | 20 | Peel section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema at Total Lung Capacity (TLC) |
| 420 | LP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 421 | LP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of peel section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 422 | LP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 423 | LP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 424 | LP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 425 | LP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 426 | LP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 427 | LP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 428 | LP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for peel section of left lung at Total Lung Capacity (TLC) |
| 429 | LP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for peel section of left lung at Total Lung Capacity (TLC) |
| 430 | LP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for peel section of left lung at Total Lung Capacity (TLC) |
| 431 | LP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of left lung |
| 432 | LP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of left lung |
| 433 | LP_VESSELVX | Char | 20 | Total number of vessel voxels in peel section of left lung at Total Lung Capacity (TLC) |
| 434 | LP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for peel section of left lung at Total Lung Capacity (TLC) |
| 435 | LU_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in upper left lung |
| 436 | LU_TOTVX | Char | 20 | Total number of voxels in upper part of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 437 | LU_B1024 | Char | 20 | Number of voxels below or equal to - 1024 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 438 | LU_E1024 | Char | 20 | Char |
| 439 | LU_B1000 | 20 | Number of voxels equal to -1024 hounsfield units for upper left lung below or equal to -1000 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |  |
| 440 | LU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 461 | LU_BE400 | Char | 20 | Number of voxels below or equal to - 400 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 462 | LU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 463 | LU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 464 | LU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 465 | LU_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 466 | LU_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 467 | LU_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of left lung at <br> Total Lung Capacity (TLC) |
| 467 | LU_KNEE | Char HU where the 2nd derivative is most negative (2nd inflection point) on a plot of |  |  |
| number of voxels versus HU for upper part of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 488 | LU_KSLP | Char | 20 | The slope of the line at the knee for upper part of left lung at Total Lung Capacity (TLC) |
| 489 | LU_KINT | Char | 20 | The intercept of the line at the knee for upper part of left lung at Total Lung Capacity (TLC) |
| 490 | LU_CCUTOFF | Char | 20 | Upper part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 491 | LU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 492 | LU_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 493 | LU_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 494 | LU_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 495 | LU_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 496 | LU_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 497 | LU_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 498 | LU_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 499 | LU_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper part of left lung at Total Lung Capacity (TLC) |
| 500 | LU_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper part of left lung at Total Lung Capacity (TLC) |
| 501 | LU_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper part of left lung at Total Lung Capacity (TLC) |
| 502 | LU_AIRWAYVX | Char | 20 | Total number of airway voxels in upper left lung |
| 503 | LU_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the upper left lung |
| 504 | LU_VESSELVX | Char | 20 | Total number of vessel voxels in upper part of left lung at Total Lung Capacity (TLC) |
| 505 | LU_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of left lung at Total Lung Capacity (TLC) |
| 506 | LUC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of upper left lung |
| 507 | LUC_TOTVX | Char | 20 | Total number of voxels in upper part of core section of left lung at Total Lung Capacity (TLC) |
| 508 | LUC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 509 | LUC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of upper left lung |
| 510 | LUC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 511 | LUC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of upper left lung |
| 512 | LUC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 513 | LUC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 514 | LUC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 515 | LUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 516 | LUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 517 | LUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 518 | LUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of core section <br> of left lung at Total Lung Capacity (TLC) |
| 519 | LUC_BE890 | Char | Char |  |
| 536 | Chamber of voxels below or equal to -890 hounsfield units for upper part of core section |  |  |  |
| of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 537 | LUC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 538 | LUC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 539 | LUC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 540 | LUC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 541 | LUC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 542 | LUC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 543 | LUC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 544 | LUC_MEAN | Char | 20 | Average pixel values within upper part of core section of left lung (HU) at Total Lung Capacity (TLC) |
| 545 | LUC_MED | Char | 20 | Median pixel values within upper part of core section of left lung (HU) at Total Lung Capacity (TLC) |
| 546 | LUC_VAR | Char | 20 | Variance of pixel values within upper part of core section of left lung at Total Lung Capacity (TLC) |
| 547 | LUC_SDEV | Char | 20 | Standard deviation of pixel values within core section of upper left lung |
| 548 | LUC_ADEV | Char | 20 | Average deviation of pixel values within core section of upper left lung |
| 549 | LUC_SKEW | Char | 20 | Skewness of pixel values in upper part of core section of left lung at Total Lung Capacity (TLC) |
| 550 | LUC_KURT | Char | 20 | Kurtosis of pixel values in upper part of core section of left lung at Total Lung Capacity (TLC) |
| 551 | LUC_FWHM | Char | 20 | Full width, half max (HU) for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 552 | LUC_AIRV | Char | 20 | Total volume of air in upper part of core section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 553 | LUC_TISV | Char | 20 | Total volume of tissue in upper part of core section of left lung (ml) at Total Lung Capacity (TLC) |
| 554 | LUC_TOTV | Char | 20 | Total volume of upper part of core section of left lung (ml) at Total Lung Capacity (TLC) |
| 555 | LUC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 556 | LUC_ASLP | Char | 20 | The slope of the line at the ankle for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 557 | LUC_AINT | Char | 20 | The interecept of the line at the ankle for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 558 | LUC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 559 | LUC_KSLP | Char | 20 | The slope of the line at the knee for upper part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 560 | LUC_KINT | Char | 20 | The intercept of the line at the knee for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 561 | LUC_CCUTOFF | Char | 20 | Upper part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 562 | LUC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 563 | LUC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 564 | LUC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 565 | LUC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 566 | LUC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 567 | LUC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 568 | LUC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 569 | LUC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 570 | LUC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 571 | LUC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 572 | LUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 573 | LUC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of upper left lung |
| 574 | LUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of upper left lung |
| 575 | LUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper part of core section of left lung at Total Lung Capacity (TLC) |
| 576 | LUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper part of core section of left lung at Total Lung Capacity (TLC) |
| 577 | LUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of upper left lung |
| 578 | LUP_TOTVX | Char | 20 | Total number of voxels in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 579 | LUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 580 | LUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of upper left lung |
| 581 | LUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 582 | LUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of upper left lung |
| 583 | LUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 584 | LUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 585 | LUP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 586 | LUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 587 | LUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 588 | LUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 589 | LUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 590 | LUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 591 | LUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 592 | LUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 593 | LUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 594 | LUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 595 | LUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 596 | LUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 597 | LUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 598 | LUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 599 | LUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 600 | LUP_BE550 | Char | 20 | Number of voxels below or equal to - 550 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 601 | LUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 602 | LUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 603 | LUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 604 | LUP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 605 | LUP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 606 | LUP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 607 | LUP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 608 | LUP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 609 | LUP_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 610 | LUP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 611 | LUP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 612 | LUP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 613 | LUP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 614 | LUP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 615 | LUP_MEAN | Char | 20 | Average pixel values within upper part of peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 616 | LUP_MED | Char | 20 | Median pixel values within upper part of peel section of left lung (HU) at Total Lung Capacity (TLC) |
| 617 | LUP_VAR | Char | 20 | Variance of pixel values within upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 618 | LUP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of upper left lung |
| 619 | LUP_ADEV | Char | 20 | Average deviation of pixel values within peel section of upper left lung |
| 620 | LUP_SKEW | Char | 20 | Skewness of pixel values in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 621 | LUP_KURT | Char | 20 | Kurtosis of pixel values in upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 622 | LUP_FWHM | Char | 20 | Full width, half max (HU) for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 623 | LUP_AIRV | Char | 20 | Total volume of air in upper part of peel section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 624 | LUP_TISV | Char | 20 | Total volume of tissue in upper part of peel section of left lung (ml) at Total Lung Capacity (TLC) |
| 625 | LUP_TOTV | Char | 20 | Total volume of upper part of peel section of left lung (ml) at Total Lung Capacity (TLC) |
| 626 | LUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 627 | LUP_ASLP | Char | 20 | The slope of the line at the ankle for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 628 | LUP_AINT | Char | 20 | The interecept of the line at the ankle for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 629 | LUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of left lung at Total Lung Capacity (TLC) |
| 630 | LUP_KSLP | Char | 20 | The slope of the line at the knee for upper part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 631 | LUP_KINT | Char | 20 | The intercept of the line at the knee for upper part of peel section of left lung at Total <br> Lung Capacity (TLC) |
| 632 | LUP_CCUTOFF | Char | 20 | Upper part of peel section of left lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 633 | LUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of peel section of left <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 634 | LUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 635 | LUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of peel <br> section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 636 | LUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 637 | LUP_CVYM | CL_BE950 | Char | 20 | | Che Y component of the mean vector drawn from the centroid of upper part of peel |
| :--- |
| section of left lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 656 | LL_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 657 | LL_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 658 | LL_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 659 | LL_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 660 | LL_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 661 | LL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 662 | LL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 663 | LL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 664 | LL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 665 | LL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 666 | LL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 667 | LL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 668 | LL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 669 | LL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 670 | LL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 671 | LL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 672 | LL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 673 | LL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 674 | LL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 675 | LL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 676 | LL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 677 | LL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 678 | LL_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 679 | LL_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 680 | LL_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 681 | LL_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 682 | LL_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 683 | LL_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 684 | LL_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 685 | LL_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of left lung at Total Lung Capacity (TLC) |
| 686 | LL_MEAN | Char | 20 | Average pixel values within lower part of left lung (HU) at Total Lung Capacity (TLC) |
| 687 | LL_MED | Char | 20 | Median pixel values within lower part of left lung (HU) at Total Lung Capacity (TLC) |
| 688 | LL_VAR | Char | 20 | Variance of pixel values within lower part of left lung at Total Lung Capacity (TLC) |
| 689 | LL_SDEV | Char | 20 | Standard deviation of pixel values within lower left lung |
| 690 | LL_ADEV | Char | 20 | Average deviation of pixel values within lower left lung |
| 691 | LL_SKEW | Char | 20 | Skewness of pixel values in lower part of left lung at Total Lung Capacity (TLC) |
| 692 | LL_KURT | Char | 20 | Kurtosis of pixel values in lower part of left lung at Total Lung Capacity (TLC) |
| 693 | LL_FWHM | Char | 20 | Full width, half max (HU) for lower part of left lung at Total Lung Capacity (TLC) |
| 694 | LL_AIRV | Char | 20 | Total volume of air in lower part of left lung (milliliters) at Total Lung Capacity (TLC) |
| 695 | LL_TISV | Char | 20 | Total volume of tissue in lower part of left lung (ml) at Total Lung Capacity (TLC) |
| 696 | LL_TOTV | Char | 20 | Total volume of lower part of left lung (ml) at Total Lung Capacity (TLC) |
| 697 | LL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of left lung at Total Lung Capacity (TLC) |
| 698 | LL_ASLP | Char | 20 | The slope of the line at the ankle for lower part of left lung at Total Lung Capacity (TLC) |
| 699 | LL_AINT | Char | 20 | The interecept of the line at the ankle for lower part of left lung at Total Lung Capacity (TLC) |
| 700 | LL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of left lung at Total Lung Capacity (TLC) |
| 701 | LL_KSLP | Char | 20 | The slope of the line at the knee for lower part of left lung at Total Lung Capacity (TLC) |
| 702 | LL_KINT | Char | 20 | The intercept of the line at the knee for lower part of left lung at Total Lung Capacity (TLC) |
| 703 | LL_CCUTOFF | Char | 20 | Lower part of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 704 | LL_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 705 | LL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 706 | LL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 707 | LL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 708 | LL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 709 | LL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 710 | LL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 711 | LL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 712 | LL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 713 | LL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 714 | LL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of left lung at Total Lung Capacity (TLC) |
| 715 | LL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left lung |
| 716 | LL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the lower left lung |
| 717 | LL_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of left lung at Total Lung Capacity (TLC) |
| 718 | LL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of left lung at Total Lung Capacity (TLC) |
| 719 | LLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of the lower left lung |
| 720 | LLC_TOTVX | Char | 20 | Total number of voxels in lower part of core section of left lung at Total Lung Capacity (TLC) |
| 721 | LLC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 722 | LLC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of lower left lung |
| 723 | LLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 724 | LLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of lower left lung |
| 725 | LLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 726 | LLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 727 | LLC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 728 | LLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 729 | LLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 730 | LLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 731 | LLC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 732 | LLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 733 | LLC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 734 | LLC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 735 | LLC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 736 | LLC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 737 | LLC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 738 | LLC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 739 | LLC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 740 | LLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 741 | LLC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 742 | LLC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 743 | LLC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 744 | LLC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 745 | LLC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 746 | LLC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 747 | LLC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 748 | LLC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 749 | LLC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 750 | LLC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 751 | LLC_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 752 | LLC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 753 | LLC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 754 | LLC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 755 | LLC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 756 | LLC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 757 | LLC_MEAN | Char | 20 | Average pixel values within lower part of core section of left lung (HU) at Total Lung Capacity (TLC) |
| 758 | LLC_MED | Char | 20 | Median pixel values within of lower part of core section of left lung (HU) at Total Lung Capacity (TLC) |
| 759 | LLC_VAR | Char | 20 | Variance of pixel values within lower part of core section of left lung at Total Lung Capacity (TLC) |
| 760 | LLC_SDEV | Char | 20 | Standard deviation of pixel values within core section of the lower left lung |
| 761 | LLC_ADEV | Char | 20 | Average deviation of pixel values within core section of the lower left lung |
| 762 | LLC_SKEW | Char | 20 | Skewness of pixel values in lower part of core section of left lung at Total Lung Capacity (TLC) |
| 763 | LLC_KURT | Char | 20 | Kurtosis of pixel values in lower part of core section of left lung at Total Lung Capacity (TLC) |
| 764 | LLC_FWHM | Char | 20 | Full width, half max (HU) for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 765 | LLC_AIRV | Char | 20 | Total volume of air in lower part of core section of left lung (milliliters) at Total Lung Capacity (TLC) |
| 766 | LLC_TISV | Char | 20 | Total volume of tissue in lower part of core section of left lung (ml) at Total Lung Capacity (TLC) |
| 767 | LLC_TOTV | Char | 20 | Total volume of lower part of core section of left lung (ml) at Total Lung Capacity (TLC) |
| 768 | LLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 769 | LLC_ASLP | Char | 20 | The slope of the line at the ankle for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 770 | LLC_AINT | Char | 20 | The interecept of the line at the ankle for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 771 | LLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 772 | LLC_KSLP | Char | 20 | The slope of the line at the knee for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 773 | LLC_KINT | Char | 20 | The intercept of the line at the knee for lower part of core section of left lung at Total Lung Capacity (TLC) |
| 774 | LLC_CCUTOFF | Char | 20 | Lower part of core section of left lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 775 | LLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 776 | LLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 777 | LLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of core section of left lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 778 | LLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 779 | LLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of core <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 780 | LLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 781 | LLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of core <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 782 | LLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower <br> part of core section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 783 | LLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core <br> section of left lung at Total Lung Capacity (TLC) |
| 790 | LLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core <br> section of left lung at Total Lung Capacity (TLC) |
| 795 | Char |  |  |  |
| 797 | LLC_HU20 left lung at Total Lung Capacity (TLC) |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 803 | LLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 804 | LLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 805 | LLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 806 | LLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 807 | LLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 808 | LLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 809 | LLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 810 | LLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 811 | LLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 812 | LLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 813 | LLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 814 | LLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 815 | LLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 816 | LLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 817 | LLP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 818 | LLP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 819 | LLP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 820 | LLP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 821 | LLP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 822 | LLP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 823 | LLP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 824 | LLP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |
| 825 | LLP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of peel section of left lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 826 | LLP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of peel section <br> of left lung at Total Lung Capacity (TLC) |
| 827 | LLP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section <br> of left lung at Total Lung Capacity (TLC) |
| 828 | LLP_MEAN | Char | 20 | Average pixel values within lower part of peel section of left lung (HU) at Total Lung <br> Capacity (TLC) |
| 829 | LLP_MED | Char | 20 | Median pixel values within lower part of peel section of left lung (HU) at Total Lung <br> Capacity (TLC) |
| 830 | LLP_VAR | Char | 20 | Variance of pixel values within lower part of peel section of left lung at Total Lung <br> Capacity (TLC) |
| 831 | LLP_SDEV | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 849 | LLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 850 | LLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of peel <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 851 | LLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 852 | LLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of peel <br> section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 853 | LLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower <br> part of peel section of left lung to emphysema voxels at Total Lung Capacity (TLC) |
| 854 | LLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel <br> section of left lung at Total Lung Capacity (TLC) |
| 855 | LLP_HU15 | Char | 20 | Char |
| 872 | R_BE900 | Char of the pixel that is at the 15th percentile of pixel values for lower part of peel |  |  |
| section of left lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 874 | R_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 875 | R_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 876 | R_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 877 | R_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 878 | R_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 879 | R_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 880 | R_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 881 | R_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 882 | R_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 883 | R_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 884 | R_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 885 | R_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 886 | R_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 887 | R_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 888 | R_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 889 | R_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 890 | R_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 891 | R_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 892 | R_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 893 | R_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 894 | R_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 895 | R_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for right lung at Total Lung Capacity (TLC) |
| 896 | R_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 897 | R_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for right lung at Total Lung <br> Capacity (TLC) |
| 898 | R_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for right lung at Total Lung <br> Capacity (TLC) |
| 899 | R_MEAN | Char | 20 | Average pixel values within right lung (HU) at Total Lung Capacity (TLC) |
| 900 | R_MED | Char | 20 | Median pixel values within right lung (HU) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 926 | R_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for right lung at Total <br> Lung Capacity (TLC) |
| 927 | R_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for right lung at Total <br> Lung Capacity (TLC) |
| 928 | R_AIRWAYVX | Char | 20 | Total number of airway voxels in right lung |
| 929 | R_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in right lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 952 | RC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 953 | RC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 954 | RC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 955 | RC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 956 | RC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for core section of right lung <br> at Total Lung Capacity (TLC) |
| 957 | RC_BE450 | Char | Char | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 977 | RC_FWHM | Char | 20 | Full width, half max (HU) for core section of right lung at Total Lung Capacity (TLC) |$|$| 978 | RC_AIRV | Char | 20 | Total volume of air in core section of right lung (milliliters) at Total Lung Capacity <br> (TLC) |
| ---: | :--- | ---: | :--- | :--- |
| 979 | RC_TISV | Char | 20 | Total volume of tissue in core section of right lung (ml) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1002 | RC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for core section of right lung at Total Lung Capacity (TLC) |
| 1003 | RP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of right lung |
| 1004 | RP_TOTVX | Char | 20 | Total number of voxels in peel section of right lung at Total Lung Capacity (TLC) |
| 1005 | RP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1006 | RP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of right lung |
| 1007 | RP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1008 | RP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of right lung |
| 1009 | RP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1010 | RP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1011 | RP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1012 | RP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1013 | RP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1014 | RP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1015 | RP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1016 | RP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1017 | RP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1018 | RP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1019 | RP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1020 | RP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1021 | RP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1022 | RP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1023 | RP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1024 | RP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1025 | RP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1026 | RP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1027 | RP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1028 | RP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1029 | RP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1030 | RP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1031 | RP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1032 | RP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1033 | RP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1034 | RP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1035 | RP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1036 | RP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1037 | RP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1038 | RP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1039 | RP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1040 | RP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for peel section of right lung at Total Lung Capacity (TLC) |
| 1041 | RP_MEAN | Char | 20 | Average pixel values within peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1042 | RP_MED | Char | 20 | Median pixel values within peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1043 | RP_VAR | Char | 20 | Variance of pixel values within peel section of right lung at Total Lung Capacity (TLC) |
| 1044 | RP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of right lung |
| 1045 | RP_ADEV | Char | 20 | Average deviation of pixel values within peel section of right lung |
| 1046 | RP_SKEW | Char | 20 | Skewness of pixel values in peel section of right lung at Total Lung Capacity (TLC) |
| 1047 | RP_KURT | Char | 20 | Kurtosis of pixel values in peel section of right lung at Total Lung Capacity (TLC) |
| 1048 | RP_FWHM | Char | 20 | Full width, half max (HU) for peel section of right lung at Total Lung Capacity (TLC) |
| 1049 | RP_AIRV | Char | 20 | Total volume of air in peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1050 | RP_TISV | Char | 20 | Total volume of tissue in peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1051 | RP_TOTV | Char | 20 | Total volume of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1052 | RP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1053 | RP_ASLP | Char | 20 | The slope of the line at the ankle for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1054 | RP_AINT | Char | 20 | The interecept of the line at the ankle for peel section of right lung at Total Lung <br> Capacity (TLC) |
| 1055 | RP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1056 | RP_KSLP | Char | 20 | The slope of the line at the knee for peel section of right lung at Total Lung Capacity <br> (TLC) |
| 1057 | RP_KINT | Char | 20 | The intercept of the line at the knee for peel section of right lung at Total Lung <br> Capacity (TLC) |
| 1058 | RP_CCUTOFF |  |  |  |
| this are considered emphysema at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1078 | RU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1079 | RU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper right lung |
| 1080 | RU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1081 | RU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1082 | RU_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1083 | RU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1084 | RU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1085 | RU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1086 | RU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1087 | RU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1088 | RU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1089 | RU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1090 | RU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1091 | RU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1092 | RU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1093 | RU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1094 | RU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1095 | RU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1096 | RU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1097 | RU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1098 | RU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1099 | RU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1100 | RU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |
| 1101 | RU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1102 | RU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1103 | RU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1104 | RU_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1105 | RU_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1106 | RU_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1107 | RU_AE200 | Char | 20 | Char |
| 1108 | RU_AE250 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of right lung at <br> Total Lung Capacity (TLC) |
| 1125 | RU_AINT | RU_KSLP | Char slope of the line at the knee for upper part of right lung at Total Lung Capacity |  |
| (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1128 | RU_KINT | Char | 20 | The intercept of the line at the knee for upper part of right lung at Total Lung Capacity <br> (TLC) |
| 1129 | RU_CCUTOFF | Char | 20 | Upper part of right lung: definition of emphysema cutoff value (HU) values less than <br> this are considered emphysema |
| 1130 | RU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of right lung to <br> emphysema voxels at Total Lung Capacity (TLC) |
| 1131 | RU_CVSD | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> right lung to emphysema voxels. at Total Lung Capacity (TLC) |  |  |
| 1132 | RU_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of right <br> lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1133 | RU_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1134 | RU_CVYM | Char Y component of the mean vector drawn from the centroid of upper part of right |  |  |
| lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1153 | RUC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1154 | RUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1155 | RUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1156 | RUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1157 | RUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1158 | RUC_BE890 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1176 | RUC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1177 | RUC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1178 | RUC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1179 | RUC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1180 | RUC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1181 | RUC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1192 | RUC_AE600 | Char | Char | 20 | | Char |
| :--- |

\(\left.$$
\begin{array}{|c|l|l|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\
\hline 1199 & \text { RUC_KINT } & \text { Char } & 20 & \begin{array}{l}\text { The intercept of the line at the knee for upper part of core section of right lung at Total } \\
\text { Lung Capacity (TLC) }\end{array} \\
\hline 1200 & \text { RUC_CCUTOFF } & \text { Char } & 20 & \begin{array}{l}\text { Upper part of core section of right lung: definition of emphysema cutoff value (HU) } \\
\text { values less than this are considered emphysema }\end{array} \\
\hline 1201 & \text { RUC_CVM } & \text { Char } & 20 & \begin{array}{l}\text { Mean length of vectors drawn from the centroid of upper part of core section of right } \\
\text { lung to emphysema voxels at Total Lung Capacity (TLC) }\end{array} \\
\hline 1202 & \text { RUC_CVSD } & \text { Char } & 20 & \begin{array}{l}\text { Standard deviation of the length of vectors drawn from the centroid of upper part of } \\
\text { core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) }\end{array} \\
\hline 1203 & \text { RUC_CVXM } & \text { Char } & 20 & \begin{array}{l}\text { The X component of the mean vector drawn from the centroid of upper part of core } \\
\text { section of right lung to emphysema voxels. at Total Lung Capacity (TLC) }\end{array}
$$ <br>
\hline 1204 \& RUC_CVXSD \& Char component of the standard deviation of the vectors from the centroid of upper <br>

part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC)\end{array}\right]\)| Char |
| :--- |
| 1205 |
| RUC_CVYM |
| 1206 |
| RUC_CVYSD |
| The Y component of the mean vector drawn from the centroid of upper part of core |
| section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1224 | RUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1225 | RUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1226 | RUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1227 | RUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1228 | RUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper part of peel section <br> of right lung at Total Lung Capacity (TLC) |
| 1229 | RUP_BE890 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1247 | RUP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1248 | RUP_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1249 | RUP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1250 | RUP_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1251 | RUP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1252 | RUP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1253 | RUP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1254 | RUP_MEAN | Char | 20 | Average pixel values within upper part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1255 | RUP_MED | Char | 20 | Median pixel values within upper part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1256 | RUP_VAR | Char | 20 | Variance of pixel values within upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1257 | RUP_SDEV | Char | 20 | Standard deviation of pixel values within upper section of upper right lung |
| 1258 | RUP_ADEV | Char | 20 | Average deviation of pixel values within peel section of upper right lung |
| 1259 | RUP_SKEW | Char | 20 | Skewness of pixel values in upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1260 | RUP_KURT | Char | 20 | Kurtosis of pixel values in upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1261 | RUP_FWHM | Char | 20 | Full width, half max (HU) for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1262 | RUP_AIRV | Char | 20 | Total volume of air in upper part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1263 | RUP_TISV | Char | 20 | Total volume of tissue in upper part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1264 | RUP_TOTV | Char | 20 | Total volume of upper part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1265 | RUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1266 | RUP_ASLP | Char | 20 | The slope of the line at the ankle for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1267 | RUP_AINT | Char | 20 | The interecept of the line at the ankle for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1268 | RUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper part of peel section of right lung at Total Lung Capacity (TLC) |
| 1269 | RUP_KSLP | Char | 20 | The slope of the line at the knee for upper part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1270 | RUP_KINT | Char | 20 | The intercept of the line at the knee for upper part of peel section of right lung at Total <br> Lung Capacity (TLC) |
| 1271 | RUP_CCUTOFF | Char | 20 | Upper part of peel section of right lung: definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 1272 | RUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper part of peel section of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1273 | RUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of upper part of <br> peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1274 | RUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1275 | RUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of upper <br> part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1276 | RUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of upper part of peel <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1272 | RManber of voxels below or equal to -950 hounsfield units for middle part of right lung |  |  |  |
| at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1296 | RM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1297 | RM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1298 | RM_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1299 | RM_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1300 | RM_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1301 | RM_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1302 | RM_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1303 | RM_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1304 | RM_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1305 | RM_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1306 | RM_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1307 | RM_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1308 | RM_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1309 | RM_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1310 | RM_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1311 | RM_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1312 | RM_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1313 | RM_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1314 | RM_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1315 | RM_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1316 | RM_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1317 | RM_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |
| 1318 | RM_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for middle part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 1319 | RM_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1320 | RM_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1321 | RM_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1322 | RM_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1323 | RM_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of right lung <br> at Total Lung Capacity (TLC) |
| 1324 | RM_AE600 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1345 | RM_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1346 | RM_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1347 | RM_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1348 | RM_CVYSD | The Y component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |
| 1349 | RM_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle part of right <br> lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1350 | RM_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1351 | RM_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle part of right <br> lung at Total Lung Capacity (TLC) |
| 1352 | RM_HU15 | Value of the pixel that is at the 15th percentile of pixel values for middle part of right <br> lung at Total Lung Capacity (TLC) |  |  |
| 1353 | RM_HU20 | Char | Char | 20 |
| 1354 | RM_AIue of the pixel that is at the 20th percentile of pixel values for middle part of right |  |  |  |
| lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1370 | RMC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1371 | RMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1372 | RMC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1373 | RMC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1374 | RMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1375 | RMC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1376 | RMC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1377 | RMC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1378 | RMC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1379 | RMC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1380 | RMC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1381 | RMC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1382 | RMC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1383 | RMC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1384 | RMC_BE400 | Char | 20 | Number of voxels below or equal to - 400 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1385 | RMC_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1386 | RMC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1387 | RMC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1388 | RMC_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1389 | RMC_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1390 | RMC_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1391 | RMC_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1392 | RMC_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1393 | RMC_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1394 | RMC_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1395 | RMC_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1396 | RMC_MEAN | Char | 20 | Average pixel values within middle part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1397 | RMC_MED | Char | 20 | Median pixel values within middle part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1398 | RMC_VAR | Char | 20 | Variance of pixel values within middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1399 | RMC_SDEV | Char | 20 | Standard deviation of pixel values within core section of middle right lung |
| 1400 | RMC_ADEV | Char | 20 | Average deviation of pixel values within core section of middle right lung |
| 1401 | RMC_SKEW | Char | 20 | Skewness of pixel values in middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1402 | RMC_KURT | Char | 20 | Kurtosis of pixel values in middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1403 | RMC_FWHM | Char | 20 | Full width, half max (HU) for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1404 | RMC_AIRV | Char | 20 | Total volume of air in middle part of core section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1405 | RMC_TISV | Char | 20 | Total volume of tissue in middle part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1406 | RMC_TOTV | Char | 20 | Total volume of middle part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1407 | RMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1408 | RMC_ASLP | Char | 20 | The slope of the line at the ankle for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1409 | RMC_AINT | Char | 20 | The interecept of the line at the ankle for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1410 | RMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1411 | RMC_KSLP | Char | 20 | The slope of the line at the knee for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1412 | RMC_KINT | Char | 20 | The intercept of the line at the knee for middle part of core section of right lung at Total Lung Capacity (TLC) |
| 1413 | RMC_CCUTOFF | Char | 20 | Middle part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1414 | RMC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1415 | RMC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of middle part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1416 | RMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1417 | RMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1418 | RMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1419 | RMC_CVYSD | The Y component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |  |  |
| 1420 | RMC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle part of core <br> section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1421 | RMC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1422 | RMC_HU10 | Value of the pixel that is at the 10th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |  |  |
| 1423 | RMC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |
| 1424 | RMC_HU20 | Value of the pixel that is at the 20th percentile of pixel values for middle part of core <br> section of right lung at Total Lung Capacity (TLC) |  |  |
| 1425 | RMC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of middle right lung |
| 1426 | RMC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in core section of middle right lung |
| 1427 | RMC_VESSELVX | Char | 20 | Total number of vessel voxels in middle part of core section of right lung at Total <br> Lung Capacity (TLC) |
| 1420 | RMC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of core section of <br> right lung at Total Lung Capacity (TLC) |
| 1439 | RMP_BE920 | RMP_BE930 | Char | Char <br> nection of right lung at Total Lung Capacity (TLC) |
| 1420 | Number of voxels below or equal to -910 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |  |  |  |
| Nection of right lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1441 | RMP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1442 | RMP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1443 | RMP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1444 | RMP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1445 | RMP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle part of peel <br> section of right lung at Total Lung Capacity (TLC) |
| 1446 | RMP_BE830 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1464 | RMP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1465 | RMP_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1466 | RMP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1467 | RMP_MEAN | Char | 20 | Average pixel values within middle part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1468 | RMP_MED | Char | 20 | Median pixel values within middle part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1469 | RMP_VAR | Char | 20 | Variance of pixel values within middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1470 | RMP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of middle right lung |
| 1471 | RMP_ADEV | Char | 20 | Average deviation of pixel values within peel section of middle right lung |
| 1472 | RMP_SKEW | Char | 20 | Skewness of pixel values in middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1473 | RMP_KURT | Char | 20 | Kurtosis of pixel values in middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1474 | RMP_FWHM | Char | 20 | Full width, half max (HU) for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1475 | RMP_AIRV | Char | 20 | Total volume of air in middle part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1476 | RMP_TISV | Char | 20 | Total volume of tissue in middle part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1477 | RMP_TOTV | Char | 20 | Total volume of middle part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1478 | RMP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1479 | RMP_ASLP | Char | 20 | The slope of the line at the ankle for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1480 | RMP_AINT | Char | 20 | The interecept of the line at the ankle for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1481 | RMP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1482 | RMP_KSLP | Char | 20 | The slope of the line at the knee for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1483 | RMP_KINT | Char | 20 | The intercept of the line at the knee for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1484 | RMP_CCUTOFF | Char | 20 | Middle part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1485 | RMP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1486 | RMP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1487 | RMP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1488 | RMP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1489 | RMP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1490 | RMP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1491 | RMP_CVZM | Char | 20 | The $Z$ component of the mean vector drawn from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1492 | RMP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1493 | RMP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1494 | RMP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1495 | RMP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1496 | RMP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of middle right lung |
| 1497 | RMP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in peel section of middle right lung |
| 1498 | RMP_VESSELVX | Char | 20 | Total number of vessel voxels in middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1499 | RMP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle part of peel section of right lung at Total Lung Capacity (TLC) |
| 1500 | RL_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in lower right lung |
| 1501 | RL_TOTVX | Char | 20 | Total number of voxels in lower part of right lung at Total Lung Capacity (TLC) |
| 1502 | RL_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1503 | RL_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for lower right lung |
| 1504 | RL_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1505 | RL_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for lower right lung |
| 1506 | RL_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1507 | RL_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1508 | RL_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1509 | RL_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1510 | RL_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1511 | RL_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1512 | RL_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1513 | RL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1514 | RL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1515 | RL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1516 | RL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1517 | RL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1518 | RL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1519 | RL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1520 | RL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1521 | RL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1522 | RL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1523 | RL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1524 | RL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1525 | RL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1526 | RL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1527 | RL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1528 | RL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1529 | RL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1530 | RL_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1531 | RL_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1532 | RL_AE150 | Char | 20 | Number of voxels above or equal to -150 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1533 | RL_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1534 | RL_AE250 | Char | 20 | Number of voxels above or equal to -250 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |
| 1535 | RL_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 1536 | RL_AE500 | Char | 20 | Number of voxels above or equal to -500 hounsfield units for lower part of right lung at <br> Total Lung Capacity (TLC) |
| 1537 | RL_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of right lung at <br> Total Lung Capacity (TLC) |
| 1538 | RL_MEAN | Char | 20 | Average pixel values within lower part of right lung (HU) at Total Lung Capacity <br> (TLC) |
| 1539 | RL_MED | Char | 20 | Median pixel values within lower part of right lung (HU) at Total Lung Capacity <br> (TLC) |
| 1540 | RL_VAR | Char | 20 | Variance of pixel values within lower part of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1562 | RL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1563 | RL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1564 | RL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1565 | RL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1566 | RL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of right lung at Total Lung Capacity (TLC) |
| 1567 | RL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower right lung |
| 1568 | RL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the lower right lung |
| 1569 | RL_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of right lung at Total Lung Capacity (TLC) |
| 1570 | RL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of right lung at Total Lung Capacity (TLC) |
| 1571 | RLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in core section of lower right lung |
| 1572 | RLC_TOTVX | Char | 20 | Total number of voxels in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1573 | RLC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1574 | RLC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for core section of lower right lung |
| 1575 | RLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1576 | RLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for core section of lower right lung |
| 1577 | RLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1578 | RLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1579 | RLC_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1580 | RLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1581 | RLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1582 | RLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1583 | RLC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1584 | RLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1585 | RLC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1586 | RLC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of core section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 1587 | RLC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1588 | RLC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1589 | RLC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1590 | RLC_BE660 | Char | Number of voxels below or equal to -660 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |  |
| 1591 | RLC_BE640 | Number of voxels below or equal to -640 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1592 | RLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |
| 1593 | RLC_BE600 | Char | Char | 20 |
| 1594 | RLC_BE550 | Number of voxels below or equal to -600 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1595 | RLC_BE500 | Number of voxels below or equal to -550 hounsfield units for lower part of core section <br> of right lung at Total Lung Capacity (TLC) |  |  |
| 1596 | RLC_BE450 | Chamber of voxels below or equal to -500 hounsfield units for lower part of core section |  |  |
| of right lung at Total Lung Capacity (TLC) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1610 | RLC_MED | Char | 20 | Median pixel values within lower part of core section of right lung (HU) at Total Lung Capacity (TLC) |
| 1611 | RLC_VAR | Char | 20 | Variance of pixel values within lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1612 | RLC_SDEV | Char | 20 | Standard deviation of pixel values within core section of lower right lung |
| 1613 | RLC_ADEV | Char | 20 | Average deviation of pixel values within core section of lower right lung |
| 1614 | RLC_SKEW | Char | 20 | Skewness of pixel values in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1615 | RLC_KURT | Char | 20 | Kurtosis of pixel values in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1616 | RLC_FWHM | Char | 20 | Full width, half max (HU) for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1617 | RLC_AIRV | Char | 20 | Total volume of air in lower part of core section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1618 | RLC_TISV | Char | 20 | Total volume of tissue in lower part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1619 | RLC_TOTV | Char | 20 | Total volume of lower part of core section of right lung (ml) at Total Lung Capacity (TLC) |
| 1620 | RLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1621 | RLC_ASLP | Char | 20 | The slope of the line at the ankle for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1622 | RLC_AINT | Char | 20 | The interecept of the line at the ankle for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1623 | RLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1624 | RLC_KSLP | Char | 20 | The slope of the line at the knee for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1625 | RLC_KINT | Char | 20 | The intercept of the line at the knee for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1626 | RLC_CCUTOFF | Char | 20 | Lower part of core section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1627 | RLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1628 | RLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1629 | RLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1630 | RLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1631 | RLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1632 | RLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1633 | RLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1634 | RLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of core section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1635 | RLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1636 | RLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1637 | RLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1638 | RLC_AIRWAYVX | Char | 20 | Total number of airway voxels in core section of lower right lung |
| 1639 | RLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the core section of lower right lung |
| 1640 | RLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1641 | RLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of core section of right lung at Total Lung Capacity (TLC) |
| 1642 | RLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters in peel section of lower right lung |
| 1643 | RLP_TOTVX | Char | 20 | Total number of voxels in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1644 | RLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for peel section of lower right lung |
| 1645 | RLP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for peel section of lower right lung |
| 1646 | RLP_B1000 | Char | 20 | Number of voxels below or equal to - 1000 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1647 | RLP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for peel section of lower right lung |
| 1648 | RLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1649 | RLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1650 | RLP_BE940 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1651 | RLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1652 | RLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1653 | RLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1654 | RLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1655 | RLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1656 | RLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1657 | RLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1658 | RLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1659 | RLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1660 | RLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1661 | RLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1662 | RLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1663 | RLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1664 | RLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1665 | RLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1666 | RLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1667 | RLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1668 | RLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1669 | RLP_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1670 | RLP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1671 | RLP_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1672 | RLP_AE50 | Char | 20 | Number of voxels above or equal to -50 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1673 | RLP_AE100 | Char | 20 | Number of voxels above or equal to -100 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1674 | RLP_AE150 | Char | 20 | Number of voxels above or equal to - 150 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1675 | RLP_AE200 | Char | 20 | Number of voxels above or equal to -200 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1676 | RLP_AE250 | Char | 20 | Number of voxels above or equal to - 250 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1677 | RLP_AE400 | Char | 20 | Number of voxels above or equal to -400 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1678 | RLP_AE500 | Char | 20 | Number of voxels above or equal to - 500 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1679 | RLP_AE600 | Char | 20 | Number of voxels above or equal to -600 hounsfield units for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1680 | RLP_MEAN | Char | 20 | Average pixel values within lower part of peel section of right lung (HU) at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1681 | RLP_MED | Char | 20 | Median pixel values within lower part of peel section of right lung (HU) at Total Lung Capacity (TLC) |
| 1682 | RLP_VAR | Char | 20 | Variance of pixel values within lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1683 | RLP_SDEV | Char | 20 | Standard deviation of pixel values within peel section of lower right lung |
| 1684 | RLP_ADEV | Char | 20 | Average deviation of pixel values within peel section of lower right lung |
| 1685 | RLP_SKEW | Char | 20 | Skewness of pixel values in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1686 | RLP_KURT | Char | 20 | Kurtosis of pixel values in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1687 | RLP_FWHM | Char | 20 | Full width, half max (HU) for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1688 | RLP_AIRV | Char | 20 | Total volume of air in lower part of peel section of right lung (milliliters) at Total Lung Capacity (TLC) |
| 1689 | RLP_TISV | Char | 20 | Total volume of tissue in lower part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1690 | RLP_TOTV | Char | 20 | Total volume of lower part of peel section of right lung (ml) at Total Lung Capacity (TLC) |
| 1691 | RLP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1692 | RLP_ASLP | Char | 20 | The slope of the line at the ankle for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1693 | RLP_AINT | Char | 20 | The interecept of the line at the ankle for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1694 | RLP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1695 | RLP_KSLP | Char | 20 | The slope of the line at the knee for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1696 | RLP_KINT | Char | 20 | The intercept of the line at the knee for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1697 | RLP_CCUTOFF | Char | 20 | Lower part of peel section of right lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1698 | RLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1699 | RLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1700 | RLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels. at Total Lung Capacity (TLC) |
| 1701 | RLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1702 | RLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1703 | RLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1704 | RLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1705 | RLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower part of peel section of right lung to emphysema voxels at Total Lung Capacity (TLC) |
| 1706 | RLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1707 | RLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1708 | RLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1709 | RLP_AIRWAYVX | Char | 20 | Total number of airway voxels in peel section of lower right lung |
| 1710 | RLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx/TotVx*100) in the peel section of lower right lung |
| 1711 | RLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1712 | RLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower part of peel section of right lung at Total Lung Capacity (TLC) |
| 1713 | TLU_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of left lung |
| 1714 | TLU_TOTVX | Char | 20 | Total number of voxels in upper third of left lung |
| 1715 | TLU_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of left lung |
| 1716 | TLU_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of left lung |
| 1717 | TLU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of left lung |
| 1718 | TLU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of left lung |
| 1719 | TLU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of left lung |
| 1720 | TLU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of left lung |
| 1721 | TLU_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of left lung |
| 1722 | TLU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of left lung |
| 1723 | TLU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of left lung |
| 1724 | TLU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of left lung |
| 1725 | TLU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of left lung |
| 1726 | TLU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of left lung |
| 1727 | TLU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of left lung |
| 1728 | TLU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of left lung |
| 1729 | TLU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of left lung |
| 1730 | TLU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of left lung |
| 1731 | TLU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of left lung |
| 1732 | TLU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of left lung |
| 1733 | TLU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of left lung |
| 1734 | TLU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of left lung |
| 1735 | TLU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of left lung |
| 1736 | TLU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1737 | TLU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of left lung |
| 1738 | TLU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of left lung |
| 1739 | TLU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of left lung |
| 1740 | TLU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of left lung |
| 1741 | TLU_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of left lung |
| 1742 | TLU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of left lung |
| 1743 | TLU_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of left lung |
| 1744 | TLU_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of left lung |
| 1745 | TLU_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of left lung |
| 1746 | TLU_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of left lung |
| 1747 | TLU_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of left lung |
| 1748 | TLU_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of left lung |
| 1749 | TLU_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of left lung |
| 1750 | TLU_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of left lung |
| 1751 | TLU_MEAN | Char | 20 | Average pixel values within upper third of left lung (HU) |
| 1752 | TLU_MED | Char | 20 | Median pixel values within upper third of left lung (HU) |
| 1753 | TLU_VAR | Char | 20 | Variance of pixel values within upper third of left lung |
| 1754 | TLU_SDEV | Char | 20 | Standard deviation of pixel values within upper third of left lung |
| 1755 | TLU_ADEV | Char | 20 | Average deviation of pixel values within upper third of left lung |
| 1756 | TLU_SKEW | Char | 20 | Skewness of pixel values in upper third of left lung |
| 1757 | TLU_KURT | Char | 20 | Kurtosis of pixel values in upper third of left lung |
| 1758 | TLU_FWHM | Char | 20 | Full width, half max (HU) for upper third of left lung |
| 1759 | TLU_AIRV | Char | 20 | Total volume of air in upper third of left lung (milliliters) |
| 1760 | TLU_TISV | Char | 20 | Total volume of tissue in upper third of left lung (ml) |
| 1761 | TLU_TOTV | Char | 20 | Total volume of upper third of left lung (ml) |
| 1762 | TLU_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of left lung |
| 1763 | TLU_ASLP | Char | 20 | The slope of the line at the ankle for upper third of left lung |
| 1764 | TLU_AINT | Char | 20 | The intercept of the line at the ankle for upper third of left lung |
| 1765 | TLU_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of left lung |
| 1766 | TLU_KSLP | Char | 20 | The slope of the line at the knee for upper third of left lung |
| 1767 | TLU_KINT | Char | 20 | The intercept of the line at the knee for upper third of left lung |
| 1768 | TLU_CCUTOFF | Char | 20 | upper third of left lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 1769 | TLU_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of left lung to emphysema voxels |
| 1770 | TLU_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of left lung to emphysema voxels |
| 1771 | TLU_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of left lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1772 | TLU_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of left lung to emphysema voxels |
| 1773 | TLU_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of left lung to emphysema voxels |
| 1774 | TLU_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of left lung to emphysema voxels |
| 1775 | TLU_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of left lung to emphysema voxels |
| 1776 | TLU_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of left lung to emphysema voxels |
| 1777 | TLU_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of left lung |
| 1778 | TLU_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of left lung |
| 1779 | TLU_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of left lung |
| 1780 | TLU_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of left lung |
| 1781 | TLU_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in upper third of left lung |
| 1782 | TLU_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of left lung |
| 1783 | TLU_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of left lung |
| 1784 | TLUC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of core section of left lung |
| 1785 | TLUC_TOTVX | Char | 20 | Total number of voxels in upper third of core section of left lung |
| 1786 | TLUC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of core section of left lung |
| 1787 | TLUC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of core section of left lung |
| 1788 | TLUC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of core section of left lung |
| 1789 | TLUC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of core section of left lung |
| 1790 | TLUC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of core section of left lung |
| 1791 | TLUC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of core section of left lung |
| 1792 | TLUC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of core section of left lung |
| 1793 | TLUC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of core section of left lung |
| 1794 | TLUC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of core section of left lung |
| 1795 | TLUC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of core section of left lung |
| 1796 | TLUC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of core section of left lung |
| 1797 | TLUC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1798 | TLUC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of core section of left lung |
| 1799 | TLUC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of core section of left lung |
| 1800 | TLUC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of core section of left lung |
| 1801 | TLUC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of core section of left lung |
| 1802 | TLUC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of core section of left lung |
| 1803 | TLUC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of core section of left lung |
| 1804 | TLUC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of core section of left lung |
| 1805 | TLUC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of core section of left lung |
| 1806 | TLUC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of core section of left lung |
| 1807 | TLUC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of core section of left lung |
| 1808 | TLUC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of core section of left lung |
| 1809 | TLUC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of core section of left lung |
| 1810 | TLUC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of core section of left lung |
| 1811 | TLUC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of core section of left lung |
| 1812 | TLUC_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper third of core section of left lung |
| 1813 | TLUC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of core section of left lung |
| 1814 | TLUC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of core section of left lung |
| 1815 | TLUC_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of core section of left lung |
| 1816 | TLUC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of core section of left lung |
| 1817 | TLUC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of core section of left lung |
| 1818 | TLUC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of core section of left lung |
| 1819 | TLUC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of core section of left lung |
| 1820 | TLUC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of core section of left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1821 | TLUC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of core section of <br> left lung |
| 1822 | TLUC_MEAN | Char | 20 | Average pixel values within upper third of core section of left lung (HU) |
| 1823 | TLUC_MED | Char | 20 | Median pixel values within upper third of core section of left lung (HU) |
| 1824 | TLUC_VAR | Char | 20 | Variance of pixel values within upper third of core section of left lung |
| 1825 | TLUC_SDEV | Char | 20 | Standard deviation of pixel values within upper third of core section of left lung |
| 1826 | TLUC_ADEV | Char | 20 | Average deviation of pixel values within upper third of core section of left lung |
| 1827 | TLUC_SKEW | Char | 20 | Kurtosis of pixel values in upper third of core section of left lung |
| 1828 | TLUC_KURT | Char | 20 | Full width, half max (HU) for upper third of core section of left lung |
| 1829 | TLUC_FWHM | Char | 20 | Total volume of air in upper third of core section of left lung (milliliters) |
| 1830 | TLUC_AIRV volume of tissue in upper third of core section of left lung (ml) |  |  |  |
| 1831 | TLUC_TISV | Char | 20 | Total volume of upper third of core section of left lung (ml) |
| 1832 | TLUC_TOTV | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for upper third of core section of left lung |
| 1833 | TLUC_ANKL | Char | 20 | The slope of the line at the ankle for upper third of core section of left lung |
| 1834 | TLUC_ASLP | Char | 20 | The intercept of the line at the ankle for upper third of core section of left lung <br> Vection of left lung |
| 1835 | TLUC_AINT | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of <br> number of voxels versus HU for upper third of core section of left lung |
| 1836 | TLUC_KNEE | Char | 20 | The slope of the line at the knee for upper third of core section of left lung <br> section of left lung |
| 1849 | Third of core section of left lung to emphysema voxels |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1850 | TLUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of core section of left lung |
| 1851 | TLUC_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of core section of left lung |
| 1852 | TLUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in upper third of core section of left lung |
| 1853 | TLUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of core section of left lung |
| 1854 | TLUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / $\operatorname{Tot} V x * 100)$ for upper third of core section of left lung |
| 1855 | TLUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of peel section of left lung |
| 1856 | TLUP_TOTVX | Char | 20 | Total number of voxels in upper third of peel section of left lung |
| 1857 | TLUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of peel section of left lung |
| 1858 | TLUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of peel section of left lung |
| 1859 | TLUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of peel section of left lung |
| 1860 | TLUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of peel section of left lung |
| 1861 | TLUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of peel section of left lung |
| 1862 | TLUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of peel section of left lung |
| 1863 | TLUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of peel section of left lung |
| 1864 | TLUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of peel section of left lung |
| 1865 | TLUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of peel section of left lung |
| 1866 | TLUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of peel section of left lung |
| 1867 | TLUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of peel section of left lung |
| 1868 | TLUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of peel section of left lung |
| 1869 | TLUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of peel section of left lung |
| 1870 | TLUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of peel section of left lung |
| 1871 | TLUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of peel section of left lung |
| 1872 | TLUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of peel section of left lung |
| 1873 | TLUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of peel section of left lung |
| 1874 | TLUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of peel section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1875 | TLUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of peel section of left lung |
| 1876 | TLUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of peel section of left lung |
| 1877 | TLUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of peel section of left lung |
| 1878 | TLUP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of peel section of left lung |
| 1879 | TLUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of peel section of left lung |
| 1880 | TLUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of peel section of left lung |
| 1881 | TLUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of peel section of left lung |
| 1882 | TLUP_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for upper third of peel section of left lung |
| 1883 | TLUP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of peel section of left lung |
| 1884 | TLUP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of peel section of left lung |
| 1885 | TLUP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of peel section of left lung |
| 1886 | TLUP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of peel section of left lung |
| 1887 | TLUP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of peel section of left lung |
| 1888 | TLUP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of peel section of left lung |
| 1889 | TLUP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of peel section of left lung |
| 1890 | TLUP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of peel section of left lung |
| 1891 | TLUP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of peel section of left lung |
| 1892 | TLUP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of peel section of left lung |
| 1893 | TLUP_MEAN | Char | 20 | Average pixel values within upper third of peel section of left lung (HU) |
| 1894 | TLUP_MED | Char | 20 | Median pixel values within upper third of peel section of left lung (HU) |
| 1895 | TLUP_VAR | Char | 20 | Variance of pixel values within upper third of peel section of left lung |
| 1896 | TLUP_SDEV | Char | 20 | Standard deviation of pixel values within upper third of peel section of left lung |
| 1897 | TLUP_ADEV | Char | 20 | Average deviation of pixel values within upper third of peel section of left lung |
| 1898 | TLUP_SKEW | Char | 20 | Skewness of pixel values in upper third of peel section of left lung |
| 1899 | TLUP_KURT | Char | 20 | Kurtosis of pixel values in upper third of peel section of left lung |
| 1900 | TLUP_FWHM | Char | 20 | Full width, half max (HU) for upper third of peel section of left lung |
| 1901 | TLUP_AIRV | Char | 20 | Total volume of air in upper third of peel section of left lung (milliliters) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1902 | TLUP_TISV | Char | 20 | Total volume of tissue in upper third of peel section of left lung (ml) |
| 1903 | TLUP_TOTV | Char | 20 | Total volume of upper third of peel section of left lung (ml) |
| 1904 | TLUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number <br> of voxels versus HU for upper third of peel section of left lung |
| 1905 | TLUP_ASLP | Char | 20 | The slope of the line at the ankle for upper third of peel section of left lung |
| 1906 | TLUP_AINT | Char | 20 | The intercept of the line at the ankle for upper third of peel section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1930 | TLM_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of left lung |
| 1931 | TLM_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third left lung |
| 1932 | TLM_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of left lung |
| 1933 | TLM_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of left lung |
| 1934 | TLM_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of left lung |
| 1935 | TLM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of left lung |
| 1936 | TLM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of left lung |
| 1937 | TLM_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of left lung |
| 1938 | TLM_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of left lung |
| 1939 | TLM_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of left lung |
| 1940 | TLM_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of left lung |
| 1941 | TLM_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of left lung |
| 1942 | TLM_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of left lung |
| 1943 | TLM_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of left lung |
| 1944 | TLM_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of left lung |
| 1945 | TLM_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of left lung |
| 1946 | TLM_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of left lung |
| 1947 | TLM_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of left lung |
| 1948 | TLM_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of left lung |
| 1949 | TLM_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of left lung |
| 1950 | TLM_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of left lung |
| 1951 | TLM_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of left lung |
| 1952 | TLM_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of left lung |
| 1953 | TLM_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of left lung |
| 1954 | TLM_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of left lung |
| 1955 | TLM_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of left lung |
| 1956 | TLM_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of left lung |
| 1957 | TLM_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of left lung |
| 1958 | TLM_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of left lung |
| 1959 | TLM_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of left lung |
| 1960 | TLM_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of left lung |
| 1961 | TLM_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of left lung |
| 1962 | TLM_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of left lung |
| 1963 | TLM_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of left lung |
| 1964 | TLM_MEAN | Char | 20 | Average pixel values within middle third of left lung (HU) |
| 1965 | TLM_MED | Char | 20 | Median pixel values within middle third of left lung (HU) |
| 1966 | TLM_VAR | Char | 20 | Variance of pixel values within middle third of left lung |
| 1967 | TLM_SDEV | Char | 20 | Standard deviation of pixel values within middle third of left lung |
| 1968 | TLM_ADEV | Char | 20 | Average deviation of pixel values within middle third of left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1969 | TLM_SKEW | Char | 20 | Skewness of pixel values in middle third of left lung |
| 1970 | TLM_KURT | Char | 20 | Kurtosis of pixel values in middle third of left lung |
| 1971 | TLM_FWHM | Char | 20 | Full width, half max (HU) for middle third of left lung |
| 1972 | TLM_AIRV | Char | 20 | Total volume of air in middle third of left lung (milliliters) |
| 1973 | TLM_TISV | Char | 20 | Total volume of tissue in middle third of left lung (ml) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1999 | TLMC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of core section of left lung |
| 2000 | TLMC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of core section of left lung |
| 2001 | TLMC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of core section of left lung |
| 2002 | TLMC_E1000 | Char | 20 | Number of voxels equal to - 1000 hounsfield units for middle third of core section of left lung |
| 2003 | TLMC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of core section of left lung |
| 2004 | TLMC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of core section of left lung |
| 2005 | TLMC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of core section of left lung |
| 2006 | TLMC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of core section of left lung |
| 2007 | TLMC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of core section of left lung |
| 2008 | TLMC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of core section of left lung |
| 2009 | TLMC_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of core section of left lung |
| 2010 | TLMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of core section of left lung |
| 2011 | TLMC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of core section of left lung |
| 2012 | TLMC_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of core section of left lung |
| 2013 | TLMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of core section of left lung |
| 2014 | TLMC_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of core section of left lung |
| 2015 | TLMC_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of core section of left lung |
| 2016 | TLMC_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of core section of left lung |
| 2017 | TLMC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of core section of left lung |
| 2018 | TLMC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of core section of left lung |
| 2019 | TLMC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of core section of left lung |
| 2020 | TLMC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of core section of left lung |
| 2021 | TLMC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2022 | TLMC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of core section of left lung |
| 2023 | TLMC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of core section of left lung |
| 2024 | TLMC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of core section of left lung |
| 2025 | TLMC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of core section of left lung |
| 2026 | TLMC_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of core section of left lung |
| 2027 | TLMC_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of core section of left lung |
| 2028 | TLMC_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of core section of left lung |
| 2029 | TLMC_AE150 | Char | 20 | Number voxels above or equal to - 150 hounsfield units in middle third of core section of left lung |
| 2030 | TLMC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of core section of left lung |
| 2031 | TLMC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of core section of left lung |
| 2032 | TLMC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of core section of left lung |
| 2033 | TLMC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of core section of left lung |
| 2034 | TLMC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of core section of left lung |
| 2035 | TLMC_MEAN | Char | 20 | Average pixel values within middle third of core section of left lung (HU) |
| 2036 | TLMC_MED | Char | 20 | Median pixel values within middle third of core section of left lung (HU) |
| 2037 | TLMC_VAR | Char | 20 | Variance of pixel values within middle third of core section of left lung |
| 2038 | TLMC_SDEV | Char | 20 | Standard deviation of pixel values within middle third of core section of left lung |
| 2039 | TLMC_ADEV | Char | 20 | Average deviation of pixel values within middle third of core section of left lung |
| 2040 | TLMC_SKEW | Char | 20 | Skewness of pixel values in middle third of core section of left lung |
| 2041 | TLMC_KURT | Char | 20 | Kurtosis of pixel values in middle third of core section of left lung |
| 2042 | TLMC_FWHM | Char | 20 | Full width, half max (HU) for middle third of core section of left lung |
| 2043 | TLMC_AIRV | Char | 20 | Total volume of air in middle third of core section of left lung (milliliters) |
| 2044 | TLMC_TISV | Char | 20 | Total volume of tissue in middle third of core section of left lung (ml) |
| 2045 | TLMC_TOTV | Char | 20 | Total volume of middle third of core section of left lung (ml) |
| 2046 | TLMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of core section of left lung |
| 2047 | TLMC_ASLP | Char | 20 | The slope of the line at the ankle for middle third of core section of left lung |
| 2048 | TLMC_AINT | Char | 20 | The intercept of the line at the ankle for middle third of core section of left lung |
| 2049 | TLMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of core section of left lung |
| 2050 | TLMC_KSLP | Char | 20 | The slope of the line at the knee for middle third of core section of left lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2051 | TLMC_KINT | Char | 20 | The intercept of the line at the knee for middle third of core section of left lung |
| 2052 | TLMC_CCUTOFF | Char | 20 | middle third of core section of left lung : definition of emphysema cutoff value (HU) <br> values less than this are considered emphysema |
| 2053 | TLMC_CVM | Char | 20 | 20 <br> Mean length of vectors drawn from the centroid of middle third of core section of left <br> lung emphysema voxels |
| 2054 | TLMC_CVSD | Standard deviation of the length of vectors drawn from the centroid of the middle third <br> of core section of left lung to emphysema voxels |  |  |
| 2055 | TLMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of <br> core section of left lung to emphysema voxels |
| 2056 | TLMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the <br> middle third of core section of left lung to emphysema voxels |
| 2057 | TLMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of <br> core section of left lung to emphysema voxels |
| 2058 | TLMC_CVYSD | The Y component of the standard deviation of the vectors from the centroid of the <br> middle third of core section of left lung to emphysema voxels |  |  |
| 2059 | TLMC_CVZM | Char | The Z component of the mean vector drawn from the centroid of middle third of core <br> section of left lung to emphysema voxels |  |
| 2060 | TLMC_CVZSD | Char | The Z component of the standard deviation of the vectors from the centroid of middle <br> third of core section of left lung to emphysema voxels |  |
| 2061 | TLMC_HU10 | Char | 20 | Value of the pixel that is at the 10 th percentile of pixel values for middle third of core <br> section of left lung |
| 2062 | TLMC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of core <br> section of left lung |
| 2073 | Thumber of voxels below or equal to -960 hounsfield units for middle third of peel |  |  |  |
| section of left lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2076 | TLMP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of peel section of left lung |
| 2077 | TLMP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of peel section of left lung |
| 2078 | TLMP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of peel section of left lung |
| 2079 | TLMP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of peel section of left lung |
| 2080 | TLMP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of peel section of left lung |
| 2081 | TLMP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of peel section of left lung |
| 2082 | TLMP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of peel section of left lung |
| 2083 | TLMP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of peel section of left lung |
| 2084 | TLMP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of peel section of left lung |
| 2085 | TLMP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of peel section of left lung |
| 2086 | TLMP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of peel section of left lung |
| 2087 | TLMP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of peel section of left lung |
| 2088 | TLMP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of peel section of left lung |
| 2089 | TLMP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of peel section of left lung |
| 2090 | TLMP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of peel section of left lung |
| 2091 | TLMP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of peel section of left lung |
| 2092 | TLMP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of peel section of left lung |
| 2093 | TLMP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of peel section of left lung |
| 2094 | TLMP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of peel section of left lung |
| 2095 | TLMP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of peel section of left lung |
| 2096 | TLMP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of peel section of left lung |
| 2097 | TLMP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of peel section of left lung |
| 2098 | TLMP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of peel section of left lung |

\(\left.$$
\begin{array}{|c|l|l|r|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\
\hline 2099 & \text { TLMP_AE100 } & \text { Char } & 20 & \begin{array}{l}\text { Number voxels above or equal to -100 hounsfield units in middle third of peel section } \\
\text { of left lung }\end{array} \\
\hline 2100 & \text { TLMP_AE150 } & \text { Char } & 20 & \begin{array}{l}\text { Number voxels above or equal to -150 hounsfield units in middle third of peel section } \\
\text { of left lung }\end{array} \\
\hline 2101 & \text { TLMP_AE200 } & \text { Char } & 20 & \begin{array}{l}\text { Number voxels above or equal to -200 hounsfield units in middle third of peel section } \\
\text { of left lung }\end{array} \\
\hline 2102 & \text { TLMP_AE250 } & \text { Char } & 20 & \begin{array}{l}\text { Number voxels above or equal to -250 hounsfield units in middle third of peel section } \\
\text { of left lung }\end{array} \\
\hline 2103 & \text { TLMP_AE400 } & \text { Char } & 20 & \begin{array}{l}\text { Number voxels above or equal to -400 hounsfield units in middle third of peel section } \\
\text { of left lung }\end{array} \\
\hline 2104 & \text { TLMP_AE500 } & \text { TLMP_CVXSD } & \text { Char } & 20\end{array}
$$ \begin{array}{l}Number voxels above or equal to -500 hounsfield units in middle third of peel section <br>

of left lung\end{array}\right]\)| The X component of the standard deviation of the vectors from the centroid of the |
| :--- |
| middle third of peel section of left lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2128 | TLMP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of <br> peel section of left lung to emphysema voxels |
| 2129 | TLMP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the <br> middle third of peel section of left lung to emphysema voxels |
| 2130 | TLMP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of peel <br> section of left lung to emphysema voxels |
| 2131 | TLMP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> third of peel section of left lung to emphysema voxels |
| 2132 | TLMP_HU10 | Char | 20 | Value of the pixel that is at the 10 th percentile of pixel values for middle third of peel <br> section of left lung |
| 2133 | TLMP_HU15 | Char | 20 | Value of the pixel that is at the 15 th percentile of pixel values for middle third of peel <br> section of left lung |
| 2134 | TLMP_HU20 | Char | 20 | Char |
| 2159 | TLL_BE640 | TLL_BE620 | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2161 | TLL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of left lung |
| 2162 | TLL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of left lung |
| 2163 | TLL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of left lung |
| 2164 | TLL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of left lung |
| 2165 | TLL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of left lung |
| 2166 | TLL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower third of left lung |
| 2167 | TLL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower third of left lung |
| 2168 | TLL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower third of left lung |
| 2169 | TLL_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of left lung |
| 2170 | TLL_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of left lung |
| 2171 | TLL_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of left lung |
| 2172 | TLL_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower third of left lung |
| 2173 | TLL_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower third of left lung |
| 2174 | TLL_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower third of left lung |
| 2175 | TLL_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of left lung |
| 2176 | TLL_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower third of left lung |
| 2177 | TLL_MEAN | Char | 20 | Average pixel values within lower third of left lung (HU) |
| 2178 | TLL_MED | Char | 20 | Median pixel values within lower third of left lung (HU) |
| 2179 | TLL_VAR | Char | 20 | Variance of pixel values within lower third of left lung |
| 2180 | TLL_SDEV | Char | 20 | Standard deviation of pixel values within lower third of left lung |
| 2181 | TLL_ADEV | Char | 20 | Average deviation of pixel values within lower third of left lung |
| 2182 | TLL_SKEW | Char | 20 | Skewness of pixel values in lower third of left lung |
| 2183 | TLL_KURT | Char | 20 | Kurtosis of pixel values in lower third of left lung |
| 2184 | TLL_FWHM | Char | 20 | Full width, half max (HU) for lower third of left lung |
| 2185 | TLL_AIRV | Char | 20 | Total volume of air in lower third of left lung (milliliters) |
| 2186 | TLL_TISV | Char | 20 | Total volume of tissue in lower third of left lung (ml) |
| 2187 | TLL_TOTV | Char | 20 | Total volume of lower third of left lung (ml) |
| 2188 | TLL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of left lung |
| 2189 | TLL_ASLP | Char | 20 | The slope of the line at the ankle for lower third of left lung |
| 2190 | TLL_AINT | Char | 20 | The intercept of the line at the ankle for lower third of left lung |
| 2191 | TLL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of left lung |
| 2192 | TLL_KSLP | Char | 20 | The slope of the line at the knee for lower third of left lung |
| 2193 | TLL_KINT | Char | 20 | The intercept of the line at the knee for lower third of left lung |
| 2194 | TLL_CCUTOFF | Char | 20 | lower third of left lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2195 | TLL_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower third of left lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2196 | TLL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2197 | TLL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2198 | TLL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of left lung to emphysema voxels |
| 2199 | TLL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of left lung to emphysema voxels |
| 2200 | TLL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of left lung to emphysema voxels |
| 2201 | TLL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of left lung to emphysema voxels |
| 2202 | TLL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of left lung to emphysema voxels |
| 2203 | TLL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of left lung |
| 2204 | TLL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of left lung |
| 2205 | TLL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of left lung |
| 2206 | TLL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of left lung |
| 2207 | TLL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of left lung |
| 2208 | TLL_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of left lung |
| 2209 | TLL_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of left lung |
| 2210 | TLLC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower left third of the core section of the lung |
| 2211 | TLLC_TOTVX | Char | 20 | Total number of voxels in lower left third of the core section of the lung |
| 2212 | TLLC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower left third of the core section of the lung |
| 2213 | TLLC_E1024 | Char | 20 | Number of voxels equal to -1000 hounsfield units lower left third of the core section of the lung |
| 2214 | TLLC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower left third of the core section of the lung |
| 2215 | TLLC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units lower left third of the core section of the lung |
| 2216 | TLLC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower left third of the core section of the lung |
| 2217 | TLLC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower left third of the core section of the lung |
| 2218 | TLLC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower left third of the core section of the lung |
| 2219 | TLLC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower left third of the core section of the lung |
| 2220 | TLLC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower left third of the core section of the lung |
| 2221 | TLLC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower left third of the core section of the lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2222 | TLLC_BE900 | Char | 20 | Number of voxels below or equal to - 900 hounsfield units for lower left third of the <br> core section of the lung |
| 2223 | TLLC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower left third of the <br> core section of the lung |
| 2224 | TLLC_BE870 | Char | 20 | Number of voxels below or equal to - -870 hounsfield units for lower left third of the <br> core section of the lung |
| 2225 | TLLC_BE856 | Char | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2245 | TLLC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower left third of the core section of the lung |
| 2246 | TLLC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower left third of the core section of the lung |
| 2247 | TLLC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower left third of the core section of the lung |
| 2248 | TLLC_MEAN | Char | 20 | Average pixel values within lower left third of the core section of the lung (HU) |
| 2249 | TLLC_MED | Char | 20 | Median pixel values within lower left third of the core section of the lung (HU) |
| 2250 | TLLC_VAR | Char | 20 | Variance of pixel values within lower left third of the core section of the lung |
| 2251 | TLLC_SDEV | Char | 20 | Standard deviation of pixel values within lower left third of the core section of the lung |
| 2252 | TLLC_ADEV | Char | 20 | Average deviation of pixel values within lower left third of the core section of the lung |
| 2253 | TLLC_SKEW | Char | 20 | Skewness of pixel values in lower left third of the core section of the lung |
| 2254 | TLLC_KURT | Char | 20 | Kurtosis of pixel values in lower left third of the core section of the lung |
| 2255 | TLLC_FWHM | Char | 20 | Full width, half max (HU) for lower left third of the core section of the lung |
| 2256 | TLLC_AIRV | Char | 20 | Total volume of air in lower left third of the core section of the lung (milliliters) |
| 2257 | TLLC_TISV | Char | 20 | Total volume of tissue in lower left third of the core section of the lung (ml) |
| 2258 | TLLC_TOTV | Char | 20 | Total volume of lower left third of the core section of the lung (ml) |
| 2259 | TLLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower left third of the core section of the lung |
| 2260 | TLLC_ASLP | Char | 20 | The slope of the line at the ankle for lower left third of the core section of the lung |
| 2261 | TLLC_AINT | Char | 20 | The intercept of the line at the ankle for lower left third of the core section of the lung |
| 2262 | TLLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower left third of the core section of the lung |
| 2263 | TLLC_KSLP | Char | 20 | The slope of the line at the knee for lower left third of the core section of the lung |
| 2264 | TLLC_KINT | Char | 20 | The intercept of the line at the knee for lower left third of the core section of the lung |
| 2265 | TLLC_CCUTOFF | Char | 20 | lower left third of the core section of the lung: definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2266 | TLLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower left third of the core section of the lung to emphysema voxels |
| 2267 | TLLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2268 | TLLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2269 | TLLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2270 | TLLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2271 | TLLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower left third of the core section of the lung to emphysema voxels |
| 2272 | TLLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower left third of the core section of the lung to emphysema voxels |
| 2273 | TLLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower left third of the core section of the lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2274 | TLLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower left third of the core section of the lung |
| 2275 | TLLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower left third of the core section of the lung |
| 2276 | TLLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower left third of the core section of the lung |
| 2277 | TLLC_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left third of the core section of the lung |
| 2278 | TLLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower left third of the core section of the lung |
| 2279 | TLLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower left third of the core section of the lung |
| 2280 | TLLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower left third of the core section of the lung |
| 2281 | TLLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower left third of the peel section of the lung |
| 2282 | TLLP_TOTVX | Char | 20 | Total number of voxels in lower left third of the peel section of the lung |
| 2283 | TLLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower left third of the peel section of the lung |
| 2284 | TLLP_E1024 | Char | 20 | Number of voxels equal to - 1024 hounsfield units for lower left third of the peel section of the lung |
| 2285 | TLLP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower left third of the peel section of the lung |
| 2286 | TLLP_E1000 | Char | 20 | Number of voxels equal to - 1000 hounsfield units for lower left third of the peel section of the lung |
| 2287 | TLLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower left third of the peel section of the lung |
| 2288 | TLLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower left third of the peel section of the lung |
| 2289 | TLLP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower left third of the peel section of the lung |
| 2290 | TLLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower left third of the peel section of the lung |
| 2291 | TLLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower left third of the peel section of the lung |
| 2292 | TLLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower left third of the peel section of the lung |
| 2293 | TLLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower left third of the peel section of the lung |
| 2294 | TLLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower left third of the peel section of the lung |
| 2295 | TLLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower left third of the peel section of the lung |
| 2296 | TLLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower left third of the peel section of the lung |
| 2297 | TLLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower left third of the peel section of the lung |
| 2298 | TLLP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower left third of the peel section of the lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2299 | TLLP_BE810 | Char | 20 | Number of voxels below or equal to - 810 hounsfield units for lower left third of the <br> peel section of the lung |
| 2300 | TLLP_BE660 | Char | 20 | Number of voxels below or equal to - 660 hounsfield units for lower left third of the <br> peel section of the lung |
| 2301 | TLLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower left third of the <br> peel section of the lung |
| 2302 | TLLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower left third of the <br> peel section of the lung |
| 2303 | TLLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower left third of the <br> peel section of the lung |
| 2323 | Char | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2325 | TLLP_KURT | Char | 20 | Kurtosis of pixel values in lower left third of the peel section of the lung |
| 2326 | TLLP_FWHM | Char | 20 | Full width, half max (HU) for lower left third of the peel section of the lung |
| 2327 | TLLP_AIRV | Char | 20 | Total volume of air in lower left third of the peel section of the lung (milliliters) |
| 2328 | TLLP_TISV | Char | 20 | Total volume of tissue in lower left third of the peel section of the lung (ml) |
| 2329 | TLLP_TOTV | Char | 20 | Total volume of lower left third of the peel section of the lung (ml) |
| 2330 | TLLP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower left third of the peel section of the lung |
| 2331 | TLLP_ASLP | Char | 20 | The slope of the line at the ankle for lower left third of the peel section of the lung |
| 2332 | TLLP_AINT | Char | 20 | The intercept of the line at the ankle for lower left third of the peel section of the lung |
| 2333 | TLLP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower left third of the peel section of the lung |
| 2334 | TLLP_KSLP | Char | 20 | The slope of the line at the knee for lower left third of the peel section of the lung |
| 2335 | TLLP_KINT | Char | 20 | The intercept of the line at the knee for lower left third of the peel section of the lung |
| 2336 | TLLP_CCUTOFF | Char | 20 | lower left third of the peel section of the lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2337 | TLLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid oflower left third of the peel section of the lung to emphysema voxels |
| 2338 | TLLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2339 | TLLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2340 | TLLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2341 | TLLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2342 | TLLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower left third of the peel section of the lung to emphysema voxels |
| 2343 | TLLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower left third of the peel section of the lung to emphysema voxels |
| 2344 | TLLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower left third of the peel section of the lung to emphysema voxels |
| 2345 | TLLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower left third of the peel section of the lung |
| 2346 | TLLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower left third of the peel section of the lung |
| 2347 | TLLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower left third of the peel section of the lung |
| 2348 | TLLP_AIRWAYVX | Char | 20 | Total number of airway voxels in lower left third of the peel section of the lung |
| 2349 | TLLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{TotVx} * 100$ ) in lower left third of the peel section of the lung |
| 2350 | TLLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower left third of the peel section of the lung |
| 2351 | TLLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower left third of the peel section of the lung |
| 2352 | TRU_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2353 | TRU_TOTVX | Char | 20 | Total number of voxels in upper third of right lung |
| 2354 | TRU_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of right lung |
| 2355 | TRU_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of right lung |
| 2356 | TRU_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of right lung |
| 2357 | TRU_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of right lung |
| 2358 | TRU_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of right lung |
| 2359 | TRU_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of right lung |
| 2360 | TRU_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of right lung |
| 2361 | TRU_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of right lung |
| 2362 | TRU_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of right lung |
| 2363 | TRU_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of right lung |
| 2364 | TRU_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of right lung |
| 2365 | TRU_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of right lung |
| 2366 | TRU_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of right lung |
| 2367 | TRU_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of right lung |
| 2368 | TRU_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of right lung |
| 2369 | TRU_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of right lung |
| 2370 | TRU_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of right lung |
| 2371 | TRU_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of right lung |
| 2372 | TRU_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of right lung |
| 2373 | TRU_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of right lung |
| 2374 | TRU_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of right lung |
| 2375 | TRU_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of right lung |
| 2376 | TRU_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of right lung |
| 2377 | TRU_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of right lung |
| 2378 | TRU_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of right lung |
| 2379 | TRU_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of right lung |
| 2380 | TRU_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper third of right lung |
| 2381 | TRU_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for upper third of right lung |
| 2382 | TRU_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of right lung |
| 2383 | TRU_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of right lung |
| 2384 | TRU_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of right lung |
| 2385 | TRU_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of right lung |
| 2386 | TRU_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of right lung |
| 2387 | TRU_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of right lung |
| 2388 | TRU_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of right lung |
| 2389 | TRU_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of right lung |
| 2390 | TRU_MEAN | Char | 20 | Average pixel values within upper third of right lung (HU) |
| 2391 | TRU_MED | Char | 20 | Median pixel values within upper third of right lung (HU) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 2392 | TRU_VAR | Char | 20 | Variance of pixel values within upper third of right lung |
| 2393 | TRU_SDEV | Char | 20 | Standard deviation of pixel values within upper third of right lung |
| 2394 | TRU_ADEV | 20 | Average deviation of pixel values within upper third of right lung |  |
| 2395 | TRU_SKEW | Char | 20 | Skewness of pixel values in upper third of right lung |
| 2396 | TRU_KURT | Char | 20 | Kurtosis of pixel values in upper third of right lung |
| 2397 | TRU_FWHM | Char | 20 | Total volume of air in upper third of right lung (milliliters) |
| 2398 | TRU_AIRV | Char | 20 | Total volume of tissue in upper third of right lung (ml) |
| 2399 | TRU_TISV | Char | 20 | Char |
| 2400 | TRU_TOTV | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 2422 | TRU_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of right lung |
| 2423 | TRUC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of core section of right lung |
| 2424 | TRUC_TOTVX | Char | 20 | Total number of voxels in upper third of core section of right lung |
| 2425 | TRUC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of core <br> section of right lung |
| 2426 | TRUC_E1024 | Char | 20 | 20 <br> Number of voxels equal to -1024 hounsfield units for upper third of core section of <br> right lung |
| 2427 | TRUC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of core <br> section of right lung |
| 2428 | TRUC_E1000 | Char | 20 | Nught lung voxels equal to -1000 hounsfield units for upper third of core section of <br> Nection of right lung |
| 2429 | TRUC_BE960 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of core <br> section of right lung |
| 2430 | TRUC_BE950 | Number of voxels below or equal to -940 hounsfield units for upper third of core <br> section of right lung |  |  |
| 2431 | TRUC_BE940 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of core <br> section of right lung |
| 2432 | TRUC_BE930 | Char | 20 | Char |
| 2433 | TRUC_BE920 | Charber of voxels below or equal to -920 hounsfield units for upper third of core |  |  |
| section of right lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2446 | TRUC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of core <br> section of right lung |
| 2447 | TRUC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of core <br> section of right lung |
| 2448 | TRUC_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of core <br> section of right lung |
| 2449 | TRUC_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of core <br> section of right lung |
| 2450 | TRUC_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for upper third of core <br> section of right lung |
| 2451 | TRUC_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for upper third of core <br> section of right lung |
| 2472 | TRUC_ASLP | Char | Char | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2474 | TRUC_AINT | Char | 20 | The intercept of the line at the ankle for upper third of core section of right lung |
| 2475 | TRUC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of core section of right lung |
| 2476 | TRUC_KSLP | Char | 20 | The slope of the line at the knee for upper third of core section of right lung |
| 2477 | TRUC_KINT | Char | 20 | The intercept of the line at the knee for upper third of core section of right lung |
| 2478 | TRUC_CCUTOFF | Char | 20 | upper third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2479 | TRUC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of core section of right lung to emphysema voxels |
| 2480 | TRUC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2481 | TRUC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2482 | TRUC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2483 | TRUC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2484 | TRUC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of core section of right lung to emphysema voxels |
| 2485 | TRUC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of core section of right lung to emphysema voxels |
| 2486 | TRUC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of core section of right lung to emphysema voxels |
| 2487 | TRUC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of core section of right lung |
| 2488 | TRUC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of core section of right lung |
| 2489 | TRUC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of core section of right lung |
| 2490 | TRUC_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of core section of right lung |
| 2491 | TRUC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in upper third of core section of right lung |
| 2492 | TRUC_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of core section of right lung |
| 2493 | TRUC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of core section of right lung |
| 2494 | TRUP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for upper third of peel section of right lung |
| 2495 | TRUP_TOTVX | Char | 20 | Total number of voxels in upper third of peel section of right lung |
| 2496 | TRUP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for upper third of peel section of right lung |
| 2497 | TRUP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for upper third of peel section of right lung |
| 2498 | TRUP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for upper third of peel section of right lung |
| 2499 | TRUP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for upper third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2500 | TRUP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for upper third of peel section of right lung |
| 2501 | TRUP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for upper third of peel section of right lung |
| 2502 | TRUP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for upper third of peel section of right lung |
| 2503 | TRUP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for upper third of peel section of right lung |
| 2504 | TRUP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for upper third of peel section of right lung |
| 2505 | TRUP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for upper third of peel section of right lung |
| 2506 | TRUP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for upper third of peel section of right lung |
| 2507 | TRUP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for upper third of peel section of right lung |
| 2508 | TRUP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for upper third of peel section of right lung |
| 2509 | TRUP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for upper third of peel section of right lung |
| 2510 | TRUP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for upper third of peel section of right lung |
| 2511 | TRUP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for upper third of peel section of right lung |
| 2512 | TRUP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for upper third of peel section of right lung |
| 2513 | TRUP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for upper third of peel section of right lung |
| 2514 | TRUP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for upper third of peel section of right lung |
| 2515 | TRUP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for upper third of peel section of right lung |
| 2516 | TRUP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for upper third of peel section of right lung |
| 2517 | TRUP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for upper third of peel section of right lung |
| 2518 | TRUP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for upper third of peel section of right lung |
| 2519 | TRUP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for upper third of peel section of right lung |
| 2520 | TRUP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for upper third of peel section of right lung |
| 2521 | TRUP_BE350 | Char | 20 | Number of voxels below or equal to - 350 hounsfield units for upper third of peel section of right lung |
| 2522 | TRUP_BE300 | Char | 20 | Number of voxels below or equal to - 300 hounsfield units for upper third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2523 | TRUP_BE250 | Char | 20 | Number of voxels below or equal to - 250 hounsfield units for upper third of peel section of right lung |
| 2524 | TRUP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in upper third of peel section of right lung |
| 2525 | TRUP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in upper third of peel section of right lung |
| 2526 | TRUP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in upper third of peel section of right lung |
| 2527 | TRUP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in upper third of peel section of right lung |
| 2528 | TRUP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in upper third of peel section of right lung |
| 2529 | TRUP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in upper third of peel section of right lung |
| 2530 | TRUP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in upper third of peel section of right lung |
| 2531 | TRUP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in upper third of peel section of right lung |
| 2532 | TRUP_MEAN | Char | 20 | Average pixel values within upper third of peel section of right lung (HU) |
| 2533 | TRUP_MED | Char | 20 | Median pixel values within upper third of peel section of right lung (HU) |
| 2534 | TRUP_VAR | Char | 20 | Variance of pixel values within upper third of peel section of right lung |
| 2535 | TRUP_SDEV | Char | 20 | Standard deviation of pixel values within upper third of peel section of right lung |
| 2536 | TRUP_ADEV | Char | 20 | Average deviation of pixel values within upper third of peel section of right lung |
| 2537 | TRUP_SKEW | Char | 20 | Skewness of pixel values in upper third of peel section of right lung |
| 2538 | TRUP_KURT | Char | 20 | Kurtosis of pixel values in upper third of peel section of right lung |
| 2539 | TRUP_FWHM | Char | 20 | Full width, half max (HU) for upper third of peel section of right lung |
| 2540 | TRUP_AIRV | Char | 20 | Total volume of air in upper third of peel section of right lung (milliliters) |
| 2541 | TRUP_TISV | Char | 20 | Total volume of tissue in upper third of peel section of right lung (ml) |
| 2542 | TRUP_TOTV | Char | 20 | Total volume of upper third of peel section of right lung (ml) |
| 2543 | TRUP_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for upper third of peel section of right lung |
| 2544 | TRUP_ASLP | Char | 20 | The slope of the line at the ankle for upper third of peel section of right lung |
| 2545 | TRUP_AINT | Char | 20 | The intercept of the line at the ankle for upper third of peel section of right lung |
| 2546 | TRUP_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for upper third of peel section of right lung |
| 2547 | TRUP_KSLP | Char | 20 | The slope of the line at the knee for upper third of peel section of right lung |
| 2548 | TRUP_KINT | Char | 20 | The intercept of the line at the knee for upper third of peel section of right lung |
| 2549 | TRUP_CCUTOFF | Char | 20 | upper third of peel section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2550 | TRUP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2551 | TRUP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2552 | TRUP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2553 | TRUP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2554 | TRUP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2555 | TRUP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the upper third of peel section of right lung to emphysema voxels |
| 2556 | TRUP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2557 | TRUP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of upper third of peel section of right lung to emphysema voxels |
| 2558 | TRUP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for upper third of peel section of right lung |
| 2559 | TRUP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for upper third of peel section of right lung |
| 2560 | TRUP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for upper third of peel section of right lung |
| 2561 | TRUP_AIRWAYVX | Char | 20 | Total number of airway voxels in upper third of peel section of right lung |
| 2562 | TRUP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{TotVx} * 100$ ) in upper third of peel section of right lung |
| 2563 | TRUP_VESSELVX | Char | 20 | Total number of vessel voxels in upper third of peel section of right lung |
| 2564 | TRUP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for upper third of peel section of right lung |
| 2565 | TRM_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of right lung |
| 2566 | TRM_TOTVX | Char | 20 | Total number of voxels in middle third of right lung |
| 2567 | TRM_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of right lung |
| 2568 | TRM_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of right lung |
| 2569 | TRM_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of right lung |
| 2570 | TRM_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of right lung |
| 2571 | TRM_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of right lung |
| 2572 | TRM_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of right lung |
| 2573 | TRM_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of right lung |
| 2574 | TRM_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of right lung |
| 2575 | TRM_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of right lung |
| 2576 | TRM_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of right lung |
| 2577 | TRM_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for middle third of right lung |
| 2578 | TRM_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of right lung |
| 2579 | TRM_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of right lung |
| 2580 | TRM_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of right lung |
| 2581 | TRM_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2582 | TRM_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of right lung |
| 2583 | TRM_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of right lung |
| 2584 | TRM_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of right lung |
| 2585 | TRM_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of right lung |
| 2586 | TRM_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of right lung |
| 2587 | TRM_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of right lung |
| 2588 | TRM_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of right lung |
| 2589 | TRM_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of right lung |
| 2590 | TRM_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of right lung |
| 2591 | TRM_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of right lung |
| 2592 | TRM_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of right lung |
| 2593 | TRM_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of right lung |
| 2594 | TRM_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of right lung |
| 2595 | TRM_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of right lung |
| 2596 | TRM_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of right lung |
| 2597 | TRM_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of right lung |
| 2598 | TRM_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of right lung |
| 2599 | TRM_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of right lung |
| 2600 | TRM_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of right lung |
| 2601 | TRM_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of right lung |
| 2602 | TRM_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of right lung |
| 2603 | TRM_MEAN | Char | 20 | Average pixel values within middle third of right lung (HU) |
| 2604 | TRM_MED | Char | 20 | Median pixel values within middle third of right lung (HU) |
| 2605 | TRM_VAR | Char | 20 | Variance of pixel values within middle third of right lung |
| 2606 | TRM_SDEV | Char | 20 | Standard deviation of pixel values within middle third of right lung |
| 2607 | TRM_ADEV | Char | 20 | Average deviation of pixel values within middle third of right lung |
| 2608 | TRM_SKEW | Char | 20 | Skewness of pixel values in middle third of right lung |
| 2609 | TRM_KURT | Char | 20 | Kurtosis of pixel values in middle third of right lung |
| 2610 | TRM_FWHM | Char | 20 | Full width, half max (HU) for middle third of right lung |
| 2611 | TRM_AIRV | Char | 20 | Total volume of air in middle third of right lung (milliliters) |
| 2612 | TRM_TISV | Char | 20 | Total volume of tissue in middle third of right lung (ml) |
| 2613 | TRM_TOTV | Char | 20 | Total volume of middle third of right lung (ml) |
| 2614 | TRM_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of right lung |
| 2615 | TRM_ASLP | Char | 20 | The slope of the line at the ankle for middle third of right lung |
| 2616 | TRM_AINT | Char | 20 | The intercept of the line at the ankle for middle third of right lung |
| 2617 | TRM_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of right lung |
| 2618 | TRM_KSLP | Char | 20 | The slope of the line at the knee for middle third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2619 | TRM_KINT | Char | 20 | The intercept of the line at the knee for middle third of right lung |
| 2620 | TRM_CCUTOFF | Char | 20 | middle third of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2621 | TRM_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle third of right lung to emphysema voxels |
| 2622 | TRM_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2623 | TRM_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2624 | TRM_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the middle third of right lung to emphysema voxels |
| 2625 | TRM_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of right lung to emphysema voxels |
| 2626 | TRM_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the middle third of right lung to emphysema voxels |
| 2627 | TRM_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of right lung to emphysema voxels |
| 2628 | TRM_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle third of right lung to emphysema voxels |
| 2629 | TRM_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle third of right lung |
| 2630 | TRM_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for middle third of right lung |
| 2631 | TRM_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for middle third of right lung |
| 2632 | TRM_AIRWAYVX | Char | 20 | Total number of airway voxels in middle third of right lung |
| 2633 | TRM_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in middle third of right lung |
| 2634 | TRM_VESSELVX | Char | 20 | Total number of vessel voxels in middle third of right lung |
| 2635 | TRM_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle third of right lung |
| 2636 | TRMC_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for middle third of core section of right lung |
| 2637 | TRMC_TOTVX | Char | 20 | Total number of voxels in middle third of core section of right lung |
| 2638 | TRMC_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for middle third of core section of right lung |
| 2639 | TRMC_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for middle third of core section of right lung |
| 2640 | TRMC_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for middle third of core section of right lung |
| 2641 | TRMC_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for middle third of core section of right lung |
| 2642 | TRMC_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for middle third of core section of right lung |
| 2643 | TRMC_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for middle third of core section of right lung |
| 2644 | TRMC_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for middle third of core section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | ---: | ---: | :--- |
| 2645 | TRMC_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for middle third of core <br> section of right lung |
| 2646 | TRMC_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for middle third of core <br> section of right lung |
| 2647 | TRMC_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for middle third of core <br> section of right lung |
| 2648 | TRMC_BE900 | Number of voxels below or equal to -900 hounsfield units for middle third of core <br> section of right lung |  |  |
| 2649 | TRMC_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for middle third of core <br> section of right lung |
| 2650 | TRMC_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for middle third of core <br> section of right lung |
| 2651 | TRMC_BE856 | Number of voxels below or equal to -856 hounsfield units for middle third of core <br> section of right lung |  |  |
| 2652 | TRMC_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of core <br> section of right lung |
| 2653 | TRMC_BE830 | Char |  |  |
| Number of voxels below or equal to -830 hounsfield units for middle third of core |  |  |  |  |
| section of right lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2668 | TRMC_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of core section of right lung |
| 2669 | TRMC_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of core section of right lung |
| 2670 | TRMC_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of core section of right lung |
| 2671 | TRMC_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of core section of right lung |
| 2672 | TRMC_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of core section of right lung |
| 2673 | TRMC_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of core section of right lung |
| 2674 | TRMC_MEAN | Char | 20 | Average pixel values within middle third of core section of right lung (HU) |
| 2675 | TRMC_MED | Char | 20 | Median pixel values within middle third of core section of right lung (HU) |
| 2676 | TRMC_VAR | Char | 20 | Variance of pixel values within middle third of core section of right lung |
| 2677 | TRMC_SDEV | Char | 20 | Standard deviation of pixel values within middle third of core section of right lung |
| 2678 | TRMC_ADEV | Char | 20 | Average deviation of pixel values within middle third of core section of right lung |
| 2679 | TRMC_SKEW | Char | 20 | Skewness of pixel values in middle third of core section of right lung |
| 2680 | TRMC_KURT | Char | 20 | Kurtosis of pixel values in middle third of core section of right lung |
| 2681 | TRMC_FWHM | Char | 20 | Full width, half max (HU) for middle third of core section of right lung |
| 2682 | TRMC_AIRV | Char | 20 | Total volume of air in middle third of core section of right lung (milliliters) |
| 2683 | TRMC_TISV | Char | 20 | Total volume of tissue in middle third of core section of right lung (ml) |
| 2684 | TRMC_TOTV | Char | 20 | Total volume of middle third of core section of right lung (ml) |
| 2685 | TRMC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for middle third of core section of right lung |
| 2686 | TRMC_ASLP | Char | 20 | The slope of the line at the ankle for middle third of core section of right lung |
| 2687 | TRMC_AINT | Char | 20 | The intercept of the line at the ankle for middle third of core section of right lung |
| 2688 | TRMC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for middle third of core section of right lung |
| 2689 | TRMC_KSLP | Char | 20 | The slope of the line at the knee for middle third of core section of right lung |
| 2690 | TRMC_KINT | Char | 20 | The intercept of the line at the knee for middle third of core section of right lung |
| 2691 | TRMC_CCUTOFF | Char | 20 | middle third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2692 | TRMC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of middle third of core section of right lung to emphysema voxels |
| 2693 | TRMC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2694 | TRMC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2695 | TRMC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the middle third of core section of right lung to emphysema voxels |
| 2696 | TRMC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the middle third of core section of right lung to emphysema voxels |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2697 | TRMC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the <br> middle third of core section of right lung to emphysema voxels |
| 2698 | TRMC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of middle third of core <br> section of right lung to emphysema voxels |
| 2699 | TRMC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of middle <br> third of core section of right lung to emphysema voxels |
| 2700 | TRMC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for middle third of core <br> section of right lung |
| 2701 | TRMC_HU15 | Char | 20 | 20 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2722 | TRMP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for middle third of peel section of right lung |
| 2723 | TRMP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for middle third of peel section of right lung |
| 2724 | TRMP_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for middle third of peel section of right lung |
| 2725 | TRMP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for middle third of peel section of right lung |
| 2726 | TRMP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for middle third of peel section of right lung |
| 2727 | TRMP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for middle third of peel section of right lung |
| 2728 | TRMP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for middle third of peel section of right lung |
| 2729 | TRMP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for middle third of peel section of right lung |
| 2730 | TRMP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for middle third of peel section of right lung |
| 2731 | TRMP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for middle third of peel section of right lung |
| 2732 | TRMP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for middle third of peel section of right lung |
| 2733 | TRMP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for middle third of peel section of right lung |
| 2734 | TRMP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for middle third of peel section of right lung |
| 2735 | TRMP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for middle third of peel section of right lung |
| 2736 | TRMP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for middle third of peel section of right lung |
| 2737 | TRMP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in middle third of peel section of right lung |
| 2738 | TRMP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in middle third of peel section of right lung |
| 2739 | TRMP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in middle third of peel section of right lung |
| 2740 | TRMP_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in middle third of peel section of right lung |
| 2741 | TRMP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in middle third of peel section of right lung |
| 2742 | TRMP_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in middle third of peel section of right lung |
| 2743 | TRMP_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in middle third of peel section of right lung |
| 2744 | TRMP_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in middle third of peel section of right lung |
| 2745 | TRMP_MEAN | Char | 20 | Average pixel values within middle third of peel section of right lung (HU) |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2746 | TRMP_MED | Char | 20 | Median pixel values within middle third of peel section of right lung (HU) |
| 2747 | TRMP_VAR | Char | 20 | Variance of pixel values within middle third of peel section of right lung |
| 2748 | TRMP_SDEV | Char | 20 | Standard deviation of pixel values within middle third of peel section of right lung |
| 2749 | TRMP_ADEV | Char | 20 | Average deviation of pixel values within middle third of peel section of right lung |
| 2750 | TRMP_SKEW | Char | 20 | Kurtosis of pixel values in middle third of peel section of right lung |
| 2751 | TRMP_KURT | Char | 20 | Full width, half max (HU) for middle third of peel section of right lung |
| 2752 | TRMP_FWHM | Char | 20 | Total volume of air in middle third of peel section of right lung (milliliters) |
| 2753 | TRMP_AIRV | Char | 20 | Total volume of tissue in middle third of peel section of right lung (ml) |$|$| 2754 | TRMP_TISV | Char | 20 | Total volume of middle third of peel section of right lung (ml) |
| :--- | :--- | ---: | :--- | :--- |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2775 | TRMP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in middle third of peel section of right lung |
| 2776 | TRMP_VESSELVX | Char | 20 | Total number of vessel voxels in middle third of peel section of right lung |
| 2777 | TRMP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for middle third of peel section of right lung |
| 2778 | TRL_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower third of right lung |
| 2779 | TRL_TOTVX | Char | 20 | Total number of voxels in lower third of right lung |
| 2780 | TRL_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower third of right lung |
| 2781 | TRL_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for lower third of right lung |
| 2782 | TRL_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower third of right lung |
| 2783 | TRL_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for lower third of right lung |
| 2784 | TRL_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower third of right lung |
| 2785 | TRL_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower third of right lung |
| 2786 | TRL_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower third of right lung |
| 2787 | TRL_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower third of right lung |
| 2788 | TRL_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower third of right lung |
| 2789 | TRL_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower third of right lung |
| 2790 | TRL_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower third of right lung |
| 2791 | TRL_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower third of right lung |
| 2792 | TRL_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower third of right lung |
| 2793 | TRL_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower third of right lung |
| 2794 | TRL_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower third of right lung |
| 2795 | TRL_BE830 | Char | 20 | Number of voxels below or equal to -830 hounsfield units for lower third of right lung |
| 2796 | TRL_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower third of right lung |
| 2797 | TRL_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower third of right lung |
| 2798 | TRL_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of right lung |
| 2799 | TRL_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of right lung |
| 2800 | TRL_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of right lung |
| 2801 | TRL_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of right lung |
| 2802 | TRL_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of right lung |
| 2803 | TRL_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of right lung |
| 2804 | TRL_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of right lung |
| 2805 | TRL_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower third of right lung |
| 2806 | TRL_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower third of right lung |
| 2807 | TRL_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower third of right lung |
| 2808 | TRL_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of right lung |
| 2809 | TRL_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of right lung |
| 2810 | TRL_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of right lung |
| 2811 | TRL_AE200 | Char | 20 | Number voxels above or equal to -200 hounsfield units in lower third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2812 | TRL_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower third of right lung |
| 2813 | TRL_AE400 | Char | 20 | Number voxels above or equal to -400 hounsfield units in lower third of right lung |
| 2814 | TRL_AE500 | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of right lung |
| 2815 | TRL_AE600 | Char | 20 | Number voxels above or equal to -600 hounsfield units in lower third of right lung |
| 2816 | TRL_MEAN | Char | 20 | Average pixel values within lower third of right lung (HU) |
| 2817 | TRL_MED | Char | 20 | Median pixel values within lower third of right lung (HU) |
| 2818 | TRL_VAR | Char | 20 | Variance of pixel values within lower third of right lung |
| 2819 | TRL_SDEV | Char | 20 | Standard deviation of pixel values within lower third of right lung |
| 2820 | TRL_ADEV | Char | 20 | Average deviation of pixel values within lower third of right lung |
| 2821 | TRL_SKEW | Char | 20 | Skewness of pixel values in lower third of right lung |
| 2822 | TRL_KURT | Char | 20 | Kurtosis of pixel values in lower third of right lung |
| 2823 | TRL_FWHM | Char | 20 | Full width, half max (HU) for lower third of right lung |
| 2824 | TRL_AIRV | Char | 20 | Total volume of air in lower third of right lung (milliliters) |
| 2825 | TRL_TISV | Char | 20 | Total volume of tissue in lower third of right lung (ml) |
| 2826 | TRL_TOTV | Char | 20 | Total volume of lower third of right lung (ml) |
| 2827 | TRL_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of right lung |
| 2828 | TRL_ASLP | Char | 20 | The slope of the line at the ankle for lower third of right lung |
| 2829 | TRL_AINT | Char | 20 | The intercept of the line at the ankle for lower third of right lung |
| 2830 | TRL_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of right lung |
| 2831 | TRL_KSLP | Char | 20 | The slope of the line at the knee for lower third of right lung |
| 2832 | TRL_KINT | Char | 20 | The intercept of the line at the knee for lower third of right lung |
| 2833 | TRL_CCUTOFF | Char | 20 | lower third of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2834 | TRL_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of right lung to emphysema voxels |
| 2835 | TRL_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2836 | TRL_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2837 | TRL_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of right lung to emphysema voxels |
| 2838 | TRL_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of right lung to emphysema voxels |
| 2839 | TRL_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of right lung to emphysema voxels |
| 2840 | TRL_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of right lung to emphysema voxels |
| 2841 | TRL_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of right lung to emphysema voxels |
| 2842 | TRL_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2843 | TRL_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of right <br> lung |
| 2844 | TRL_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of right <br> lung |
| 2845 | TRL_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of right lung |
| 2846 | TRL_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of right lung |
| 2847 | TRL_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of right lung |
| 2848 | TRL_VESSELPERCENT | Char | 20 | Charsel voxels percentage (VesselVx / TotVx * 100) for lower third of right lung |
| 2849 | TRLC_VXSIZE | Char | 20 | Char |
| 2850 | TRLC_TOTVX | 20 | Char | Char |


| Num | Variable | Type | Len | Label |
| :---: | :--- | :--- | ---: | :--- |
| 2869 | TRLC_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of core <br> section of right lung |
| 2870 | TRLC_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of core <br> section of right lung |
| 2871 | TRLC_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of core <br> section of right lung |
| 2872 | TRLC_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of core <br> section of right lung |
| 2873 | TRLC_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of core <br> section of right lung |
| 2874 | TRLC_BE450 | Char | 20 | Char |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2896 | TRLC_TISV | Char | 20 | Total volume of tissue in lower third of core section of right lung (ml) |
| 2897 | TRLC_TOTV | Char | 20 | Total volume of lower third of core section of right lung (ml) |
| 2898 | TRLC_ANKL | Char | 20 | HU where the 2nd derivative is most positive (1st inflection point) on a plot of number of voxels versus HU for lower third of core section of right lung |
| 2899 | TRLC_ASLP | Char | 20 | The slope of the line at the ankle for lower third of core section of right lung |
| 2900 | TRLC_AINT | Char | 20 | The intercept of the line at the ankle for lower third of core section of right lung |
| 2901 | TRLC_KNEE | Char | 20 | The HU where the 2nd derivative is most negative (2nd inflection point) on a plot of number of voxels versus HU for lower third of core section of right lung |
| 2902 | TRLC_KSLP | Char | 20 | The slope of the line at the knee for lower third of core section of right lung |
| 2903 | TRLC_KINT | Char | 20 | The intercept of the line at the knee for lower third of core section of right lung |
| 2904 | TRLC_CCUTOFF | Char | 20 | lower third of core section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2905 | TRLC_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of core section of right lung to emphysema voxels |
| 2906 | TRLC_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2907 | TRLC_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2908 | TRLC_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2909 | TRLC_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2910 | TRLC_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of core section of right lung to emphysema voxels |
| 2911 | TRLC_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of core section of right lung to emphysema voxels |
| 2912 | TRLC_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of core section of right lung to emphysema voxels |
| 2913 | TRLC_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of core section of right lung |
| 2914 | TRLC_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of core section of right lung |
| 2915 | TRLC_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of core section of right lung |
| 2916 | TRLC_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of core section of right lung |
| 2917 | TRLC_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / $\operatorname{Tot} V \mathrm{x} * 100$ ) in lower third of core section of right lung |
| 2918 | TRLC_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of core section of right lung |
| 2919 | TRLC_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of core section of right lung |
| 2920 | TRLP_VXSIZE | Char | 20 | Volume of voxel in cubic millimeters for lower third of peel section of right lung |
| 2921 | TRLP_TOTVX | Char | 20 | Total number of voxels in lower third of peel section of right lung |
| 2922 | TRLP_B1024 | Char | 20 | Number of voxels below or equal to -1024 hounsfield units for lower third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2923 | TRLP_E1024 | Char | 20 | Number of voxels equal to -1024 hounsfield units for lower third of peel section of right lung |
| 2924 | TRLP_B1000 | Char | 20 | Number of voxels below or equal to -1000 hounsfield units for lower third of peel section of right lung |
| 2925 | TRLP_E1000 | Char | 20 | Number of voxels equal to -1000 hounsfield units for lower third of peel section of right lung |
| 2926 | TRLP_BE960 | Char | 20 | Number of voxels below or equal to -960 hounsfield units for lower third of peel section of right lung |
| 2927 | TRLP_BE950 | Char | 20 | Number of voxels below or equal to -950 hounsfield units for lower third of peel section of right lung |
| 2928 | TRLP_BE940 | Char | 20 | Number of voxels below or equal to -940 hounsfield units for lower third of peel section of right lung |
| 2929 | TRLP_BE930 | Char | 20 | Number of voxels below or equal to -930 hounsfield units for lower third of peel section of right lung |
| 2930 | TRLP_BE920 | Char | 20 | Number of voxels below or equal to -920 hounsfield units for lower third of peel section of right lung |
| 2931 | TRLP_BE910 | Char | 20 | Number of voxels below or equal to -910 hounsfield units for lower third of peel section of right lung |
| 2932 | TRLP_BE900 | Char | 20 | Number of voxels below or equal to -900 hounsfield units for lower third of peel section of right lung |
| 2933 | TRLP_BE890 | Char | 20 | Number of voxels below or equal to -890 hounsfield units for lower third of peel section of right lung |
| 2934 | TRLP_BE870 | Char | 20 | Number of voxels below or equal to -870 hounsfield units for lower third of peel section of right lung |
| 2935 | TRLP_BE856 | Char | 20 | Number of voxels below or equal to -856 hounsfield units for lower third of peel section of right lung |
| 2936 | TRLP_BE850 | Char | 20 | Number of voxels below or equal to -850 hounsfield units for lower third of peel section of right lung |
| 2937 | TRLP_BE830 | Char | 20 | Number of voxels below or equal to - 830 hounsfield units for lower third of peel section of right lung |
| 2938 | TRLP_BE810 | Char | 20 | Number of voxels below or equal to -810 hounsfield units for lower third of peel section of right lung |
| 2939 | TRLP_BE660 | Char | 20 | Number of voxels below or equal to -660 hounsfield units for lower third of peel section of right lung |
| 2940 | TRLP_BE640 | Char | 20 | Number of voxels below or equal to -640 hounsfield units for lower third of peel section of right lung |
| 2941 | TRLP_BE620 | Char | 20 | Number of voxels below or equal to -620 hounsfield units for lower third of peel section of right lung |
| 2942 | TRLP_BE600 | Char | 20 | Number of voxels below or equal to -600 hounsfield units for lower third of peel section of right lung |
| 2943 | TRLP_BE550 | Char | 20 | Number of voxels below or equal to -550 hounsfield units for lower third of peel section of right lung |
| 2944 | TRLP_BE500 | Char | 20 | Number of voxels below or equal to -500 hounsfield units for lower third of peel section of right lung |
| 2945 | TRLP_BE450 | Char | 20 | Number of voxels below or equal to -450 hounsfield units for lower third of peel section of right lung |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | ---: | :--- |
| 2946 | TRLP_BE400 | Char | 20 | Number of voxels below or equal to -400 hounsfield units for lower third of peel <br> section of right lung |
| 2947 | TRLP_BE350 | Char | 20 | Number of voxels below or equal to -350 hounsfield units for lower third of peel <br> section of right lung |
| 2948 | TRLP_BE300 | Char | 20 | Number of voxels below or equal to -300 hounsfield units for lower third of peel <br> section of right lung |
| 2949 | TRLP_BE250 | Char | 20 | Number of voxels below or equal to -250 hounsfield units for lower third of peel <br> section of right lung |
| 2950 | TRLP_AE50 | Char | 20 | Number voxels above or equal to -50 hounsfield units in lower third of peel section of <br> right lung |
| 2951 | TRLP_AE100 | Char | 20 | Number voxels above or equal to -100 hounsfield units in lower third of peel section of <br> right lung |
| 2952 | TRLP_AE150 | Char | 20 | Number voxels above or equal to -150 hounsfield units in lower third of peel section of <br> right lung |
| 2953 | TRLP_AE200 | Number voxels above or equal to -200 hounsfield units in lower third of peel section of <br> right lung |  |  |
| 2954 | TRLP_AE250 | Char | 20 | Number voxels above or equal to -250 hounsfield units in lower third of peel section of <br> right lung |
| 2955 | TRLP_AE400 | Char | 20 | Char |
| 2956 | TRLP_AE500 | 20 | 20 | The intercept of the line at the knee for lower third of peel section of right lung <br> Number voxels above or equal to -400 hounsfield units in lower third of peel section of <br> right lung |
| 2974 | TRLP_KSLP | Char | 20 | Number voxels above or equal to -500 hounsfield units in lower third of peel section of of the line at the ankle for lower third of peel section of right lung <br> right lung |
| 2957 | TRLP_AE600 | Char HU where the 2nd derivative is most negative (2nd inflection point) on a plot of |  |  |
| number of voxels versus HU for lower third of peel section of right lung |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 2975 | TRLP_CCUTOFF | Char | 20 | lower third of peel section of right lung : definition of emphysema cutoff value (HU) values less than this are considered emphysema |
| 2976 | TRLP_CVM | Char | 20 | Mean length of vectors drawn from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2977 | TRLP_CVSD | Char | 20 | Standard deviation of the length of vectors drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2978 | TRLP_CVXM | Char | 20 | The X component of the mean vector drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2979 | TRLP_CVXSD | Char | 20 | The X component of the standard deviation of the vectors from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2980 | TRLP_CVYM | Char | 20 | The Y component of the mean vector drawn from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2981 | TRLP_CVYSD | Char | 20 | The Y component of the standard deviation of the vectors from the centroid of the lower third of peel section of right lung to emphysema voxels |
| 2982 | TRLP_CVZM | Char | 20 | The Z component of the mean vector drawn from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2983 | TRLP_CVZSD | Char | 20 | The Z component of the standard deviation of the vectors from the centroid of lower third of peel section of right lung to emphysema voxels |
| 2984 | TRLP_HU10 | Char | 20 | Value of the pixel that is at the 10th percentile of pixel values for lower third of peel section of right lung |
| 2985 | TRLP_HU15 | Char | 20 | Value of the pixel that is at the 15th percentile of pixel values for lower third of peel section of right lung |
| 2986 | TRLP_HU20 | Char | 20 | Value of the pixel that is at the 20th percentile of pixel values for lower third of peel section of right lung |
| 2987 | TRLP_AIRWAYVX | Char | 20 | Total number of airway voxels in lower third of peel section of right lung |
| 2988 | TRLP_AIRWAYPERCENT | Char | 20 | Airway voxels percentage (AirwayVx / TotVx * 100) in lower third of peel section of right lung |
| 2989 | TRLP_VESSELVX | Char | 20 | Total number of vessel voxels in lower third of peel section of right lung |
| 2990 | TRLP_VESSELPERCENT | Char | 20 | Vessel voxels percentage (VesselVx / TotVx * 100) for lower third of peel section of right lung |
| 2991 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 2992 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 2993 | SESSION_ID_VERSION | Char | 20 | Version ID of the Session ID |

Data Set Name: v2_ct_edftracking_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 |  |
| 3 | QA_NOISSUES | Num | 8 | QA_NoIssues |
| 4 | QA_INCORRECTPROTOCOL | Num | 8 | QA_IncorrectProtocol |
| 5 | QA_METALARTIFACT | Num | 8 | QA_MetalArtifact |
| 6 | QA_FIELDOFVIEWISSUES | Num | 8 | QA_FieldOfViewIssues |
| 7 | QA_MOTIONARTIFACT | Num | 8 | QA_MotionArtifact |
| 8 | QA_MISSINGSLICES | Num | 8 | QA_MissingSlices |
| 9 | QA_RADIATIONDOSEDEVIATION | Num | 8 | QA_RadiationDoseDeviation |
| 10 | QA_OTHERS | Num | 8 | QA_Others |
| 11 | QA_ROIOUTSIDEAIR | Num | 8 | QA_RoiOutsideAir |
| 12 | QA_ROIOUTSIDEAIRMEAN | Num | 8 | QA_RoiOutsideAirMean |
| 13 | QA_ROIOUTSIDEAIRSTDDEV | Num | 8 | QA_RoiOutsideAirStdDev |
| 14 | QA_ROIOUTSIDEAIRAREA | Num | 8 | QA_RoiOutsideAirArea |
| 15 | QA_APPROVEDFORANALYSIS | Num | 8 | QA_ApprovedForAnalysis |
| 16 | QA_REJECTEDFORANALYSIS | Num | 8 | QA_RejectedForAnalysis |
| 17 | AIRWAYS_RB1TARGETLEVEL | Char | 2 | Airways_RB1TargetLevel |
| 18 | AIRWAYS_RB1LEVEL | Char | 2 | Airways_RB1Level |
| 19 | AIRWAYS_RB1ISSUE | Char | 13 | Airways_RB1Issue |
| 20 | AIRWAYS_RB4TARGETLEVEL | Char | 2 | Airways_RB4TargetLevel |
| 21 | AIRWAYS_RB4LEVEL | Char | 2 | Airways_RB4Level |
| 22 | AIRWAYS_RB4ISSUE | Char | 13 | Airways_RB4Issue |
| 23 | AIRWAYS_RB10TARGETLEVEL | Char | 2 | Airways_RB10TargetLevel |
| 24 | AIRWAYS_RB10LEVEL | Char | 2 | Airways_RB10Level |
| 25 | AIRWAYS_RB10ISSUE | Char | 13 | Airways_RB10Issue |
| 26 | AIRWAYS_LB1TARGETLEVEL | Char | 2 | Airways_LB1TargetLevel |
| 27 | AIRWAYS_LB1LEVEL | Char | 2 | Airways_LB1Level |
| 28 | AIRWAYS_LB1ISSUE | Char | 13 | Airways_LB1Issue |
| 29 | AIRWAYS_LB10TARGETLEVEL | Char | 2 | Airways_LB10TargetLevel |
| 30 | AIRWAYS_LB10LEVEL | Char | 2 | Airways_LB10Level |
| 31 | AIRWAYS_LB10ISSUE | Char | 13 | Airways_LB10Issue |
| 32 | AIRWAYS_COMMENT | Char | 143 | Airways_Comment |
| 33 | LABELING_TRACHEAISSUE | Char | 8 | Labeling_TracheaIssue |
| 34 | LABELING_RMBISSUE | Char | 13 | Labeling_RMBIssue |
| 35 | LABELING_RULISSUE | Char | 14 | Labeling_RULIssue |
| 36 | LABELING_RB1ISSUE | Char | 14 | Labeling_RB1Issue |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | LABELING_RB2ISSUE | Char | 14 | Labeling_RB2Issue |
| 38 | LABELING_RB3ISSUE | Char | 14 | Labeling_RB3Issue |
| 39 | LABELING_BRONINTISSUE | Char | 8 | Labeling_BronIntIssue |
| 40 | LABELING_RB4_5ISSUE | Char | 8 | Labeling_RB4_5Issue |
| 41 | LABELING_RB4ISSUE | Char | 14 | Labeling_RB4Issue |
| 42 | LABELING_RB5ISSUE | Char | 14 | Labeling_RB5Issue |
| 43 | LABELING_RB6ISSUE | Char | 13 | Labeling_RB6Issue |
| 44 | LABELING_RLL7ISSUE | Char | 13 | Labeling_RLL7Issue |
| 45 | LABELING_RB7ISSUE | Char | 14 | Labeling_RB7Issue |
| 46 | LABELING_RLLISSUE | Char | 8 | Labeling_RLLIssue |
| 47 | LABELING_RB8ISSUE | Char | 14 | Labeling_RB8Issue |
| 48 | LABELING_RB9ISSUE | Char | 14 | Labeling_RB9Issue |
| 49 | LABELING_RB10ISSUE | Char | 14 | Labeling_RB10Issue |
| 50 | LABELING_LMBISSUE | Char | 8 | Labeling_LMBIssue |
| 51 | LABELING_LULISSUE | Char | 13 | Labeling_LULIssue |
| 52 | LABELING_LB1_2ISSUE | Char | 14 | Labeling_LB1_2Issue |
| 53 | LABELING_LB1ISSUE | Char | 14 | Labeling_LB1Issue |
| 54 | LABELING_LB2ISSUE | Char | 14 | Labeling_LB2Issue |
| 55 | LABELING_LB3ISSUE | Char | 14 | Labeling_LB3Issue |
| 56 | LABELING_LB4_5ISSUE | Char | 14 | Labeling_LB4_5Issue |
| 57 | LABELING_LB4ISSUE | Char | 14 | Labeling_LB4Issue |
| 58 | LABELING_LB5ISSUE | Char | 14 | Labeling_LB5Issue |
| 59 | LABELING_LLB6ISSUE | Char | 13 | Labeling_LLB6Issue |
| 60 | LABELING_LB6ISSUE | Char | 14 | Labeling_LB6Issue |
| 61 | LABELING_LLBISSUE | Char | 14 | Labeling_LLBIssue |
| 62 | LABELING_LB8ISSUE | Char | 14 | Labeling_LB8Issue |
| 63 | LABELING_LB9ISSUE | Char | 14 | Labeling_LB9Issue |
| 64 | LABELING_LB10ISSUE | Char | 14 | Labeling_LB10Issue |
| 65 | LABELING_COMMENT | Char | 94 | Labeling_Comment |
| 66 | LOBES_LULISSUE | Char | 14 | Lobes_LULIssue |
| 67 | LOBES_LLLISSUE | Char | 14 | Lobes_LLLIssue |
| 68 | LOBES_RULISSUE | Char | 8 | Lobes_RULIssue |
| 69 | LOBES_RMLISSUE | Char | 14 | Lobes_RMLIssue |
| 70 | LOBES_RLLISSUE | Char | 14 | Lobes_RLLIssue |
| 71 | LOBES_COMMENT | Char | 64 | Lobes_Comment |
| 72 | PROBLEMDATA_AIRWAY | Num | 8 | ProblemData_Airway |
| 73 | PROBLEMDATA_SKELETON | Num | 8 | ProblemData_Skeleton |
| 74 | PROBLEMDATA_LABELS | Num | 8 | ProblemData_Labels |
| 75 | PROBLEMDATA_LUNGS | Num | 8 | ProblemData_Lungs |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | PROBLEMDATA_VESSELS | Num | 8 | ProblemData_Vessels |
| 77 | PROBLEMDATA_LOBES | Num | 8 | ProblemData_Lobes |
| 78 | PROBLEMDATA_SUBLOBES | Num | 8 | ProblemData_SubLobes |
| 79 | PROBLEMDATA_FISSURE | Num | 8 | ProblemData_Fissure |
| 80 | PROBLEMDATA_COMMENT | Char | 40 | ProblemData_Comment |

## Data Set Name: v2_ct_lac_tlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |
| 3 | STUDY_TIME | Num | 8 | Time of scan - $(0008,0030)$ StudyTime |
| 4 | SERIES_NAME | Char | 26 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Num | 8 | Time the series was reconstructed - $(0008,0031)$ SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |
| 7 | MODEL | Char | 24 | Model of scanner - $(0008,1090)$ ManufacturersModelName |
| 8 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 9 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) |
| 10 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan |
| 11 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan |
| 12 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan |
| 13 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan |
| 14 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan |
| 15 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator that the incorrect radiation dose was administered during CT scan |
| 16 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan |
| 17 | ONE_VOXEL_BRIDGES_REMOVED | Char | 3 | Denotes that an interval bin in the log-log plot with a single low attentuation region was removed |
| 18 | ONE_COUNT_BINS_REMOVED | Char | 3 | Denotes that two low attenuation regions that were separated by a single voxel were divided into two separate regions |
| 19 | MIN_SIZE_THRESHOLD | Num | 8 | Minimum size threshold |
| 20 | MAX_SIZE_THRESHOLD | Num | 8 | Maximum size threshold |
| 21 | DIMENSION | Char | 2 | Dimension of region being calculated. 2d regions are calculated separately for each axial slice. 3d regions are calculated in a volumetric manner. |
| 22 | BOTH_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for both lungs |
| 23 | BOTH_SLOPE_BELOW_950 | Num | 8 | Both lungs: slope (alpha) of the $\log -\log$ plot below or equal to -950 Hounsfield Units |
| 24 | BOTH_INTERCEPT_BELOW_950 | Num | 8 | Both lungs: y-axis intercept of the log-log plot below or equal to -950 Hounsfield Units |
| 25 | BOTH_R_SQUARED_BELOW_950 | Num | 8 | Both lungs: Correlation coefficient of the log-log plot below or equal to -950 Hounsfield Units |
| 26 | BOTH_SLOPE_BELOW_910 | Num | 8 | Both lungs: slope (alpha) of the $\log -\log$ plot below or equal to -910 Hounsfield Units |
| 27 | BOTH_INTERCEPT_BELOW_910 | Num | 8 | Both lungs: y-axis intercept of the log-log plot below or equal to -910 Hounsfield Units |
| 28 | BOTH_R_SQUARED_BELOW_910 | Num | 8 | Both lungs: Correlation coefficient of the log-log plot below or equal to -910 Hounsfield Units |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 29 | BOTH_SLOPE_BELOW_856 | Num | 8 | Both lungs: slope (alpha) of the log-log plot below or equal to -856 Hounsfield Units |
| 30 | BOTH_INTERCEPT_BELOW_856 | Num | 8 | Both lungs: $y$-axis intercept of the log-log plot below or equal to -856 Hounsfield Units |
| 31 | BOTH_R_SQUARED_BELOW_856 | Num | 8 | Both lungs: Correlation coefficient of the log-log plot below or equal to -856 Hounsfield Units |
| 32 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung |
| 33 | LEFT_SLOPE_BELOW_950 | Num | 8 | Left lung: slope (alpha) of the log-log plot below or equal to -950 Hounsfield Units |
| 34 | LEFT_INTERCEPT_BELOW_950 | Num | 8 | Left lung: $y$-axis intercept of the log-log plot below or equal to -950 Hounsfield Units |
| 35 | LEFT_R_SQUARED_BELOW_950 | Num | 8 | Left lung: Correlation coefficient of the log-log plot below or equal to -950 Hounsfield Units |
| 36 | LEFT_SLOPE_BELOW_910 | Num | 8 | Left lung: slope (alpha) of the log-log plot below or equal to -910 Hounsfield Units |
| 37 | LEFT_INTERCEPT_BELOW_910 | Num | 8 | Left lung: y-axis intercept of the log-log plot below or equal to -910 Hounsfield Units |
| 38 | LEFT_R_SQUARED_BELOW_910 | Num | 8 | Left lung: Correlation coefficient of the log-log plot below or equal to -910 Hounsfield Units |
| 39 | LEFT_SLOPE_BELOW_856 | Num | 8 | Left lung: slope (alpha) of the log-log plot below or equal to -856 Hounsfield Units |
| 40 | LEFT_INTERCEPT_BELOW_856 | Num | 8 | Left lung: y-axis intercept of the log-log plot below or equal to -856 Hounsfield Units |
| 41 | LEFT_R_SQUARED_BELOW_856 | Num | 8 | Left lung: Correlation coefficient of the log-log plot below or equal to -856 Hounsfield Units |
| 42 | L_LOWER_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lower lung |
| 43 | LEFT_LOWER_SLOPE_BELOW_950 | Num | 8 | Left lower lung: slope (alpha) of the log-log plot below or equal to -950 Hounsfield Units |
| 44 | L_LOWER_INTERCEPT_BELOW_950 | Num | 8 | Left lower lung: y-axis intercept of the log-log plot below or equal to -950 Hounsfield Units |
| 45 | L_LOWER_R_SQUARED_BELOW_950 | Num | 8 | Left lower lung: Correlation coefficient of the log-log plot below or equal to -950 Hounsfield Units |
| 46 | LEFT_LOWER_SLOPE_BELOW_910 | Num | 8 | Left lower lung: slope (alpha) of the log-log plot below or equal to -910 Hounsfield Units |
| 47 | L_LOWER_INTERCEPT_BELOW_910 | Num | 8 | Left lower lung: y-axis intercept of the log-log plot below or equal to -910 Hounsfield Units |
| 48 | L_LOWER_R_SQUARED_BELOW_910 | Num | 8 | Left lower lung: Correlation coefficient of the log-log plot below or equal to -910 Hounsfield Units |
| 49 | LEFT_LOWER_SLOPE_BELOW_856 | Num | 8 | Left lower lung: slope (alpha) of the log-log plot below or equal to -856 Hounsfield Units |
| 50 | L_LOWER_INTERCEPT_BELOW_856 | Num | 8 | Left lower lung: $y$-axis intercept of the log-log plot below or equal to -856 Hounsfield Units |
| 51 | L_LOWER_R_SQUARED_BELOW_856 | Num | 8 | Left lower lung: Correlation coefficient of the log-log plot below or equal to -856 Hounsfield Units |
| 52 | L_UPPER_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left upper lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 53 | LEFT_UPPER_SLOPE_BELOW_950 | Num | 8 | Left upper lung: slope (alpha) of the log-log plot below or equal to -950 <br> Hounsfield Units |
| 54 | L_UPPER_INTERCEPT_BELOW_950 | Num | 8 | Left upper lung: y-axis intercept of the log-log plot below or equal to <br> -950 Hounsfield Units |
| 55 | L_UPPER_R_SQUARED_BELOW_950 | Num | 8 | Left upper lung: Correlation coefficient of the log-log plot below or equal <br> to -950 Hounsfield Units |
| 56 | LEFT_UPPER_SLOPE_BELOW_910 | Num | 8 | Left upper lung: slope (alpha) of the log-log plot below or equal to -910 <br> Hounsfield Units |
| 57 | L_UPPER_INTERCEPT_BELOW_910 | Num | 8 | Left upper lung: y-axis intercept of the log-log plot below or equal to <br> -910 Hounsfield Units |
| 76 | L_UPPER_R_SQUARED_BELOW_910 | Num | 8 | 8 |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 77 | R_LOWER_INTERCEPT_BELOW_910 | Num | 8 | Right lower lung: y-axis intercept of the log-log plot below or equal to <br> -910 Hounsfield Units |
| 78 | R_LOWER_R_SQUARED_BELOW_910 | Num | 8 | Right lower lung: Correlation coefficient of the log-log plot below or <br> equal to -910 Hounsfield Units |
| 79 | RIGHT_LOWER_SLOPE_BELOW_856 | Num | 8 | Right lower lung: slope (alpha) of the log-log plot below or equal to -856 <br> Hounsfield Units |
| 80 | R_LOWER_INTERCEPT_BELOW_856 | Num | 8 | Right lower lung: y-axis intercept of the log-log plot below or equal to <br> $-856 ~ H o u n s f i e l d ~ U n i t s ~$ |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 101 | R_UPPER_R_SQUARED_BELOW_856 | Num | 8 | Right upper lung: Correlation coefficient of the log-log plot below or <br> equal to -856 Hounsfield Units |
| 102 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 103 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 104 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v2_ct_pi10_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | study visit |
| 3 | STUDY_TIME | Num | 8 | Time of scan - $(0008,0030)$ StudyTime |
| 4 | SERIES_NAME | Char | 26 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Num | 8 | Time the series was reconstructed - $(0008,0031)$ SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |
| 7 | MODEL | Char | 24 | Model of scanner - $(0008,1090)$ ManufacturersModelName |
| 8 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 9 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) |
| 10 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan |
| 11 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan |
| 12 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan |
| 13 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan |
| 14 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan |
| 15 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator of incorrect radiation dose issues in CT scan |
| 16 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan |
| 17 | PI10_LB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB1 path and subtree |
| 18 | PI10_LB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB1 path and subtree |
| 19 | PI10_LB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB10 path and subtree |
| 20 | PI10_LB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB10 path and subtree |
| 21 | PI10_LB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB4 path and subtree |
| 22 | PI10_LB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB4 path and subtree |
| 23 | PI10_RB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB1 path and subtree |
| 24 | PI10_RB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB1 path and subtree |
| 25 | PI10_RB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB10 path and subtree |
| 26 | PI10_RB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB10 path and subtree |
| 27 | PI10_RB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB4 path and subtree |
| 28 | PI10_RB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB4 path and subtree |
| 29 | PI10_WHOLE_TREE_ALL | Num | 8 | Pi10 value for all airways on whole airway tree |
| 30 | PI10_WHOLE_TREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on whole airway tree |
| 31 | PI10_LEFT_LUNG_ALL | Num | 8 | Pi10 value for all airways on left lung |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 32 | PI10_LEFT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter < = 20 mm on left lung |
| 33 | PI10_RIGHT_LUNG_ALL | Num | 8 | Pi10 value for all airways on right lung |
| 34 | PI10_RIGHT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter < $=20 \mathrm{~mm}$ on right lung |
| 35 | PI10_LEFT_UPPER_LOBE_ALL | Num | 8 | Pi10 value for all airways on left upper lobe |
| 36 | PI10_LEFT_UPPER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter < $=20 \mathrm{~mm}$ on left upper <br> lobe |
| 37 | PI10_LEFT_LOWER_LOBE_ALL | Num | 8 | Pi10 value for all airways on left lower lobe |
| 38 | PI10_LEFT_LOWER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on left lower |
| lobe |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 62 | PI10_RB5_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB5 path and <br> subtree |
| 63 | PI10_RB6_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB6 path and subtree |
| 64 | PI10_RB6_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB6 path and <br> subtree |
| 65 | PI10_RB7_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB7 path and subtree |
| 66 | PI10_RB7_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB7 path and <br> subtree |
| 67 | PI10_RB8_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB8 path and subtree |
| 68 | PI10_RB8_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB8 path and <br> subtree |
| 69 | PI10_RB9_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB9 path and subtree |
| 70 | PI10_RB9_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB9 path and <br> subtree |
| 71 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 72 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 73 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

## Data Set Name: v2_ct_rv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Study visit |
| 3 | STUDY_TIME | Char | 8 | Time of scan - (0000,0030) StudyTime |
| 4 | SERIES_NAME | Char | 28 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Char | 8 | Time the series was reconstructed - (0008,0031) SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 30 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Residual Volume (RV) |
| 31 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 32 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Residual Volume (RV) |
| 33 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 34 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Residual Volume (RV) |
| 35 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Residual Volume (RV) |
| 36 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Residual Volume (RV) |
| 37 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 38 | LL_TOT_V | Num | 8 | Left lower lobe: Total volume at Residual Volume (RV) |
| 39 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Residual Volume (RV) |
| 40 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 41 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 42 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 43 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 44 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Residual Volume (RV) |
| 45 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 46 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Residual Volume (RV) |
| 47 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 48 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Residual Volume (RV) |
| 49 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Residual Volume (RV) |
| 50 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Residual Volume (RV) |
| 51 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest $15 \%$ Hounsfield unit at Residual Volume (RV) |
| 52 | TLL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLL lung at Residual Volume (RV) |
| 53 | TLL_PCT_BE_950 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 54 | TLL_PCT_BE_910 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 55 | TLL_PCT_BE_856 | Num | 8 | Left lower third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 56 | TLL_PCT_AE_0 | Num | 8 | Left lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 57 | TLL_MEAN | Num | 8 | Left lower third: Mean lung density at Residual Volume (RV) |
| 58 | TLL_SD | Num | 8 | Left lower third: Standard deviation of mean lung density at Residual Volume (RV) |
| 59 | TLL_SKEW | Num | 8 | Left lower third: Skewness of lung density histogram at Residual Volume (RV) |
| 60 | TLL_KURT | Num | 8 | Left lower third: Kurtosis of lung density histogram at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 61 | TLL_AIR_V | Num | 8 | Left lower third: Total air volume at Residual Volume (RV) |
| 62 | TLL_TIS_V | Num | 8 | Left lower third: Total tissue volume at Residual Volume (RV) |
| 63 | TLL_TOT_V | Num | 8 | Left lower third: Total volume at Residual Volume (RV) |
| 64 | TLL_HU15 | Num | 8 | Left lower third: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 65 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Residual Volume (RV) |
| 66 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 67 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 68 | TLM_PCT_BE_856 | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 69 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 70 | TLM_MEAN | Num | 8 | Left middle third: Mean lung density at Residual Volume (RV) |
| 71 | TLM_SD | Num | 8 | Left middle third: Standard deviation of mean lung density at Residual Volume (RV) |
| 72 | TLM_SKEW | Num | 8 | Left middle third: Skewness of lung density histogram at Residual Volume (RV) |
| 73 | TLM_KURT | Num | 8 | Left middle third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 74 | TLM_AIR_V | Num | 8 | Left middle third: Total air volume at Residual Volume (RV) |
| 75 | TLM_TIS_V | Num | 8 | Left middle third: Total tissue volume at Residual Volume (RV) |
| 76 | TLM_TOT_V | Num | 8 | Left middle third: Total volume at Residual Volume (RV) |
| 77 | TLM_HU15 | Num | 8 | Left middle third: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 78 | TLU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLU lung at Residual Volume (RV) |
| 79 | TLU_PCT_BE_950 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 80 | TLU_PCT_BE_910 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 81 | TLU_PCT_BE_856 | Num | 8 | Left upper third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 82 | TLU_PCT_AE_0 | Num | 8 | Left upper third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 83 | TLU_MEAN | Num | 8 | Left upper third: Mean lung density at Residual Volume (RV) |
| 84 | TLU_SD | Num | 8 | Left upper third: Standard deviation of mean lung density at Residual Volume (RV) |
| 85 | TLU_SKEW | Num | 8 | Left upper third: Skewness of lung density histogram at Residual Volume (RV) |
| 86 | TLU_KURT | Num | 8 | Left upper third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 87 | TLU_AIR_V | Num | 8 | Left upper third: Total air volume at Residual Volume (RV) |
| 88 | TLU_TIS_V | Num | 8 | Left upper third: Total tissue volume at Residual Volume (RV) |
| 89 | TLU_TOT_V | Num | 8 | Left upper third: Total volume at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 90 | TLU_HU15 | Num | 8 | Left upper third: Location of the lowest 15\% Hounsfield unit at Residual <br> Volume (RV) |
| 91 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Residual Volume (RV) |
| 92 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Residual Volume (RV) |
| 93 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including <br> -910 Hounsfield units at Residual Volume (RV) |
| 94 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Residual Volume (RV) |
| 95 | TRL_PCT_AE_0 | Num | 8 | Num |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 117 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Residual Volume (RV) |
| 118 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Residual Volume (RV) |
| 119 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -910 Hounsfield units at Residual Volume (RV) |
| 120 | TRU_PCT_BE_856 | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Residual Volume (RV) |
| 121 | TRU_PCT_AE_0 | Num | 8 | Right upper third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Residual Volume (RV) |
| 122 | TRU_MEAN | Num | 8 | Right upper third: Mean lung density at Residual Volume (RV) |
| 123 | TRU_SD | 8 | Right upper third: Standard deviation of mean lung density at Residual <br> Volume (RV) |  |
| 124 | TRU_SKEW | Num | 8 | Right upper third: Skewness of lung density histogram at Residual Volume <br> (RV) |
| 125 | TRU_KURT | Num | 8 | Right upper third: Kurtosis of lung density histogram at Residual Volume <br> (RV) |
| 126 | TRU_AIR_V | Num | 8 | Right upper third: Total air volume at Residual Volume (RV) |

## Data Set Name: v2_ct_tlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Study visit |
| 3 | STUDY_TIME | Char | 10 | Time of scan - $(0008,0030)$ StudyTime |
| 4 | SERIES_NAME | Char | 26 | Series name - (0008,103e) SeriesDescription |
| 5 | SERIES_TIME | Char | 11 | Time the series was reconstructed - $(0008,0031)$ SeriesTime |
| 6 | MANUFACTURER | Char | 18 | Manufacturer of scanner - (0008,0070) Manufacturer |
| 7 | MODEL | Char | 24 | Model of scanner - $(0008,1090)$ ManufacturersModelName |
| 8 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 9 | MA | Num | 8 | X-ray tube current |
| 10 | PIXEL_SPACING | Num | 8 | pixel size |
| 11 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) at Total Lung Capacity (TLC) |
| 12 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan at Total Lung Capacity (TLC) |
| 13 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan at Total Lung Capacity (TLC) |
| 14 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan at Total Lung Capacity (TLC) |
| 15 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan at Total Lung Capacity (TLC) |
| 16 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan at Total Lung Capacity (TLC) |
| 17 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator of incorrect radiation dose issues in CT scan at Total Lung Capacity (TLC) |
| 18 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan at Total Lung Capacity (TLC) |
| 19 | BOTH_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for both lungs at Total Lung Capacity (TLC) |
| 20 | BOTH_PCT_BE_950 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 21 | BOTH_PCT_BE_910 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 22 | BOTH_PCT_BE_856 | Num | 8 | Both lungs: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 23 | BOTH_PCT_AE_0 | Num | 8 | Both lungs: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 24 | BOTH_MEAN | Num | 8 | Both lungs: Mean lung density at Total Lung Capacity (TLC) |
| 25 | BOTH_SD | Num | 8 | Both lungs: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 26 | BOTH_SKEW | Num | 8 | Both lungs: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 27 | BOTH_KURT | Num | 8 | Both lungs: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 28 | BOTH_AIR_V | Num | 8 | Both lungs: Total air volume at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 29 | BOTH_TIS_V | Num | 8 | Both lungs: Total tissue volume at Total Lung Capacity (TLC) |
| 30 | BOTH_TOT_V | Num | 8 | Both lungs: Total volume at Total Lung Capacity (TLC) |
| 31 | BOTH_HU15 | Num | 8 | Both lungs: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 32 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung at Total Lung Capacity (TLC) |
| 33 | LEFT_PCT_BE_950 | Num | 8 | Left lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 34 | LEFT_PCT_BE_910 | Num | 8 | Left lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 35 | LEFT_PCT_BE_856 | Num | 8 | Left lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 36 | LEFT_PCT_AE_0 | Num | 8 | Left lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 37 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Total Lung Capacity (TLC) |
| 38 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 39 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 40 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 41 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Total Lung Capacity (TLC) |
| 42 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Total Lung Capacity (TLC) |
| 43 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Total Lung Capacity (TLC) |
| 44 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest $15 \%$ Hounsfield unit at Total Lung Capacity (TLC) |
| 45 | LL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LL lung at Total Lung Capacity (TLC) |
| 46 | LL_PCT_BE_950 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 47 | LL_PCT_BE_910 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 48 | LL_PCT_BE_856 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 49 | LL_PCT_AE_0 | Num | 8 | Left lower lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 50 | LL_MEAN | Num | 8 | Left lower lobe: Mean lung density at Total Lung Capacity (TLC) |
| 51 | LL_SD | Num | 8 | Left lower lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 52 | LL_SKEW | Num | 8 | Left lower lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 53 | LL_KURT | Num | 8 | Left lower lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 54 | LL_AIR_V | Num | 8 | Left lower lobe: Total air volume at Total Lung Capacity (TLC) |
| 55 | LL_TIS_V | Num | 8 | Left lower lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 56 | LL_TOT_V | Num | 8 | Left lower lobe: Total volume at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 57 | LL_HU15 | Num | 8 | Left lower lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 58 | LU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LU lung at Total Lung Capacity (TLC) |
| 59 | LU_PCT_BE_950 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 60 | LU_PCT_BE_910 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 61 | LU_PCT_BE_856 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 62 | LU_PCT_AE_0 | Num | 8 | Left upper lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 63 | LU_MEAN | Num | 8 | Left upper lobe: Mean lung density at Total Lung Capacity (TLC) |
| 64 | LU_SD | Num | 8 | Left upper lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 65 | LU_SKEW | Num | 8 | Left upper lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 66 | LU_KURT | Num | 8 | Left upper lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 67 | LU_AIR_V | Num | 8 | Left upper lobe: Total air volume at Total Lung Capacity (TLC) |
| 68 | LU_TIS_V | Num | 8 | Left upper lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 69 | LU_TOT_V | Num | 8 | Left upper lobe: Total volume at Total Lung Capacity (TLC) |
| 70 | LU_HU15 | Num | 8 | Left upper lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 71 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Total Lung Capacity (TLC) |
| 72 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 73 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 74 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 75 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 76 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Total Lung Capacity (TLC) |
| 77 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 78 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 79 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 80 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Total Lung Capacity (TLC) |
| 81 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Total Lung Capacity (TLC) |
| 82 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Total Lung Capacity (TLC) |
| 83 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 84 | RL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RL lung at Total Lung Capacity <br> (TLC) |  |
| 85 | RL_PCT_BE_950 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -950 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 86 | RL_PCT_BE_910 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -910 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 87 | RL_PCT_BE_856 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 88 | RL_PCT_AE_0 | Num | 8 | Right lower lobe: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 99 | RL_MEAN | Num | 8 | Num | Nught lower lobe: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 110 | RU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RU lung at Total Lung Capacity <br> (TLC) |
| 111 | RU_PCT_BE_950 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -950 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 112 | RU_PCT_BE_910 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -910 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 113 | RU_PCT_BE_856 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 114 | RU_PCT_AE_0 | Num | 8 | Right upper lobe: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 115 | RU_MEAN | Num | 8 | Rught upper lobe: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 136 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Total Lung Capacity <br> (TLC) |  |
| 137 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Total Lung Capacity (TLC) |  |
| 138 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -910 |  |
| 139 | TLM_PCT_BE_856 |  | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 140 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 141 | TLM_MEAN | Num | 8 | Num | Neft middle third: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 162 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Total Lung Capacity (TLC) |
| 163 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 164 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 165 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 166 | TRL_PCT_AE_0 | Num | 8 | Right lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 167 | TRL_MEAN | Num | 8 | Right lower third: Mean lung density at Total Lung Capacity (TLC) |
| 168 | TRL_SD | Num | 8 | Right lower third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 169 | TRL_SKEW | Num | 8 | Right lower third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 170 | TRL_KURT | Num | 8 | Right lower third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 171 | TRL_AIR_V | Num | 8 | Right lower third: Total air volume at Total Lung Capacity (TLC) |
| 172 | TRL_TIS_V | Num | 8 | Right lower third: Total tissue volume at Total Lung Capacity (TLC) |
| 173 | TRL_TOT_V | Num | 8 | Right lower third: Total volume at Total Lung Capacity (TLC) |
| 174 | TRL_HU15 | Num | 8 | Right lower third: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 175 | TRM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRM lung at Total Lung Capacity (TLC) |
| 176 | TRM_PCT_BE_950 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 177 | TRM_PCT_BE_910 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 178 | TRM_PCT_BE_856 | Num | 8 | Right middle third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 179 | TRM_PCT_AE_0 | Num | 8 | Right middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 180 | TRM_MEAN | Num | 8 | Right middle third: Mean lung density at Total Lung Capacity (TLC) |
| 181 | TRM_SD | Num | 8 | Right middle third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 182 | TRM_SKEW | Num | 8 | Right middle third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 183 | TRM_KURT | Num | 8 | Right middle third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 184 | TRM_AIR_V | Num | 8 | Right middle third: Total air volume at Total Lung Capacity (TLC) |
| 185 | TRM_TIS_V | Num | 8 | Right middle third: Total tissue volume at Total Lung Capacity (TLC) |
| 186 | TRM_TOT_V | Num | 8 | Right middle third: Total volume at Total Lung Capacity (TLC) |
| 187 | TRM_HU15 | Num | 8 | Right middle third: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 188 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Total Lung Capacity <br> (TLC) |  |
| 189 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Total Lung Capacity (TLC) |  |
| 190 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -910 |  |
| 191 | TRU_PCT_BE_856 |  | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 192 | TRU_PCT_AE_0 | Num | Num | 8 | 8 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 213 | RM_PCT_ABV_600 | Num | 8 | Middle right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 214 | RM_PCT_ABV_650 | Num | 8 | Middle right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 215 | RL_PCT_ABV_600 | Char | 15 | Lower right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 216 | RL_PCT_ABV_650 | Char | 15 | Lower right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 217 | TLU_PCT_ABV_600 | Num | 8 | Left upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 218 | TLU_PCT_ABV_650 | Num | 8 | Left upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 219 | TLM_PCT_ABV_600 | Num | 8 | Left middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 220 | TLM_PCT_ABV_650 | Num | 8 | Left middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 221 | TLL_PCT_ABV_600 | Num | 8 | Left lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 222 | TLL_PCT_ABV_650 | Num | 8 | Left lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 223 | TRU_PCT_ABV_600 | Num | 8 | right upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 224 | TRU_PCT_ABV_650 | Num | 8 | right upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 225 | TRM_PCT_ABV_600 | Char | 15 | right middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 226 | TRM_PCT_ABV_650 | Char | 15 | right middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 227 | TRL_PCT_ABV_600 | Num | 8 | right lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 228 | TRL_PCT_ABV_650 | Num | 8 | right lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 229 | PCT_EMPHYSEMA | Num | 8 | Percentage of emphysema in the lung based on -950 Hounsfield units |
| 230 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 231 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |
| 232 | SESSION_ID_VERSION | Char | 15 | Version ID of the Session ID |

Data Set Name: v2_dem_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | DEM01A | Num | 8 | DEM01A Age |
| 5 | DEM02 | Char | 2 | DEM02 Highest grade completed |
| 6 | DEM03 | Char | 1 | DEM03 Marital status |
| 7 | DEM04 | Char | 1 | DEM04 Total yearly household income |
| 8 | VERSION | Char | 21 | Version |
| 9 | DEM0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v2_derv_cbc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CBC03_DERV | Num | 8 | 3) Total red blood cells |
| 5 | CBC04_DERV | Num | 8 | 4) Hemoglobin |
| 6 | CBC05_DERV | Num | 8 | 5) Hemacrit |
| 7 | CBC06_DERV | Num | 8 | 6) Mean corpuscular volume |
| 8 | CBC07_DERV | Num | 8 | 7) Red blood cell distribution width |
| 9 | CBC08_DERV | Num | 8 | 8) Total white blood cells |
| 10 | CBC09_DERV | Num | 8 | 9) Neutrophil granulocyte |
| 11 | CBC10_DERV | Num | 8 | 10) Lymphocytes |
| 12 | CBC11_DERV | Num | 8 | 11) Monocytes |
| 13 | CBC12_DERV | Num | 8 | 12) Eosinophil granuloctyes |
| 14 | CBC13_DERV | Num | 8 | 13) Basophil granuloctyes |
| 15 | CBC14_DERV | Num | 8 | 14) Platelet Count |
| 16 | CBC15_DERV | Num | 8 | 15) Mean Platelet Volume |
| 17 | CBC16_DERV | Char | 2000 | 16) Comments: |
| 18 | CBC09A_DERV | Num | 8 | 9a) Neutrophil granulocyte \% |
| 19 | CBC10A_DERV | Num | 8 | 10a) Lymphocyte \% |
| 20 | CBC11A_DERV | Num | 8 | 11a) Monocyte \% |
| 21 | CBC12A_DERV | Num | 8 | 12a) Eosinophil granuloctye \% |
| 22 | CBC13A_DERV | Num | 8 | 13a) Basophil granuloctye \% |
| 23 | VERSION | Char | 21 | Version |
| 24 | CBC0A_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 25 | CBC01_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 26 | CBC02_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v2_derv_post_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | study_id |
| 5 | PFV10 | Char | 15 | Position |
| 6 | PFV12 | Num | 8 | visit_num |
| 7 | PFV13 | Num | 8 | interval_num |
| 8 | PFV14 | Num | 8 | stage_num |
| 9 | PFV15 | Num | 8 | seq_num |
| 10 | PFV16 | Char | 15 | vlabel |
| 11 | PFV17 | Num | 8 | repeats |
| 12 | PFV22B | Num | 8 | Mit_derv |
| 13 | PFV23B | Num | 8 | Fevpd_derv |
| 14 | PFV24B | Num | 8 | Pctfev_derv |
| 34 | PFV80_DERV | Num | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV43_DERV | Num | 8 | Fev05_derv |
| 38 | PFV45_DERV | Num | 8 | Fev1_derv |
| 39 | PFV46 | Num | 8 | flag_fev_best |
| 40 | PFV66_DERV | Num | 8 | Vext_derv |
| 41 | PFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | PFV69_DERV | Num | 8 | RVSPCA_derv |
| 43 | PFV70_DERV | Num | 8 | Fevdiff_derv |
| 44 | PFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 45 | PFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 46 | PFV44_DERV | Num | 8 | Fev05fvc_derv |
| 47 | PFV47_DERV | Num | 8 | Fev1fvc_derv |
| 48 | PFV48 | Num | 8 | flag_fevfvc_best |
| 49 | PFV50_DERV | Num | 8 | Fev3fvc_derv |
| 50 | PFV32_DERV | Num | 8 | Fefpd_derv |
| 51 | PFV37_DERV | Num | 8 | Pctfef2575_derv |
| 52 | PFV52_DERV | Num | 8 | Fef212_derv |
| 53 | PFV53_DERV | Num | 8 | Fef2575_derv |
| 54 | PFV54 | Num | 8 | flag_fef2575_best |
| 55 | PFV55_DERV | Num | 8 | Fef25756_derv |
| 56 | PFV56_DERV | Num | 8 | Fef25_derv |
| 57 | PFV57_DERV | Num | 8 | Fef50_derv |
| 58 | PFV58_DERV | Num | 8 | Fef506_derv |
| 59 | PFV59_DERV | Num | 8 | Fef75_derv |
| 60 | PFV60_DERV | Num | 8 | Fef756_derv |
| 61 | PFV61_DERV | Num | 8 | Fef7585_derv |
| 62 | PFV64_DERV | Num | 8 | Met_derv |
| 63 | PFV34_DERV | Num | 8 | Pefpd_derv |
| 64 | PFV38_DERV | Num | 8 | Pctpefr_derv |
| 65 | PFV62_DERV | Num | 8 | Pefr_derv |
| 66 | PFV63 | Num | 8 | flag_pefr_best |
| 67 | PFV65_DERV | Num | 8 | Peft_derv |
| 68 | PFV77_DERV | Num | 8 | Pifr_derv |
| 69 | POST_FEV1FVC_DERV | Num | 8 | post_BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 70 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 71 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 72 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 73 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v2_derv_post_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | study_id |
| 5 | PSV10 | Char | 15 | position |
| 6 | PSV12 | Num | 8 | visit_num |
| 7 | PSV13 | Char | 15 | interval_num |
| 8 | PSV14 | Num | 8 | stage_num |
| 9 | PSV15 | Num | 8 | seq_num |
| 10 | PSV16 | Char | 5 | vlabel |
| 11 | PSV17 | Num | 8 | repeats |
| 12 | PSV19 | Char | 15 | qa_grade |
| 13 | PSV20 | Char | 15 | qa_status |
| 14 | PSV23B | Char | 8 | time_best |
| 15 | PSV24B | Char | 8 | time_first |
| 16 | PSV28 | Num | 8 | temperature |
| 17 | PSV29 | Num | 8 | barometric |
| 18 | PSV30 | Num | 8 | humidity |
| 19 | PSV32 | Char | 5 | tom |
| 20 | VERSION | Char | 21 | Version |
| 21 | PSV33_DERV | Num | 8 | Svc_derv |
| 22 | PSV34_DERV | Num | 8 | Svcpd_derv |
| 23 | PSV35_DERV | Num | 8 | Pctsvc_derv |
| 24 | PSV36 | Num | 8 | flag_svc_best |
| 25 | PSV37_DERV | Num | 8 | IC_derv |
| 26 | PSV38_DERV | Num | 8 | IRV_derv |
| 27 | PSV39_DERV | Num | 8 | ERV_derv |
| 28 | PSV40_DERV | Num | 8 | TV_derv |
| 29 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 30 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 31 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 32 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v2_derv_pre_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | study_id |
| 5 | SFV10 | Char | 15 | Position |
| 6 | SFV12 | Num | 8 | visit_num |
| 7 | SFV13 | Num | 8 | interval_num |
| 8 | SFV14 | Num | 8 | stage_num |
| 9 | SFV15 | Num | 8 | seq_num |
| 10 | SFV16 | Char | 10 | vlabel |
| 11 | SFV17 | Num | 8 | repeats |
| 12 | SFV22B | Char | 8 | time |
| 13 | SFV23B | Char | 8 | time_best |
| 14 | SFV24B | Char | 8 | time_first |
| 15 | SFV27 | Num | 8 | temperature |
| 16 | SFV28 | Num | 8 | barometric |
| 17 | SFV29 | Num | 8 | humidity |
| 18 | VERSION | Char | 21 | Version |
| 19 | SFV31_DERV | Num | 8 | Fvcpd_derv |
| 20 | SFV36_DERV | Num | 8 | Pctfvc_derv |
| 21 | SFV40_DERV | Num | 8 | Fvc_derv |
| 22 | SFV41 | Num | 8 | flag_fvc_best |
| 23 | SFV49_DERV | Num | 8 | Fev3_derv |
| 24 | SFV51_DERV | Num | 8 | Fev6_derv |
| 25 | SFV68_DERV | Num | 8 | Expt_derv |
| 26 | SFV71_DERV | Num | 8 | Fivc_derv |
| 27 | SFV72_DERV | Num | 8 | Fiv05_derv |
| 28 | SFV73_DERV | Num | 8 | Fiv05fivc_derv |
| 29 | SFV74_DERV | Num | 8 | Fiv1_derv |
| 30 | SFV75_DERV | Num | 8 | Fiv1fivc_derv |
| 31 | SFV76_DERV | Num | 8 | Fiv3_derv |
| 32 | SFV78_DERV | Num | 8 | Fif212_derv |
| 33 | SFV79_DERV | Num | 8 | Fif2575_derv |
| 34 | SFV80_DERV | Num | 8 | Mit_derv |
| 35 | SFV30_DERV | Num | 8 | Fevpd_derv |
| 36 | SFV35_DERV | Num | 8 | Pctfev_derv |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV43_DERV | Num | 8 | Fev05_derv |
| 38 | SFV45_DERV | Num | 8 | Fev1_derv |
| 39 | SFV46 | Num | 8 | flag_fev_best |
| 40 | SFV66_DERV | Num | 8 | Vext_derv |
| 41 | SFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | SFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 43 | SFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 44 | SFV44_DERV | Num | 8 | Fev05fvc_derv |
| 45 | SFV47_DERV | Num | 8 | Fev1fvc_derv |
| 46 | SFV48 | Num | 8 | flag_fevfvc_best |
| 47 | SFV50_DERV | Num | 8 | Fev3fvc_derv |
| 48 | SFV32_DERV | Num | 8 | Fefpd_derv |
| 49 | SFV37_DERV | Num | 8 | Pctfef2575_derv |
| 50 | SFV52_DERV | Num | 8 | Fef212_derv |
| 51 | SFV53_DERV | Num | 8 | Fef2575_derv |
| 52 | SFV54 | Num | 8 | flag_fef2575_best |
| 53 | SFV55_DERV | Num | 8 | Fef25756_derv |
| 54 | SFV56_DERV | Num | 8 | Fef25_derv |
| 55 | SFV57_DERV | Num | 8 | Fef50_derv |
| 56 | SFV58_DERV | Num | 8 | Fef506_derv |
| 57 | SFV59_DERV | Num | 8 | Fef75_derv |
| 58 | SFV60_DERV | Num | 8 | Fef756_derv |
| 59 | SFV61_DERV | Num | 8 | Fef7585_derv |
| 60 | SFV64_DERV | Num | 8 | Met_derv |
| 61 | SFV34_DERV | Num | 8 | Pefpd_derv |
| 62 | SFV38_DERV | Num | 8 | Pctpefr_derv |
| 63 | SFV62_DERV | Num | 8 | Pefr_derv |
| 64 | SFV63 | Num | 8 | flag_pefr_best |
| 65 | SFV65_DERV | Num | 8 | Peft_derv |
| 66 | SFV77_DERV | Num | 8 | Pifr_derv |
| 67 | PRE_FEV1FVC_DERV | Num | 8 | pre-BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 68 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 69 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 70 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 71 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v2_derv_pre_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | study_id |
| 5 | SSV10 | Char | 15 | position |
| 6 | SSV12 | Num | 8 | visit_num |
| 7 | SSV13 | Num | 8 | interval_num |
| 8 | SSV14 | Num | 8 | stage_num |
| 9 | SSV15 | Num | 8 | seq_num |
| 10 | SSV16 | Char | 5 | vlabel |
| 11 | SSV17 | Num | 8 | repeats |
| 12 | SSV19 | Char | 15 | qa_grade |
| 13 | SSV20 | Char | 15 | qa_status |
| 14 | SSV23B | Char | 8 | time_best |
| 15 | SSV28 | Num | 8 | temperature |
| 16 | SSV29 | Num | 8 | barometric |
| 17 | SSV30 | Num | 8 | humidity |
| 18 | SSV31 | Num | 8 | pre_washout_1 |
| 19 | VERSION | Char | 21 | Version |
| 20 | SSV33_DERV | Num | 8 | Svc_derv |
| 21 | SSV34_DERV | Num | 8 | Svcpd_derv |
| 22 | SSV35_DERV | Num | 8 | Pctsvc_derv |
| 23 | SSV36 | Num | 8 | flag_svc_best |
| 24 | SSV37_DERV | Num | 8 | IC_derv |
| 25 | SSV38_DERV | Num | 8 | IRV_derv |
| 26 | SSV39_DERV | Num | 8 | ERV_derv |
| 27 | SSV40_DERV | Num | 8 | TV_derv |
| 28 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 29 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 30 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 31 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v2_eca_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECA1 | Char | 1 | 1. Have you ever used an electronic cigarette or eCigarette? |
| 5 | ECA3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 6 | EСАЗВ | Char | 1 | 3b. If yes, what flavor was it? |
| 7 | ECA4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 8 | ECA5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 9 | ECA5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 10 | ECA5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 11 | ECA5C1 | Num | 8 | 5c1. If Yes, about how many fewer cigarettes do you now smoke? |
| 12 | ECA6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 13 | ECA7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 14 | ECA8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 15 | ECA9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 16 | ECA9B | Char | 100 | 9b. Specify: |
| 17 | ECA10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 18 | ECA11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 19 | ECA12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 20 | ECA13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 21 | ECA14A | Num | 8 | how long did you smoke eCigarettes days |
| 22 | ECA14B | Num | 8 | how long did you smoke eCigarettes months |
| 23 | ECA14C | Num | 8 | how long did you smoke eCigarettes years |
| 24 | ECA15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 25 | ECA15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 26 | ECA15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 27 | ECA16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 28 | ECA17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 29 | ECA17A | Char | 100 | 17a. Specify: |
| 30 | ECA18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 31 | ECA19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 32 | VERSION | Char | 21 | Version |
| 33 | ECA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 34 | ECA2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v2_ecf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECF0C | Char | 1 | Oc. Has this participant previously completed the ECA - eCigarette Use Assessment form? |
| 5 | ECF1 | Char | 1 | 1. Have you used electronic cigarettes or eCigarettes since your last visit? |
| 6 | ECF3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 7 | ECF3B | Char | 1 | 3b. If yes, what flavor was it? |
| 8 | ECF4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 9 | ECF5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 10 | ECF5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 11 | ECF5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 12 | ECF5C1 | Num | 8 | 5 c 1 . If Yes, about how many fewer cigarettes do you now smoke? |
| 13 | ECF6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 14 | ECF7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 15 | ECF8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 16 | ECF9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 17 | ECF9B | Char | 100 | 9b. Specify: |
| 18 | ECF10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 19 | ECF11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 20 | ECF12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 21 | ECF13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 22 | ECF14A | Num | 8 | how long did you smoke eCigarettes days |
| 23 | ECF14B | Num | 8 | how long did you smoke eCigarettes months |
| 24 | ECF14C | Num | 8 | how long did you smoke eCigarettes years |
| 25 | ECF15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 26 | ECF15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 27 | ECF15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 28 | ECF16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 29 | ECF17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 30 | ECF17A | Char | 100 | 17a. Specify: |
| 31 | ECF18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 32 | ECF19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 33 | VERSION | Char | 21 | Version |
| 34 | ECF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 35 | ECF2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v2_eha_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | EHA1 | Char | 1 | 1. Has your employment status changed in the last 12 months? (If 'No' or 'No Answer', go to item 18.) |
| 5 | EHA2 | Char | 1 | 2. How has your employment situation changed in the last 12 months? Have you (Please read all |
| options before recording answer): |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 35 | EHA13L1 | Num | 8 | 1311. How many years? |
| 36 | EHA13M | Char | 1 | 13 m . in an aluminum factory? |
| 37 | EHA13M1 | Num | 8 | 13m1. How many years? |
| 38 | EHA13N | Char | 1 | 13n. in a rubber tire plant? |
| 39 | EHA13N1 | Num | 8 | 13n1. How many years? |
| 40 | EHA13O | Char | 1 | 13o. in HVAC? |
| 41 | EHA13O1 | Num | 8 | 13o1. How many years? |
| 42 | EHA13P | Char | 1 | 13p. in demolition? |
| 43 | EHA13P1 | Num | 8 | 13p1. How many years? |
| 44 | EHA13Q | Char | 1 | 13q. in remodeling? |
| 45 | EHA13Q1 | Num | 8 | 13q1. How many years? |
| 46 | EHA13R | Char | 1 | 13r. in professional cleaning? |
| 47 | EHA13R1 | Num | 8 | 13r1. How many years? |
| 48 | EHA13S | Char | 1 | 13s. in beauty care? |
| 49 | EHA13S1 | Num | 8 | 13s1. How many years? |
| 50 | EHA13T | Char | 1 | 13t. in agriculture? |
| 51 | EHA13T1 | Num | 8 | 13t1. How many years? |
| 52 | EHA13U | Char | 1 | 13u. in the flooring industry? |
| 53 | EHA13U1 | Num | 8 | 13u1. How many years? |
| 54 | EHA14A | Char | 1 | 14a. a boilermaker? |
| 55 | EHA14A1 | Num | 8 | 14a1. How many years? |
| 56 | EHA14B | Char | 1 | 14b. a carpenter? |
| 57 | EHA14B1 | Num | 8 | 14b1. How many years? |
| 58 | EHA14C | Char | 1 | 14c. a chemical worker? |
| 59 | EHA14C1 | Num | 8 | 14c1. How many years? |
| 60 | EHA14D | Char | 1 | 14d. an electrician? |
| 61 | EHA14D1 | Num | 8 | 14d1. How many years? |
| 62 | EHA14E | Char | 1 | 14e. an elevator operator? |
| 63 | EHA14E1 | Num | 8 | 14e1. How many years? |
| 64 | EHA14F | Char | 1 | 14f. an insulator? |
| 65 | EHA14F1 | Num | 8 | 14f1. How many years? |
| 66 | EHA14G | Char | 1 | 14g. a lather? |
| 67 | EHA14G1 | Num | 8 | 14g1. How many years? |
| 68 | EHA14H | Char | 1 | 14h. a machinist? |
| 69 | EHA14H1 | Num | 8 | 14h1. How many years? |
| 70 | EHA14I | Char | 1 | 14i. a mechanic? |
| 71 | EHA14I1 | Num | 8 | 14i1. How many years? |
| 72 | EHA14J | Char | 1 | 14j. a millwright? |
| 73 | EHA14J1 | Num | 8 | 14j1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | EHA14K | Char | 1 | 14k. a pipefitter? |
| 75 | EHA14K1 | Num | 8 | 14k1. How many years? |
| 76 | EHA14L | Char | 1 | 141. a plasterer? |
| 77 | EHA14L1 | Num | 8 | 1411. How many years? |
| 78 | EHA14M | Char | 1 | 14m. a plumber? |
| 79 | EHA14M1 | Num | 8 | 14m1. How many years? |
| 80 | EHA14N | Char | 1 | 14n. a sander? |
| 81 | EHA14N1 | Num | 8 | 14n1. How many years? |
| 82 | EHA14O | Char | 1 | 140. a sheet metal worker? |
| 83 | EHA14O1 | Num | 8 | 14o1. How many years? |
| 84 | EHA14P | Char | 1 | 14p. a steelworker? |
| 85 | EHA14P1 | Num | 8 | 14p1. How many years? |
| 86 | EHA14Q | Char | 1 | 14q. a welder? |
| 87 | EHA14Q1 | Num | 8 | 14q1. How many years? |
| 88 | EHA14R | Char | 1 | 14r. a pig farmer? |
| 89 | EHA14R1 | Num | 8 | 14r1. How many years? |
| 90 | EHA14S | Char | 1 | 14s. a rigger? |
| 91 | EHA14S1 | Num | 8 | 14s1. How many years? |
| 92 | EHA14T | Char | 1 | 14t. a roofer? |
| 93 | EHA14T1 | Num | 8 | 14t1. How many years? |
| 94 | EHA14U | Char | 1 | 14u. a painter? |
| 95 | EHA14U1 | Num | 8 | 14u1. How many years? |
| 96 | EHA14V | Char | 1 | 14 v . a mason? |
| 97 | EHA14V1 | Num | 8 | 14v1. How many years? |
| 98 | EHA15A | Char | 1 | 15a. Irritant gases, such as chlorine or ammonia? |
| 99 | EHA15A1 | Num | 8 | 15a1. How many years? |
| 100 | EHA15B | Char | 1 | 15b. Fire, smoke or other combustion products? |
| 101 | EHA15B1 | Num | 8 | 15b1. How many years? |
| 102 | EHA15C | Char | 1 | 15c. Incinerators, boilers, or oil refineries? |
| 103 | EHA15C1 | Num | 8 | 15c1. How many years? |
| 104 | EHA15D | Char | 1 | 15d. Coal dust or powder? |
| 105 | EHA15D1 | Num | 8 | 15d1. How many years? |
| 106 | EHA15E | Char | 1 | 15e. Silica or sand, or concrete or cement dust? |
| 107 | EHA15E1 | Num | 8 | 15e1. How many years? |
| 108 | EHA15F | Char | 1 | 15f. Indoor fuel powered motors, compressors, or engines? |
| 109 | EHA15F1 | Num | 8 | 15f1. How many years? |
| 110 | EHA15G | Char | 1 | 15g. Diesel engine exhaust? |
| 111 | EHA15G1 | Num | 8 | 15g1. How many years? |
| 112 | EHA15H | Char | 1 | 15h. Wheat flour or other grain dusts? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 113 | EHA15H1 | Num | 8 | 15h1. How many years? |
| 114 | EHA15I | Char | 1 | 15i. Animal feeds or fodder? |
| 115 | EHA15I1 | Num | 8 | 15i1. How many years? |
| 116 | EHA15J | Char | 1 | 15j. Cotton dust or cotton processing? |
| 117 | EHA15J1 | Num | 8 | 15j1. How many years? |
| 118 | EHA15K | Char | 1 | 15k. Wood dust or saw dust? |
| 119 | EHA15K1 | Num | 8 | 15k1. How many years? |
| 120 | EHA15L | Char | 1 | 15l. Cadmium fumes or batteries or sliver solder? |
| 121 | EHA15L1 | Num | 8 | 15l1. How many years? |
| 122 | EHA15M | Char | 1 | 15 m . Other metal dusts or metal fumes? |
| 123 | EHA15M1 | Num | 8 | 15m1. How many years? |
| 124 | EHA15N | Char | 1 | 15n. Welding or flame cutting? |
| 125 | EHA15N1 | Num | 8 | 15n1. How many years? |
| 126 | EHA15O | Char | 1 | 150. Fiberglass or other man-made mineral fibers? |
| 127 | EHA15O1 | Num | 8 | 15o1. How many years? |
| 128 | EHA15P | Char | 1 | 15p. Explosives or blasting fumes? |
| 129 | EHA15P1 | Num | 8 | 15p1. How many years? |
| 130 | EHA16 | Char | 1 | 16. What type of mine was it? |
| 131 | EHA16A | Char | 50 | 16a. Specify: |
| 132 | EHA17 | Char | 1 | 17. What was mined? |
| 133 | EHA17A | Char | 50 | 17a. Specify: |
| 134 | EHA18A | Char | 1 | 18a. in a cotton, flax or hemp mill? |
| 135 | EHA18A1 | Num | 8 | 18a1. How many years? |
| 136 | EHA18B | Char | 1 | 18b. in a foundry? |
| 137 | EHA18B1 | Num | 8 | 18b1. How many years? |
| 138 | EHA18C | Char | 1 | 18c. in a glass works? |
| 139 | EHA18C1 | Num | 8 | 18c1. How many years? |
| 140 | EHA18D | Char | 1 | 18d. in a mine? |
| 141 | EHA18D1 | Num | 8 | 18d1. How many years? |
| 142 | EHA18E | Char | 1 | 18e. in a pottery? |
| 143 | EHA18E1 | Num | 8 | 18e1. How many years? |
| 144 | EHA18F | Char | 1 | 18f. in a power plant? |
| 145 | EHA18F1 | Num | 8 | 18f1. How many years? |
| 146 | EHA18G | Char | 1 | 18g. in a quarry? |
| 147 | EHA18G1 | Num | 8 | 18g1. How many years? |
| 148 | EHA18H | Char | 1 | 18h. in a refinery? |
| 149 | EHA18H1 | Num | 8 | 18h1. How many years? |
| 150 | EHA18I | Char | 1 | 18i. or with asbestos? |
| 151 | EHA18I1 | Num | 8 | 18i1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 152 | EHA18J | Char | 1 | 18j. in synthetic fibers or fabric manufacturing? |
| 153 | EHA18J1 | Num | 8 | 18j1. How many years? |
| 154 | EHA18K | Char | 1 | 18k. in a paper mill? |
| 155 | EHA18K1 | Num | 8 | 18k1. How many years? |
| 156 | EHA18L | Char | 1 | 181. in building or highway construction? |
| 157 | EHA18L1 | Num | 8 | 1811. How many years? |
| 158 | EHA18M | Char | 1 | 18 m . in an aluminum factory? |
| 159 | EHA18M1 | Num | 8 | 18m1. How many years? |
| 160 | EHA18N | Char | 1 | 18n. in a rubber tire plant? |
| 161 | EHA18N1 | Num | 8 | 18n1. How many years? |
| 162 | EHA18O | Char | 1 | 18o. in HVAC? |
| 163 | EHA18O1 | Num | 8 | 18o1. How many years? |
| 164 | EHA18P | Char | 1 | 18p. in demolition? |
| 165 | EHA18P1 | Num | 8 | 18p1. How many years? |
| 166 | EHA18Q | Char | 1 | 18q. in remodeling? |
| 167 | EHA18Q1 | Num | 8 | 18q1. How many years? |
| 168 | EHA18R | Char | 1 | 18r. in professional cleaning? |
| 169 | EHA18R1 | Num | 8 | 18r1. How many years? |
| 170 | EHA18S | Char | 1 | 18s. in beauty care? |
| 171 | EHA18S1 | Num | 8 | 18s1. How many years? |
| 172 | EHA18T | Char | 1 | 18t. in agriculture? |
| 173 | EHA18T1 | Num | 8 | 18t1. How many years? |
| 174 | EHA18U | Char | 1 | 18u. in the flooring industry? |
| 175 | EHA18U1 | Num | 8 | 18u1. How many years? |
| 176 | EHA19A | Char | 1 | 19a. a boilermaker? |
| 177 | EHA19A1 | Num | 8 | 19a1. How many years? |
| 178 | EHA19B | Char | 1 | 19b. a carpenter? |
| 179 | EHA19B1 | Num | 8 | 19b1. How many years? |
| 180 | EHA19C | Char | 1 | 19c. a chemical worker? |
| 181 | EHA19C1 | Num | 8 | 19c1. How many years? |
| 182 | EHA19D | Char | 1 | 19d. an electrician? |
| 183 | EHA19D1 | Num | 8 | 19d1. How many years? |
| 184 | EHA19E | Char | 1 | 19e. an elevator operator? |
| 185 | EHA19E1 | Num | 8 | 19e1. How many years? |
| 186 | EHA19F | Char | 1 | 19f. an insulator? |
| 187 | EHA19F1 | Num | 8 | 19f1. How many years? |
| 188 | EHA19G | Char | 1 | 19 g . a lather? |
| 189 | EHA19G1 | Num | 8 | 19g1. How many years? |
| 190 | EHA19H | Char | 1 | 19h. a machinist? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 191 | EHA19H1 | Num | 8 | 19h1. How many years? |
| 192 | EHA19I | Char | 1 | 19i. a mechanic? |
| 193 | EHA19I1 | Num | 8 | 19i1. How many years? |
| 194 | EHA19J | Char | 1 | 19j. a millwright? |
| 195 | EHA19J1 | Num | 8 | 19j1. How many years? |
| 196 | EHA19K | Char | 1 | 19k. a pipefitter? |
| 197 | EHA19K1 | Num | 8 | 19k1. How many years? |
| 198 | EHA19L | Char | 1 | 191. a plasterer? |
| 199 | EHA19L1 | Num | 8 | 1911. How many years? |
| 200 | EHA19M | Char | 1 | 19m. a plumber? |
| 201 | EHA19M1 | Num | 8 | 19m1. How many years? |
| 202 | EHA19N | Char | 1 | 19n. a sander? |
| 203 | EHA19N1 | Num | 8 | 19n1. How many years? |
| 204 | EHA19O | Char | 1 | 190. a sheet metal worker? |
| 205 | EHA19O1 | Num | 8 | 19o1. How many years? |
| 206 | EHA19P | Char | 1 | 19p. a steelworker? |
| 207 | EHA19P1 | Num | 8 | 19p1. How many years? |
| 208 | EHA19Q | Char | 1 | 19q. a welder? |
| 209 | EHA19Q1 | Num | 8 | 19q1. How many years? |
| 210 | EHA19R | Char | 1 | 19r. a pig farmer? |
| 211 | EHA19R1 | Num | 8 | 19r1. How many years? |
| 212 | EHA19S | Char | 1 | 19s. a rigger? |
| 213 | EHA19S1 | Num | 8 | 19s1. How many years? |
| 214 | EHA19T | Char | 1 | 19t. a roofer? |
| 215 | EHA19T1 | Num | 8 | 19t1. How many years? |
| 216 | EHA19U | Char | 1 | 19u. a painter? |
| 217 | EHA19U1 | Num | 8 | 19u1. How many years? |
| 218 | EHA19V | Char | 1 | 19v. a mason? |
| 219 | EHA19V1 | Num | 8 | 19v1. How many years? |
| 220 | EHA20A | Char | 1 | 20a. Irritant gases, such as chlorine or ammonia? |
| 221 | EHA20A1 | Num | 8 | 20a1. How many years? |
| 222 | EHA20B | Char | 1 | 20b. Fire, smoke or other combustion products? |
| 223 | EHA20B1 | Num | 8 | 20b1. How many years? |
| 224 | EHA20C | Char | 1 | 20c. Incinerators, boilers, or oil refineries? |
| 225 | EHA20C1 | Num | 8 | 20c1. How many years? |
| 226 | EHA20D | Char | 1 | 20d. Coal dust or powder? |
| 227 | EHA20D1 | Num | 8 | 20d1. How many years? |
| 228 | EHA20E | Char | 1 | 20e. Silica or sand, or concrete or cement dust? |
| 229 | EHA20E1 | Num | 8 | 20e1. How many years? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 230 | EHA20F | Char | 1 | 20f. Indoor fuel powered motors, compressors, or engines? |
| 231 | EHA20F1 | Num | 8 | 20f1. How many years? |
| 232 | EHA20G | Char | 1 | 20g. Diesel engine exhaust? |
| 233 | EHA20G1 | Num | 8 | 20g1. How many years? |
| 234 | EHA20H | Char | 1 | 20h. Wheat flour or other grain dusts? |
| 235 | EHA20H1 | Num | 8 | 20h1. How many years? |
| 236 | EHA20I | Char | 1 | 20i. Animal feeds or fodder? |
| 237 | EHA2011 | Num | 8 | 20i1. How many years? |
| 238 | EHA20J | Char | 1 | 20j. Cotton dust or cotton processing? |
| 239 | EHA20J1 | Num | 8 | 20j1. How many years? |
| 240 | EHA20K | Char | 1 | 20k. Wood dust or saw dust? |
| 241 | EHA20K1 | Num | 8 | 20k1. How many years? |
| 242 | EHA20L | Char | 1 | 201. Cadmium fumes or batteries or sliver solder? |
| 243 | EHA20L1 | Num | 8 | 2011. How many years? |
| 244 | EHA20M | Char | 1 | 20m. Other metal dusts or metal fumes? |
| 245 | EHA20M1 | Num | 8 | 20m1. How many years? |
| 246 | EHA20N | Char | 1 | 20n. Welding or flame cutting? |
| 247 | EHA20N1 | Num | 8 | 20n1. How many years? |
| 248 | EHA20O | Char | 1 | 20o. Fiberglass or other man-made mineral fibers? |
| 249 | EHA20O1 | Num | 8 | 20o1. How many years? |
| 250 | EHA20P | Char | 1 | 20p. Explosives or blasting fumes? |
| 251 | EHA20P1 | Num | 8 | 20p1. How many years? |
| 252 | EHA21 | Char | 1 | 21. What type of mine was it? |
| 253 | EHA21A | Char | 50 | 21a. Specify: |
| 254 | EHA22 | Char | 1 | 22. What was mined? |
| 255 | EHA22A | Char | 50 | 22a. Specify: |
| 256 | EHA6M | Num | 8 | Month of 6. Approximately what date did you begin working in this job? |
| 257 | EHA6D | Num | 8 | Day of 6. Approximately what date did you begin working in this job? |
| 258 | EHA6Y | Num | 8 | Year of 6. Approximately what date did you begin working in this job? |
| 259 | VERSION | Char | 21 | Version |
| 260 | EHA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 261 | EHA6_DAYS | Num | 8 | Approximately what date did you begin working in this job? - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v2_fct_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | FCT01 | Char | 1 | FCT01 Lack of energy |
| 5 | FCT02 | Char | 1 | FCT02 Nausea |
| 6 | FCT03 | Char | 1 | FCT03 Physical limitations |
| 7 | FCT04 | Char | 1 | FCT04 Pain |
| 8 | FCT05 | Char | 1 | FCT05 Side effects of treatment |
| 9 | FCT06 | Char | 1 | FCT06 Illness |
| 10 | FCT07 | Char | 1 | FCT07 Forced time in bed |
| 11 | FCT08 | Char | 1 | FCT08 Closeness to friends |
| 12 | FCT09 | Char | 1 | FCT09 Emotional support from family |
| 13 | FCT10 | Char | 1 | FCT10 Support from friends |
| 14 | FCT11 | Char | 1 | FCT11 Family accepted illness |
| 15 | FCT12 | Char | 1 | FCT12 Satisfied with communication |
| 16 | FCT13 | Char | 1 | FCT13 Closeness to partner |
| 17 | FCT14 | Num | 8 | FCT14 Answer or mark box |
| 18 | FCT15 | Char | 1 | FCT15 Satisfaction with sex life |
| 19 | FCT16 | Char | 1 | FCT16 Feeling sad |
| 20 | FCT17 | Char | 1 | FCT17 Satisfaction with coping |
| 21 | FCT18 | Char | 1 | FCT18 Loss of hope |
| 22 | FCT19 | Char | 1 | FCT19 Feeling nervous |
| 23 | FCT20 | Char | 1 | FCT20 Worries about death |
| 24 | FCT21 | Char | 1 | FCT21 Worry about worsening condition |
| 25 | FCT22 | Char | 1 | FCT22 Ability to work |
| 26 | FCT23 | Char | 1 | FCT23 Fulfillment of work |
| 27 | FCT24 | Char | 1 | FCT24 Ability to enjoy life |
| 28 | FCT25 | Char | 1 | FCT25 Acceptance of illness |
| 29 | FCT26 | Char | 1 | FCT26 Sleeping well |
| 30 | FCT27 | Char | 1 | FCT27 Enjoyment of fun activities |
| 31 | FCT28 | Char | 1 | FCT28 Content with quality of life |
| 32 | FCT29 | Char | 1 | FCT29 Feeling fatigued |
| 33 | FCT30 | Char | 1 | FCT30 Feeling weak |
| 34 | FCT31 | Char | 1 | FCT31 Feeling listless |
| 35 | FCT32 | Char | 1 | FCT32 Feeling tired |
| 36 | FCT33 | Char | 1 | FCT33 Trouble starting things |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 37 | FCT34 | Char | 1 | FCT34 Trouble finishing things |
| 38 | FCT35 | Char | 1 | FCT35 Energy |
| 39 | FCT36 | Char | 1 | FCT36 Ability to do usual activities |
| 40 | FCT37 | Char | 1 | FCT37 Need to sleep during day |
| 41 | FCT38 | Char | 1 | FCT38 Too tired to eat |
| 42 | FCT39 | Char | 1 | FCT39 Need helping with usual activities |
| 43 | FCT40 | Char | 1 | FCT40 Frustrated with fatigue |
| 44 | FCT41 | Char | 1 | FCT41 Fatigue limits social activities |
| 45 | VERSION | Char | 21 | Version |
| 46 | FACIT_PHYSICALWELLBEINGSCORE02 | Num | 8 | Year 1 FACIT physical wellbeing score |
| 47 | FACIT_SOCIALWELLBEINGSCORE02 | Num | 8 | Year 1 FACIT social wellbeing score |
| 48 | FACIT_EMOTIONALWELLBEINGSCORE02 | Num | 8 | Year 1 FACIT emotional wellbeing score |
| 49 | FACIT_FUNCTIONALWELLBEINGSCORE02 | Num | 8 | Year 1 FACIT functional wellbeing score |
| 50 | FACIT_FATIGUESCORE02 | Num | 8 | Year 1 FACIT fatigue score |
| 51 | FACIT_FTRIALOUTCOMEINDEX02 | Num | 8 | Year 1 FACIT F trial outcome index score |
| 52 | FACIT_GTOTALSCORE02 | Num | 8 | Year 1 FACIT G total score |
| 53 | FACIT_FTOTALSCORE02 | Num | 8 | Year 1 FACIT F total score |
| 54 | FCT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v2_hds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HDS01 | Num | 8 | HDS01 Feeling tense |
| 5 | HDS02 | Num | 8 | HDS02 Enjoyment |
| 6 | HDS03 | Char | 1 | HDS03 Feeling fearful |
| 7 | HDS04 | Char | 1 | HDS04 Sense of humor |
| 8 | HDS05 | Num | 8 | HDS05 Worried thoughts |
| 9 | HDS06 | Num | 8 | HDS06 Feeling cheerful |
| 10 | HDS07 | Num | 8 | HDS07 Ability to relax |
| 11 | HDS08 | Num | 8 | HDS08 Feeling slowed down |
| 12 | HDS09 | Num | 8 | HDS09 Feeling frightened |
| 13 | HDS10 | Num | 8 | HDS10 Lost interest in appearance |
| 14 | HDS11 | Num | 8 | HDS11 Feeling restless |
| 15 | HDS12 | Num | 8 | HDS12 Looking forward |
| 16 | HDS13 | Num | 8 | HDS13 Sudden feelings of panic |
| 17 | HDS14 | Num | 8 | HDS14 Ability to enjoy |
| 18 | VERSION | Char | 21 | Version |
| 19 | HDS_ANXIETYSCORE02 | Num | 8 | Year 1 HDS Anxiety Score |
| 20 | HDS_DEPRESSIONSCORE02 | Num | 8 | Year 1 HDS Depression Score |
| 21 | HDS0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_hef_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HEF1 | Char | 1 | 1. Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 5 | HEF1A | Num | 8 | 1a. How many episodes of chest trouble flare ups have you had since (date)? |
| 6 | HEF2A | Char | 1 | 2a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 7 | HEF2B | Char | 1 | 2b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 8 | HEF2C | Char | 1 | 2c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 9 | HEF2D | Char | 1 | 2d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 10 | HEF2E | Char | 1 | 2e. Were you evaluated in a physician's office or urgent care? |
| 11 | HEF2E1 | Num | 8 | 2e1. An additional antibiotic |
| 12 | HEF2E2 | Num | 8 | 2e2. Additional steroids |
| 13 | HEF2E3 | Num | 8 | 2e3. Don't know |
| 14 | HEF2E4 | Num | 8 | 2e4. Don't remember |
| 15 | HEF2F | Char | 1 | 2f. Were you evaluated in an Emergency Department? |
| 16 | HEF2F1 | Num | 8 | 2f1. An additional antibiotic |
| 17 | HEF2F2 | Num | 8 | 2f2. Additional steroids |
| 18 | HEF2F3 | Num | 8 | 2f3. Don't know |
| 19 | HEF2F4 | Num | 8 | 2f4. Don't remember |
| 20 | HEF2G | Char | 1 | 2 g . Were you admitted to the hospital? |
| 21 | HEF4 | Char | 1 | 4. (do not ask) Did the participant have a second episode? |
| 22 | HEF5A | Char | 1 | 5a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 23 | HEF5B | Char | 1 | 5b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 24 | HEF5C | Char | 1 | 5c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 25 | HEF5D | Char | 1 | 5d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 26 | HEF5E | Char | 1 | 5e. Were you evaluated in a physician's office or urgent care? |
| 27 | HEF5E1 | Num | 8 | 5e1. An additional antibiotic |
| 28 | HEF5E2 | Num | 8 | 5 e 2 . Additional steroids |
| 29 | HEF5E3 | Num | 8 | 5e3. Don't know |
| 30 | HEF5E4 | Num | 8 | 5e4. Don't remember |
| 31 | HEF5F | Char | 1 | 5f. Were you evaluated in an Emergency Department? |
| 32 | HEF5F1 | Num | 8 | 5f1. An additional antibiotic |
| 33 | HEF5F2 | Num | 8 | 5f2. Additional steroids |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 34 | HEF5F3 | Num | 8 | 5f3. Don't know |
| 35 | HEF5F4 | Num | 8 | 5f4. Don't remember |
| 36 | HEF5G | Char | 1 | 5g. Were you admitted to the hospital? |
| 37 | HEF7 | Char | 1 | 7. (do not ask) Did the participant have a third episode? |
| 38 | HEF8A | Char | 1 | 8a. Did you take additional antibiotics after contacting your healthcare provider by telephone or |
| email? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 70 | HEF14A | Char | 1 | 14a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 71 | HEF14B | Char | 1 | 14b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 72 | HEF14C | Char | 1 | 14c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 73 | HEF14D | Char | 1 | 14d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 74 | HEF14E | Char | 1 | 14e. Were you evaluated in a physician's office or urgent care? |
| 75 | HEF14E1 | Num | 8 | 14e1. An additional antibiotic |
| 76 | HEF14E2 | Num | 8 | 14e2. Additional steroids |
| 77 | HEF14E3 | Num | 8 | 14e3. Don't know |
| 78 | HEF14E4 | Num | 8 | 14e4. Don't remember |
| 79 | HEF14F | Char | 1 | 14f. Were you evaluated in an Emergency Department? |
| 80 | HEF14F1 | Num | 8 | 14f1. An additional antibiotic |
| 81 | HEF14F2 | Num | 8 | 14f2. Additional steroids |
| 82 | HEF14F3 | Num | 8 | 14f3. Don't know |
| 83 | HEF14F4 | Num | 8 | 14f4. Don't remember |
| 84 | HEF14G | Char | 1 | 14 g . Were you admitted to the hospital? |
| 85 | HEF16 | Char | 1 | 16. (do not ask) Did the participant have a fifth episode? |
| 86 | HEF17A | Char | 1 | 17a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 87 | HEF17B | Char | 1 | 17b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 88 | HEF17C | Char | 1 | 17c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 89 | HEF17D | Char | 1 | 17d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 90 | HEF17E | Char | 1 | 17e. Were you evaluated in a physician's office or urgent care? |
| 91 | HEF17E1 | Num | 8 | 17e1. An additional antibiotic |
| 92 | HEF17E2 | Num | 8 | 17e2. Additional steroids |
| 93 | HEF17E3 | Num | 8 | 17e3. Don't know |
| 94 | HEF17E4 | Num | 8 | 17e4. Don't remember |
| 95 | HEF17F | Char | 1 | 17f. Were you evaluated in an Emergency Department? |
| 96 | HEF17F1 | Num | 8 | 17f1. An additional antibiotic |
| 97 | HEF17F2 | Num | 8 | 17f2. Additional steroids |
| 98 | HEF17F3 | Num | 8 | 17f3. Don't know |
| 99 | HEF17F4 | Num | 8 | 17f4. Don't remember |
| 100 | HEF17G | Char | 1 | 17 g . Were you admitted to the hospital? |
| 101 | HEF19 | Char | 1 | 19. Since your last (center visit or telephone contact) on (date), have you at any time been admitted to a hospital (For COPD Participants: for any reason other than a chest flare up)? |
| 102 | HEF20 | Num | 8 | 20. How many hospitalizations have you had since (date)? |
| 103 | HEF21E | Char | 1 | 21e. Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 104 | HEF22E | Char | 1 | 22e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 105 | HEF23E | Char | 1 | 23e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 106 | HEF24E | Char | 1 | 24e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 107 | HEF25E | Char | 1 | 25e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 108 | VERSION | Char | 21 | Version |
| 109 | HEF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 110 | HEF12A_DAYS | Num | 8 | 12a. What was the date of this event? - Days from enrollment |
| 111 | HEF15A_DAYS | Num | 8 | 15a. What was the date of this event? - Days from enrollment |
| 112 | HEF18A_DAYS | Num | 8 | 18a. What was the date of this event? - Days from enrollment |
| 113 | HEF21A_DAYS | Num | 8 | $21 a$. What was the date of this event? - Days from enrollment |
| 114 | HEF22A_DAYS | Num | 8 | 22a. What was the date of this event? - Days from enrollment |
| 115 | HEF23A_DAYS | Num | 8 | 23a. What was the date of this event? - Days from enrollment |
| 116 | HEF24A_DAYS | Num | 8 | 24a. What was the date of this event? - Days from enrollment |
| 117 | HEF25A_DAYS | Num | 8 | 25a. What was the date of this event? - Days from enrollment |
| 118 | HEF26A_DAYS | Num | 8 | $26 a$. What was the date of this event? - Days from enrollment |
| 119 | HEF3A_DAYS | Num | 8 | 3a. What was the date of this event? - Days from enrollment |
| 120 | HEF6A_DAYS | Num | 8 | 6a. What was the date of this event? - Days from enrollment |
| 121 | HEF9A_DAYS | Num | 8 | 9a. What was the date of this event? - Days from enrollment |

## Data Set Name: v2_isp_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISP01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISP01B | Num | 8 | is |
| 6 | ISP02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISP02B | Num | 8 | is |
| 8 | ISP03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISP03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISP03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISP04A | Num | 8 | a) FEV1 |
| 12 | ISP05A | Num | 8 | a) FEV1 |
| 13 | ISP06A | Num | 8 | a) FEV1 |
| 14 | ISP08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISP09A | Num | 8 | a) FEV1 |
| 16 | ISP10A | Num | 8 | a) FEV1 |
| 17 | ISP11A | Num | 8 | a) FEV1 |
| 18 | ISP12A | Num | 8 | a) FEV1 |
| 19 | ISP13A | Num | 8 | a) FEV1 |
| 20 | ISP14A | Num | 8 | a) FEV1 |
| 21 | ISP15A | Num | 8 | a) FEV1 |
| 22 | ISP16 | Char | 1 | 16) First 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 23 | ISP17 | Char | 1 | 17) If yes, \% NaCl used: |
| 24 | ISP18A | Num | 8 | a) FEV1 |
| 25 | ISP19A | Num | 8 | a) FEV1 |
| 26 | ISP20A | Num | 8 | a) FEV1 |
| 27 | ISP21A | Num | 8 | a) FEV1 |
| 28 | ISP22 | Char | 1 | $22)$ Second 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 29 | ISP23A | Num | 8 | a) FEV1 |
| 30 | ISP24A | Num | 8 | a) FEV1 |
| 31 | ISP25A | Num | 8 | a) FEV1 |
| 32 | ISP26A | Num | 8 | a) FEV1 |
| 33 | ISP27 | Char | 1 | $27)$ Was the participant able to produce sputum? |
| 34 | ISP28 | Char | 1 | $28)$ Was the induction terminated early? (If 'No', 30) |
| 35 | ISP29 | Char | 1 | $29)$ Reason terminated early |
| 36 | ISP30 | Char | 1 | 30) Did the participant require additional albuterol? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISP31A | Num | 8 | a) FEV1 |
| 38 | ISP32A | Num | 8 | a) FEV1 |
| 39 | ISP33A | Num | 8 | a) FEV1 |
| 40 | ISP0D | Char | 5 | Time Collected |
| 41 | ISP0D_AMPM | Char | 1 | AM/PM |
| 42 | VERSION | Char | 21 | Version |
| 43 | ISP0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 44 | ISP0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v2_isw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISW01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISW01B | Num | 8 | is |
| 6 | ISW02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISW02B | Num | 8 | is |
| 8 | ISW03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISW03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISW03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISW04A | Num | 8 | a) FEV1: |
| 12 | ISW05A | Num | 8 | a) FEV1: |
| 13 | ISW06A | Num | 8 | a) FEV1: |
| 14 | ISW08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISW09A | Num | 8 | a) FEV1 |
| 16 | ISW10A | Num | 8 | a) FEV1 |
| 17 | ISW11A | Num | 8 | a) FEV1 |
| 18 | ISW12A | Num | 8 | a) FEV1 |
| 19 | ISW13A | Num | 8 | a) FEV1 |
| 20 | ISW14 | Char | 1 | 14) First 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 21 | ISW15 | Char | 1 | 15) If yes, \% NaCl used: |
| 22 | ISW16A | Num | 8 | a) FEV1 |
| 23 | ISW17A | Num | 8 | a) FEV1 |
| 24 | ISW18 | Char | 1 | 18) Second 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 25 | ISW19 | Char | 1 | 19) If yes, \% NaCl used: |
| 26 | ISW20A | Num | 8 | a) FEV1 |
| 27 | ISW21A | Num | 8 | a) FEV1 |
| 28 | ISW22 | Char | 1 | 22) Was the participant able to produce sputum? |
| 29 | ISW23 | Char | 1 | 23) Was the induction terminated early? |
| 30 | ISW24 | Char | 1 | 24) Reason terminated early |
| 31 | ISW25 | Char | 1 | 25) Did the participant require additional albuterol? |
| 32 | ISW26A | Num | 8 | a) FEV1 |
| 33 | ISW27A | Num | 8 | a) FEV1 |
| 34 | ISW28A | Num | 8 | a) FVC |
| 35 | ISW29 | Char | 2000 | 29) Note reason and time point obtained |
| 36 | ISW0D | Char | 5 | Time Collected |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISW0D_AMPM | Char | 1 | AM/PM |
| 38 | VERSION | Char | 21 | Version |
| 39 | ISW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 40 | ISW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v2_mcq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MCQ01 | Char | 1 | MCQ01 Frequency of cough today |
| 5 | MCQ02 | Char | 1 | MCQ02 Frequency of cough last night |
| 6 | MCQ03 | Char | 1 | MCQ03 Severity of cough episodes |
| 7 | MCQ04 | Char | 1 | MCQ04 Ease of coughing up sputum today |
| 8 | MCQ05 | Char | 1 | MCQ05 Chest tightness/discomfort today |
| 9 | VERSION | Char | 21 | Version |
| 10 | MCQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_mhf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MHF0C | Num | 8 | 0c. (do not read) Check here if participant is Female |
| 5 | MHF1 | Char | 1 | 1. Did you get an influenza vaccination (flu shot) in the last 12 months? |
| 6 | MHF2 | Char | 1 | 2. When was your most recent pneumonia vaccination? (Pneumovax) |
| 7 | MHF3 | Char | 1 | 3. Have you been diagnosed with alpha-1 anti-trypsin deficiency? |
| 8 | MHF4A | Char | 1 | 4a. Vision problems |
| 9 | MHF4B | Char | 1 | 4b. Hearing problems |
| 10 | MHF4C | Char | 1 | 4c. Dizziness |
| 11 | MHF4D | Char | 1 | 4d. Ears ringing |
| 12 | MHF4E | Char | 1 | 4e. Sinusitis/Rhinitis |
| 13 | MHF4F | Char | 1 | 4f. Other |
| 14 | MHF5A | Char | 1 | 5a. High blood pressure |
| 15 | MHF5B | Char | 1 | 5b. Coronary artery disease |
| 16 | MHF5C | Char | 1 | 5c. Angina (chest pain) |
| 17 | MHF5D | Char | 1 | 5d. Heart attack |
| 18 | MHF5E | Char | 1 | 5e. Murmur |
| 19 | MHF5F | Char | 1 | 5f. Palpitations, irregular heartbeat |
| 20 | MHF5G | Char | 1 | 5g. Valve disease |
| 21 | MHF5H | Char | 1 | 5h. Congestive heart failure |
| 22 | MHF5I | Char | 1 | 5i. Blood clots |
| 23 | MHF5J | Char | 1 | 5j. Poor circulation (claudication) |
| 24 | MHF5K | Char | 1 | 5k. Other |
| 25 | MHF6A | Char | 1 | 6a. Esophageal condition or disease |
| 26 | MHF6B | Char | 1 | 6b. Ulcers |
| 27 | MHF6C | Char | 1 | 6c. Hepatitis or jaundice |
| 28 | MHF6D | Char | 1 | 6d. Crohn's disease or colitis |
| 29 | MHF6E | Char | 1 | 6e. Gallstones |
| 30 | MHF6F | Char | 1 | 6f. Cirrhosis |
| 31 | MHF6F1 | Char | 75 | 6f1. Explain: |
| 32 | MHF6G | Char | 1 | 6g. GERD (heart burn) |
| 33 | MHF6H | Char | 1 | 6h. Hiatal hernia |
| 34 | MHF6I | Char | 1 | 6i. Other |
| 35 | MHF7A | Char | 1 | 7a. Intubation or respirator |
| 36 | MHF7B | Char | 1 | 7b. Pneumothorax (collapsed lung) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | MHF7C | Char | 1 | 7c. Tuberculosis |
| 38 | MHF7D | Char | 1 | 7d. Pulmonary fibrosis |
| 39 | MHF7D1 | Char | 75 | 7d1. Explain: |
| 40 | MHF7E | Char | 1 | 7e. Lung nodules |
| 41 | MHF7F | Char | 1 | 7f. Pulmonary embolism |
| 42 | MHF7G | Char | 1 | 7 g . Other |
| 43 | MHF8A | Char | 1 | 8a. Cancer(except basal cell skin cancer) |
| 44 | MHF8B | Char | 1 | 8b. Anemia |
| 45 | MHF8C | Char | 1 | 8c. Other |
| 46 | MHF9A | Char | 1 | 9a. Menstrual symptoms (women) |
| 47 | MHF9B | Char | 1 | 9b. Enlarged prostate or BPH (men) |
| 48 | MHF9C | Char | 1 | 9c. Bladder or kidney problems/kidney stones |
| 49 | MHF9D | Char | 1 | 9d. Other |
| 50 | MHF10A | Char | 1 | 10a. Diabetes |
| 51 | MHF10B | Char | 1 | 10b. Thyroid |
| 52 | MHF10C | Char | 1 | 10c. Other |
| 53 | MHF10C1 | Char | 75 | 10c1. Explain: |
| 54 | MHF11A | Char | 1 | 11a. Stroke |
| 55 | MHF11B | Char | 1 | 11b. Headaches |
| 56 | MHF11C | Char | 1 | 11c. Seizure |
| 57 | MHF11D | Char | 1 | 11d. Other |
| 58 | MHF12A | Char | 1 | 12a. Rheumatoid arthritis |
| 59 | MHF12B | Char | 1 | 12b. Gout |
| 60 | MHF12C | Char | 1 | 12c. Osteoporosis |
| 61 | MHF12D | Char | 1 | 12d. Fractures |
| 62 | MHF12E | Char | 1 | 12e. Joint pain |
| 63 | MHF12F | Char | 1 | 12f. Osteoarthritis |
| 64 | MHF12G | Char | 1 | 12g. Other |
| 65 | MHF13A | Char | 1 | 13a. Rashes/hives/ eczema |
| 66 | MHF13B | Char | 1 | 13b. Psoriasis |
| 67 | MHF13C | Char | 1 | 13c. Shingles |
| 68 | MHF13D | Char | 1 | 13d. Other |
| 69 | MHF14A | Char | 1 | 14a. Atypical mycobacteria (MAC,MAI) |
| 70 | MHF14B | Char | 1 | 14b. Fungal disease |
| 71 | MHF14C | Char | 1 | 14c. Other |
| 72 | MHF15A | Char | 1 | 15a. Anxiety |
| 73 | MHF15B | Char | 1 | 15b. Depression |
| 74 | MHF15C | Char | 1 | 15c. Other |
| 75 | MHF15C1 | Char | 75 | 15c1. Explain: |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | MHF16 | Char | 1 | 16. Other significant problems not reported in questions 2-18 |
| 77 | MHF16C | Char | 50 | List Problem C |
| 78 | MHF16D | Char | 50 | List Problem D |
| 79 | MHF17 | Char | 1 | 17. A fever, cold, flu, or sore throat? |
| 80 | MHF18 | Char | 1 | 18. A urinary tract infection? |
| 81 | MHF19 | Char | 1 | 19. Seasonal allergies? |
| 82 | MHF20 | Char | 1 | 20. A sinus infection or sinusitis? |
| 83 | MHF21 | Char | 1 | 21. A tooth infection? |
| 84 | MHF22 | Char | 1 | 22. A flare up of gout? |
| 85 | MHF23 | Char | 1 | 23. A flare up of arthritis? |
| 86 | MHF24 | Char | 1 | 24. Other? |
| 87 | MHF25 | Char | 50 | 25. Please explain: |
| 88 | MHF26 | Char | 1 | 26. Are you allergic to any medications, latex, food, or substances? |
| 89 | MHF26A | Char | 50 | 26a. List Substance: |
| 90 | MHF26A1 | Char | 50 | 26a1. Reaction: |
| 91 | MHF26B | Char | 50 | 26b. List Substance: |
| 92 | MHF26B1 | Char | 50 | 26b1. Reaction: |
| 93 | MHF26C | Char | 50 | 26c. List Substance: |
| 94 | MHF26C1 | Char | 50 | 26c1. Reaction: |
| 95 | MHF26D | Char | 50 | 26d. List Substance: |
| 96 | MHF26D1 | Char | 50 | 26d1. Reaction: |
| 97 | MHF26E | Char | 50 | 26e. List Substance: |
| 98 | MHF26E1 | Char | 50 | 26e1. Reaction: |
| 99 | MHF27 | Char | 1 | 27. In the past 12 months, how often have you consumed any beverage containing alcohol (beer, wine, wine coolers, liquor, or mixed drinks such as margaritas, martinis, or daiquiris)? |
| 100 | MHF28 | Char | 1 | 28. When you drink beverage containing alcohol, how many do you usually drink at one sitting? |
| 101 | MHF29A | Num | 8 | 29a. Beer |
| 102 | MHF29B | Num | 8 | 29b. Wine |
| 103 | MHF29C | Num | 8 | 29c. Drinks containing liquor |
| 104 | MHF30 | Char | 1 | 30. How often do you have eight or more drinks on one occasion? |
| 105 | MHF31 | Char | 1 | 31. How often during the last year have you been unable to remember what happened the night before because you had been drinking? |
| 106 | MHF32 | Char | 1 | 32. How often during the last year have you failed to do what was normally expected of you because of your drinking? |
| 107 | MHF33 | Char | 1 | 33. Has a relative or friend, a doctor or other health worker been concerned about your drinking or suggested you cut down? |
| 108 | MHF34 | Char | 1 | 34. Have you reached menopause? |
| 109 | MHF35 | Num | 8 | 35. If you have reached menopause, at what age did that occur? |
| 110 | MHF36 | Char | 1 | 36. Did you ever use oral contraceptive medications? |
| 111 | MHF37 | Num | 8 | 37. If you did use oral contraceptives, for how many years? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 112 | MHF38 | Char | 1 | 38. Did you ever use hormone replacement therapy? |
| 113 | MHF39 | Num | 8 | 39. If you did use hormone replacement therapy, for how many years? |
| 114 | MHF40 | Char | 1 | 40. In the past 12 months have you been pregnant? |
| 115 | MHF41 | Char | 1 | 41. In the past 12 months did you ever breastfeed |
| 116 | MHF42 | Num | 8 | 42. If you did breastfeed, for approximately how many total months did you breastfeed (total for all |
| pregnancies)? |  |  |  |  |
| 117 | MHF43 | Char | 1 | 43. In the last 12 months have you had an ovary removed? |
| 118 | MHF44 | Char | 1 | 44. If you had an ovary removed, was one removed or both? |
| 119 | MHF45 | Num | 8 | 45. At what age was your ovary or ovaries removed? |
| 120 | MHF46 | Char | 1 | 46. Were you born premature? |
| 121 | MHF46A | Num | 8 | 46a. If yes, how many weeks were you premature? |
| 122 | MHF47A | Num | 8 | 47a. What was your birth weight? |
| 123 | MHF47B | Num | 8 | Birth Weight in Pounds/Ounces |
| 124 | MHF48 | Char | 1 | 48. Did you ever have breathing problems during the first two years of life? |
| 125 | MHF48A | Char | 1 | 48a. If yes, were you ever hospitalized for these problems? |
| 126 | MHF49 | Char | 1 | 49. Were you ever hospitalized for pneumonia before 18 years of age? |
| 127 | MHF7H | Char | 1 | 7h. Wedge Resection |
| 128 | MHF7H1 | Char | 75 | 7h1. Explain: |
| 129 | VERSION | Char | 21 | Version |
| 130 | MHF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_mrc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MRC01 | Num | 8 | MRC01 Describe shortness of breath |
| 5 | VERSION | Char | 21 | Version |
| 6 | MRC0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_pft_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFT01 | Num | 8 | PFT01 Large meal eaten within the last 2 hours |
| 5 | PFT02 | Num | 8 | PFT02 Smoked within the last hour |
| 6 | PFT03 | Num | 8 | PFT03 Vigorous exercise in the past 30 minutes |
| 7 | PFT04 | Num | 8 | PFT04 Consumed alcohol within past 4 hours |
| 8 | PFT05 | Num | 8 | PFT05 Medication for lungs in past 48 hours |
| 9 | PFT06 | Num | 8 | PFT06 Use of Spiriva within past 48 hours |
| 10 | PFT06B | Char | 5 | PFT06B Time last used Spiriva |
| 11 | PFT06B_AMPM | Char | 1 | PFT06B_AMPM Last used Spiriva AM/PM |
| 12 | PFT07 | Num | 8 | PFT07 Use of theophylline within past 48 hrs |
| 13 | PFT07A | Num | 8 | PFT07A Most recent type of theophyline used |
| 14 | PFT07C | Char | 5 | PFT07C Time last used theophyline |
| 15 | PFT07C_AMPM | Char | 1 | PFT07C_AMPM last used theophyline AM/PM |
| 16 | PFT08 | Num | 8 | PFT08 Use of one-a-day bronchodilator |
| 17 | PFT08B | Char | 5 | PFT08B Time last used one-a-day bronchodilator |
| 18 | PFT08B_AMPM | Char | 1 | PFT08B_AMPM last used one-a-day bronchodilator AM/PM |
| 19 | PFT09 | Num | 8 | PFT09 Use of long-acting beta agonist |
| 20 | PFT09A | Num | 8 | PFT09A Most recent long-acting beta agonist used |
| 21 | PFT09A1 | Char | 50 | PFT09A1 Specify long-acting beta agonist |
| 22 | PFT09B | Char | 5 | PFT09B Time last used long-acting beta agonist |
| 23 | PFT09B_AMPM | Char | 1 | PFT09B_AMPM last used long-acting beta agonist AM/PM |
| 24 | PFT10 | Num | 8 | PFT10 Use of ipratropium within the past 8 hours |
| 25 | PFT10A | Num | 8 | PFT10A Most recent ipratropium used |
| 26 | PFT10B | Char | 5 | PFT10B Time last used ipratropium |
| 27 | PFT10C_AMPM | Char | 1 | PFT10C_AMPM last used ipratropium AM/PM |
| 28 | PFT11 | Num | 8 | PFT11 Use of short-acting beta agonist |
| 29 | PFT11A | Num | 8 | PFT11A Most recent short-acting beta agonist used |
| 30 | PFT11A7A | Char | 50 | PFT11A7A Specify short-acting beta agonist |
| 31 | PFT11B | Char | 5 | PFT11B Time last short-acting beta agonist used |
| 32 | PFT11B_AMPM | Char | 1 | PFT11B_AMPM last short-acting beta agonist used AM/PM |
| 33 | PFT12 | Char | 1 | PFT12 Consumption of caffeine in past 6 hours |
| 34 | VERSION | Char | 21 | Version |
| 35 | PFT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 36 | PFT06A_DAYS | Num | 8 | Date last used Spiriva - Days from enrollment |
|  |  |  | PFT |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | PFT07B_DAYS | Num | 8 | Date last used theophyline - Days from enrollment |
| 38 | PFT08A_DAYS | Num | 8 | Date last used one-a-day bronchodilator - Days from enrollment |

## Data Set Name: v2_pfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | PFV01 study_id |
| 5 | PFV10 | Char | 15 | PFV10 Position |
| 6 | PFV12 | Num | 8 | PFV12 visit_num |
| 7 | PFV13 | Num | 8 | PFV13 interval_num |
| 8 | PFV14 | Num | 8 | PFV14 stage_num |
| 9 | PFV15 | Num | 8 | PFV15 seq_num |
| 10 | PFV16 | Char | 15 | PFV16 vlabel |
| 11 | PFV17 | Num | 8 | PFV17 repeats |
| 12 | PFV19 | Char | 15 | PFV19 qa_grade |
| 13 | PFV20 | Char | 15 | PFV20 qa_status |
| 14 | PFV22B | Char | 8 | PFV22B time |
| 15 | PFV23B | Char | 8 | PFV23B time_best |
| 16 | PFV24B | Char | 8 | PFV24B time_first |
| 17 | PFV25 | Num | 8 | PFV25 trial_seq_num |
| 18 | PFV26 | Num | 8 | PFV26 ranking |
| 19 | PFV27 | Num | 8 | PFV27 temperature |
| 20 | PFV28 | Num | 8 | PFV28 barometric |
| 21 | PFV29 | Num | 8 | PFV29 humidity |
| 22 | PFV30 | Num | 8 | PFV30 fevpd |
| 23 | PFV31 | Num | 8 | PFV31 fvcpd |
| 24 | PFV32 | Num | 8 | PFV32 fefpd |
| 25 | PFV33 | Num | 8 | PFV33 fev1_fvcpd |
| 26 | PFV34 | Num | 8 | PFV34 pefpd |
| 27 | PFV35 | Num | 8 | PFV35 pctfev |
| 28 | PFV36 | Num | 8 | PFV36 pctfvc |
| 29 | PFV37 | Num | 8 | PFV37 pctfef2575 |
| 30 | PFV38 | Num | 8 | PFV38 pctpefr |
| 31 | PFV39 | Num | 8 | PFV39 pctfev_fvc |
| 32 | PFV40 | Num | 8 | PFV40 fvc |
| 33 | PFV41 | Num | 8 | PFV41 flag_fvc_best |
| 34 | PFV42B | Char | 8 | PFV42B trials_time |
| 35 | PFV43 | Num | 8 | PFV43 fev05 |
| 36 | PFV44 | Num | 8 | PFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV45 | Num | 8 | PFV45 fev1 |
| 38 | PFV46 | Num | 8 | PFV46 flag_fev_best |
| 39 | PFV47 | Num | 8 | PFV47 fev1fvc |
| 40 | PFV48 | Num | 8 | PFV48 flag_fevfvc_best |
| 41 | PFV49 | Num | 8 | PFV49 fev3 |
| 42 | PFV50 | Num | 8 | PFV50 fev3fvc |
| 43 | PFV51 | Num | 8 | PFV51 fev6 |
| 44 | PFV52 | Num | 8 | PFV52 fef212 |
| 45 | PFV53 | Num | 8 | PFV53 fef2575 |
| 46 | PFV54 | Num | 8 | PFV54 flag_fef2575_best |
| 47 | PFV55 | Num | 8 | PFV55 fef25756 |
| 48 | PFV56 | Num | 8 | PFV56 fef25 |
| 49 | PFV57 | Num | 8 | PFV57 fef50 |
| 50 | PFV58 | Num | 8 | PFV58 fef506 |
| 51 | PFV59 | Num | 8 | PFV59 fef75 |
| 52 | PFV60 | Num | 8 | PFV60 fef756 |
| 53 | PFV61 | Num | 8 | PFV61 fef7585 |
| 54 | PFV62 | Num | 8 | PFV62 pefr |
| 55 | PFV63 | Num | 8 | PFV63 flag_pefr_best |
| 56 | PFV64 | Num | 8 | PFV64 met |
| 57 | PFV65 | Num | 8 | PFV65 peft |
| 58 | PFV66 | Num | 8 | PFV66 vext |
| 59 | PFV67 | Num | 8 | PFV67 pctvext |
| 60 | PFV68 | Num | 8 | PFV68 expt |
| 61 | PFV69 | Num | 8 | PFV69 RVSPCA |
| 62 | PFV70 | Char | 4 | PFV70 fevdiff |
| 63 | PFV71 | Num | 8 | PFV71 fivc |
| 64 | PFV72 | Num | 8 | PFV72 fiv05 |
| 65 | PFV73 | Num | 8 | PFV73 fiv05fivc |
| 66 | PFV74 | Num | 8 | PFV74 fiv1 |
| 67 | PFV75 | Num | 8 | PFV75 fiv1fivc |
| 68 | PFV76 | Num | 8 | PFV76 fiv3 |
| 69 | PFV77 | Num | 8 | PFV77 pifr |
| 70 | PFV78 | Num | 8 | PFV78 fif212 |
| 71 | PFV79 | Num | 8 | PFV79 fif2575 |
| 72 | PFV80 | Num | 8 | PFV80 mit |
| 73 | VERSION | Char | 21 | Version |
| 74 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 75 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :---: | ---: | :--- |
| 76 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 77 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v2_psq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | PSAQ7 | Char | 2000 | PSAQ7 Frequency of taking medication to sleep during the last month |
| 4 | PSAQ8 | Char | 2000 | PSAQ8 Frequency of having trouble staying awake during the last month |
| 5 | PSAQ9 | Char | 2000 | PSAQ9 Difficulty keeping up enthusiasm during the last month |
| 6 | VISIT | Char | 10 | Visit |
| 7 | PSQ01 | Char | 5 | PSQ01 Usual bedtime in the past month |
| 8 | PSQ01_AMPM | Char | 1 | PSQ01_AMPM bedtime AM/PM |
| 9 | PSQ02 | Num | 8 | PSQ02 Time taken to fall asleep in the past month |
| 10 | PSQ03 | Char | 5 | PQQ03 Waking hour in the past month |
| 11 | PSQ03_AMPM | Char | 1 | PSQ03_AMPM waking hour AM/PM |
| 12 | PSQ04 | Num | 8 | PSQ04 Hours of sleep per night in the past month |
| 13 | PSQ05A | Char | 1 | PSQ05A Trouble sleeping: Cannot get to sleep within 30 minutes |
| 14 | PSQ05B | Char | 1 | PSQ05B Trouble sleeping: Wake up in the middle of the night or early morning |
| 15 | PSQ05C | Char | 1 | PSQ05C Trouble sleeping: Have to get up to use the bathroom |
| 16 | PSQ05D | Char | 1 | PSQ05D Trouble sleeping: Cannot breathe comfortably |
| 17 | PSQ05E | Char | 1 | PSQ05E Trouble sleeping: Cough or snore loudly |
| 18 | PSQ05F | Char | 1 | PSQ05F Trouble sleeping: Feel too cold |
| 19 | PSQ05G | Char | 1 | PSQ05G Trouble sleeping: Feel too hot |
| 20 | PSQ05H | Char | 1 | PSQ05H Trouble sleeping: Have bad dreams |
| 21 | PSQ05I | Char | 1 | PSQ05I Trouble sleeping: Have pain |
| 22 | PSQ05J | Char | 1 | PSQ05J Trouble sleeping: Other reasons |
| 23 | PSQ06 | Char | 1 | PSQ06 Sleep quality during the last month |
| 24 | PSQ10 | Char | 1 | PSQ10 Bed partner/roommate |
| 25 | PSQ10A | Char | 1 | PSQ10A Bed partner/roommate reports: Loud snoring |
| 26 | PSQ10B | Char | 1 | PSQ10B Bed partner/roommate reports: Long pauses between breaths while asleep |
| 27 | PSQ10C | Char | 1 | PSQ10C Bed partner/roommate reports: Legs twitching or jerking while you sleep |
| 28 | PSQ10D | Char | 1 | PSQ10D Bed partner/roommate reports: Episodes of disorientation or confusion during sleep |
| 29 | PSQ10E | Char | 1 | PSQ10E Bed partner/roommate reports: Other restlessness while you sleep |
| 30 | PSQ10E1 | Char | 2000 | PSQ10E1 Describe other restlessness during sleep |
| 31 | VERSION | Char | 21 | Version |
| 32 | PSQ_TOTALSCORE02 | Num | 8 | Year 1 Pittsburgh sleep total score |
| 33 | PSQ_DURATIONSLEEP02 | Num | 8 | Year 1 PSQ Duration of sleep) |
| 34 | PSQ_SLEEPDISTURBANCE02 | Num | 8 | Year 1 PSQ sleep disturbance |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 35 | PSQ_SLEEPLATENCY02 | Num | 8 | Year 1 PSQ sleep latency |
| 36 | PSQ_DAYSLEEPYDYSFUNC02 | Num | 8 | Year 1 PSQ day dysfunction due to sleepness |
| 37 | PSQ_SLEEPEFFICIENCY02 | Num | 8 | Year 1 PSQ sleep efficiency |
| 38 | PSQ_OVERALLSLEEPQUALITY02 | Num | 8 | Year 1 PSQ overall sleep quality |
| 39 | PSQ_NEEDMEDSTOSLEEP02 | Num | 8 | Year 1 PSQ need meds to sleep |
| 40 | PSQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v2_psv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | PSV01 study_id |
| 5 | PSV10 | Char | 15 | PSV10 position |
| 6 | PSV12 | Num | 8 | PSV12 visit_num |
| 7 | PSV13 | Char | 15 | PSV13 interval_num |
| 8 | PSV14 | Num | 8 | PSV14 stage_num |
| 9 | PSV15 | Num | 8 | PSV15 seq_num |
| 10 | PSV16 | Char | 5 | PSV16 vlabel |
| 11 | PSV17 | Num | 8 | PSV17 repeats |
| 12 | PSV19 | Char | 15 | PSV19 qa_grade |
| 13 | PSV20 | Char | 15 | PSV20 qa_status |
| 14 | PSV22B | Char | 8 | PSV22B time |
| 15 | PSV23B | Char | 8 | PSV23B time_best |
| 16 | PSV24B | Char | 8 | PSV24B time_first |
| 17 | PSV25B | Char | 8 | PSV25B trials_time |
| 18 | PSV26 | Num | 8 | PSV26 trial_seq_num |
| 19 | PSV27 | Num | 8 | PSV27 ranking |
| 20 | PSV28 | Num | 8 | PSV28 temperature |
| 21 | PSV29 | Num | 8 | PSV29 barometric |
| 22 | PSV30 | Num | 8 | PSV30 humidity |
| 23 | PSV32 | Char | 5 | PSV32 tom |
| 24 | PSV33 | Num | 8 | PSV33 svc |
| 25 | PSV34 | Num | 8 | PSV34 svcpd |
| 26 | PSV35 | Num | 8 | PSV35 pctsvc |
| 27 | PSV36 | Num | 8 | PSV36 flag_svc_best |
| 28 | PSV37 | Num | 8 | PSV37 ic |
| 29 | PSV38 | Num | 8 | PSV38 irv |
| 30 | PSV39 | Num | 8 | PSV39 erv |
| 31 | PSV40 | Num | 8 | PSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v2_rdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | RDF1 | Char | 1 | 1. Do you usually have a cough? (Exclude clearing of throat.) |
| 5 | RDF1A | Char | 1 | 1a. Do you usually cough as much as 4 times a day, 4 or more days out of the week? |
| 6 | RDF2 | Char | 1 | 2. Do you usually cough at all on getting up or first thing in the morning? |
| 7 | RDF3 | Char | 1 | 3. Do you usually cough at all during the rest of the day or night? |
| 8 | RDF3A | Char | 1 | 3a. Do you cough like this on most days, for 3 consecutive months or more during the year? |
| 9 | RDF3B | Num | 8 | 3b. For how many years have you had this cough? |
| 10 | RDF4 | Char | 1 | 4. Do you usually bring up phlegm from your chest? |
| 11 | RDF4A | Char | 1 | 4a. Do you usually bring up phlegm like this as much as twice a day, 4 or more days out of the |
| week? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 33 | RDF14 | Char | 1 | 14. In the last 12 months, have you been bothered by watery, itchy, or burning eyes when you did not <br> have a cold or the flu? |
| 34 | RDF15 | Char | 1 | 15. Are you unable to walk due to a condition other than shortness of breath? |
| 35 | RDF15A | Char | 40 | 15a. Nature of condition: |
| 36 | RDF16 | Char | 1 | 16. In the past 12 months, have you been newly diagnosed by a doctor or other health professional <br> with asthma? |
| 37 | RDF16A | Char | 1 | 16a. In the past 12 months, have you received medical treatment, taken medications or used an <br> inhaler for asthma? |
| 38 | RDF17 | Char | 1 | 17. In the past 12 months, have you had hay fever (allergy involving the nose and/or eyes)? |
| 39 | RDF17A | Char | 1 | 17a. Was it diagnosed by a doctor or other health professional? |
| 40 | RDF17B | Char | 1 | 17b. In the past 12 months, have you received medical treatment, taken medications or used a nasal <br> spray for hay fever? |
| 41 | RDF18 | Char | 1 | 18. In the past 12 months, have you had an attack of bronchitis? |
| 42 | RDF18A | Char | 1 | 18a. Was it diagnosed by a doctor or other health professional? |
| 43 | RDF18B | Num | 8 | 18b. How many times have you had bronchitis in the past 12 months? |
| 44 | RDF19 | Char | 1 | 19. In the past 12 months, have you ever had pneumonia or bronchopneumonia? |
| 45 | RDF19A | Char | 1 | 19a. Was it diagnosed by a doctor or other health professional? |
| 46 | RDF19B | Num | 8 | 19b. How many times have you had pneumonia or bronchopneumonia in the past 12 months? |
| 47 | RDF20 | Char | 1 | 20. In the past 12 months, were you newly diagnosed by a doctor or other health professional with <br> chronic bronchitis? |
| 48 | RDF20A | Char | 1 | 20a. In the past 12 months, have you received medical treatment, taken medications or used an <br> inhaler for chronic bronchitis? |
| 64 | RDF27A | Num | 8 | 27a. 24 hours |
| 59 | RDF21 | Char | 1 | 21. In the past 12 months, have you been newly diagnosed by a doctor or other health professional <br> with emphysema? |
| 50 | RDF24C | Char | 1 | 1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 65 | RDF27B | Num | 8 | 27b. 2 hours |
| 66 | RDF27C | Num | 8 | 27c. 1/2 hour |
| 67 | RDF28 | Num | 8 | 28. How many cigarettes do you smoke per day now? |
| 68 | RDF29 | Num | 8 | 29. On average over the last 12 months, how many cigarettes did you smoke per day? |
| 69 | RDF30 | Char | 1 | 30. Have you ever smoked menthol cigarettes? |
| 70 | RDF30A | Num | 8 | 30a. For how long have you or did you smoke menthol cigarettes? |
| 71 | RDF31A | Char | 40 | First brand of cigarettes smoked |
| 72 | RDF31B | Char | 40 | Second brand of cigarettes smoked |
| 73 | RDF31C | Char | 40 | Third brand of cigarettes smoked |
| 74 | RDF31D | Char | 40 | Fourth brand of cigarettes smoked |
| 75 | RDF31E | Char | 40 | Fifth brand of cigarettes smoked |
| 76 | RDF32 | Char | 1 | 32. In the past twelve months have you smoked a pipe regularly? |
| 77 | RDF33 | Char | 1 | 33. Do you smoke a pipe (as of one month ago)? |
| 78 | RDF34 | Num | 8 | 34. How much pipe tobacco do you smoke per day now? |
| 79 | RDF35 | Num | 8 | 35. On average over the last 12 months, how many ounces of tobacco did you smoke per week? |
| 80 | RDF36 | Char | 1 | 36. In the past twelve months have you smoked cigars regularly? (YES means more than 1 cigar a week for one year at any time in your life) |
| 81 | RDF37 | Char | 1 | 37. Do you now smoke cigars (as of one month ago)? |
| 82 | RDF38 | Num | 8 | 38. How many cigars so you smoke per day now? |
| 83 | RDF39 | Num | 8 | 39. On average over the last 12 months, how many cigars did you smoke per week? |
| 84 | RDF40 | Char | 1 | 40. Which of the following best describes your approach to tobacco smoking in your home when you are in the house? |
| 85 | RDF41 | Char | 1 | 41. In the last 12 months, have you lived in the same household with someone who smoked tobacco products? |
| 86 | RDF42 | Char | 1 | 42. Do you currently live in the same household with someone who smokes tobacco products? |
| 87 | RDF43 | Num | 8 | 43. How many people in your household currently smoke? |
| 88 | RDF44 | Num | 8 | 44. In the last 12 months for how many months in total have you lived in the same household with someone else who smoked tobacco products? |
| 89 | RDF44A | Char | 1 | 44a. If no answer: |
| 90 | RDF45 | Char | 1 | 45. Has anyone smoked tobacco in your home during the past seven days? |
| 91 | RDF46 | Num | 8 | 46. During the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke at home? |
| 92 | RDF47 | Char | 1 | 47. During the past 7 days, did you enter a room in your home that was visibly smoky? |
| 93 | RDF48 | Char | 1 | 48. In the past 7 days, did you smell tobacco smoke in your home? |
| 94 | RDF49 | Char | 1 | 49. During the past 7 days, did you experience red eyes or eye irritation? |
| 95 | RDF50 | Char | 1 | 50. During the past 7 days, did you experience runny nose or nose irritation? |
| 96 | RDF51 | Char | 1 | 51. During the past 7 days, did you experience coughing, wheezing, or chest tightness? |
| 97 | RDF52 | Char | 1 | 52. In the past 7 days, did you take any extra handheld spray inhalers for breathing or lung problems after exposure to tobacco smoke in your home? |
| 98 | RDF53 | Char | 1 | 53. In the past 7 days, have you visited another person's home where someone was smoking tobacco products indoors? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 99 | RDF54 | Num | 8 | 54. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in another person's home? |
| 100 | RDF55 | Char | 1 | 55. During the past 7 days, did you enter a room in another person's home that was visibly smoky? |
| 101 | RDF56 | Char | 1 | 56. In the past 7 days, did you smell tobacco in another person's home? |
| 102 | RDF57 | Char | 1 | 57. In the past 7 days, have you traveled by car or other vehicle with someone else who was smoking tobacco products? |
| 103 | RDF58 | Num | 8 | 58. In the past 7 days, how many hours did you spend traveling in a car while someone else was smoking tobacco? |
| 104 | RDF59 | Char | 1 | 59. During the past 7 days, did anyone smoke tobacco inside your workplace, that is, while you were working indoors? |
| 105 | RDF60 | Num | 8 | 60. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke inside your workplace? |
| 106 | RDF61 | Char | 1 | 61. During the past 7 days, did you enter a room in your workplace that was visibly smoky? |
| 107 | RDF62 | Char | 1 | 62. In the past 7 days, did you smell tobacco smoke in your workplace? |
| 108 | RDF63 | Char | 1 | 63. Is there an outdoor area at your workplace where cigarette smokers routinely gather or congregate to smoke? |
| 109 | RDF64 | Num | 8 | 64. In the past 7 days, how many times did you walk through or past this area while others were smoking? |
| 110 | RDF65 | Num | 8 | 65. During the past 7 days, how many hours in total did you spend in an outdoor smoking area while people were smoking? |
| 111 | RDF66 | Char | 1 | 66. While walking through or past this area, did you smell smoke? |
| 112 | RDF67 | Num | 8 | 67. In the past 7 days, how many hours did you spend near coworkers who were smoking tobacco outdoors? |
| 113 | RDF68 | Char | 1 | 68. During the past 7 days, did you smell tobacco smoke while working outdoors? |
| 114 | RDF69 | Char | 1 | 69. In the past 7 days, have you been at an outdoor location (besides work) where someone was smoking tobacco products outside? |
| 115 | RDF71 | Char | 1 | 71. During the past 7 days, did you smell tobacco smoke in this outdoor location? |
| 116 | RDF72 | Num | 8 | 72. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke at this outdoor location? |
| 117 | RDF73 | Char | 1 | 73. In the past 7 days or nights, were you in a bar, nightclub, cocktail lounge, sports arena, or concert hall where someone else was smoking tobacco products? |
| 118 | RDF74 | Num | 8 | 74. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in a bar or other place of entertainment? |
| 119 | RDF75 | Char | 1 | 75. During the past 7 days, did you enter a room in a bar or other place of entertainment that was visibly smoky? |
| 120 | RDF76 | Char | 1 | 76. In the past 7 days, did you smell tobacco smoke in a bar or other place of entertainment? |
| 121 | RDF77 | Char | 1 | 77. I have asked you about exposure to someone else's tobacco smoke in your home, friend's home, work, outdoor locations, and bars or nightclubs. In the past 7 days, was there any other location where you were exposed to tobacco smoke? |
| 122 | RDF79 | Num | 8 | 79. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in this location? |
| 123 | RDF80 | Char | 1 | 80. In the last 12 months have you smoked marijuana (cannabis, pot, or hashish)? |
| 124 | RDF81 | Char | 1 | 81. In the last 12 months have you smoked marijuana regularly (five times or more in a given year)? |
| 125 | RDF82 | Num | 8 | 82. On average, in the last 12 months about how many joints per week do (did) you smoke? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 126 | RDF83 | Num | 8 | 83. On average over the entire time that you smoke(d) about how many pipes per week do (did) you <br> smoke? |
| 127 | RDF84A | Num | 8 | 84a. In spring |
| 128 | RDF84B | Num | 8 | 84b. In summer |
| 129 | RDF84C | Num | 8 | 84c. In fall |
| 130 | RDF84D | Num | 8 | 84d. In winter |
| 131 | RDF85 | Num | 8 | 85. On average, how many hours per day do you spend in your home? |
| 132 | RDF85A | Char | 1 | 85a. Do you have central air conditioner? |
| 133 | RDF85B | Num | 8 | 85b. How many months out of the year do you use it? |
| 134 | RDF85C | Char | 1 | 85c. Do you have a room air conditioner? |
| 135 | RDF85D | Num | 8 | 85d. How many months out of the year do you use it? |
| 136 | RDF85E | Char | 1 | 85e. What kind of range or stove do you have? |
| 137 | RDF85E1 | Char | 25 | 85e1. Specify |
| 138 | RDF85F | Char | 1 | 85f. Does your range or stove have ventilation to the outdoors? |
| 139 | RDF85G | Char | 1 | 85g. What is the main type of heating you use in your house? |
| 140 | RDF85H | Char | 1 | 85h. What is the main type of heating fuel you use in your house? |
| 141 | RDF85H1 | Char | 25 | 85h1. Specify |
| 142 | RDF85I | Num | 8 | 85i. How many months out of the year do you use the main type of heating in your house? |
| 143 | RDF85J1 | Num | 8 | 85j1. Radiator |
| 144 | RDF85J2 | Num | 8 | 85j2. Forced Air |
| 145 | RDF85J3 | Num | 8 | 85j3. Wood Stove |
| 146 | RDF85J4 | Num | 8 | 85j4. Fireplace |
| 147 | RDF85J5 | Num | 8 | $85 j 5$. Other |
| 148 | RDF86 | Char | 1 | 86. How much time per each day to you spend communting in traffic to work in total (i.e. both |
|  |  |  | ways)? |  |
| 149 | RDF86A | Num | 8 | $86 a$. How many days per week do you commute to work? |
| 150 | VERSION | Char | 21 | Version |
| 151 | RDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v2_rmu_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | RMU01 | Char | 1 | RMU01 Currently using Theophylline |
| 5 | RMU02 | Char | 1 | RMU02 Currently using Oral Corticosteroids |
| 6 | RMU02A1 | Num | 8 | RMU02A1 Years on oral corticosteroids |
| 7 | RMU02A2 | Num | 8 | RMU02A2 Days on oral corticosteroids |
| 8 | RMU03 | Char | 1 | RMU03 Supplemental oxygen usage |
| 9 | RMU03A | Num | 8 | RMU03A Hours using supplemental oxygen per day |
| 10 | RMU04 | Char | 1 | RMU04 Inhaled steroids usage in last three months |
| 11 | RMU04A1 | Char | 1 | RMU04A1 Inhaled steroids used in last 3 months: Azmacort (triamcinolone) |
| 12 | RMU04A1A | Num | 8 | RMU04A1A Azmacort (triamcinolone): Puffs/day? |
| 13 | RMU04A2 | Char | 1 | RMU04A2 Inhaled steroids used in last 3 months: Beclovent (beclomethasone) |
| 14 | RMU04A2A | Num | 8 | RMU04A2A Beclovent (beclomethasone): Puffs/day? |
| 15 | RMU04A3 | Char | 1 | RMU04A3 Inhaled steroids used in last 3 months: Vanceril (beclomethasone) |
| 16 | RMU04A3A | Num | 8 | RMU04A3A Vanceril (beclomethasone): Puffs/day? |
| 17 | RMU04A3B | Char | 1 | RMU04A3B Inhaled steroids used in last 3 months: Vanceril dose |
| 18 | RMU04A4 | Char | 1 | RMU04A4 Inhaled steroids used in last 3 months: AeroBid (blunisolide) |
| 19 | RMU04A4A | Num | 8 | RMU04A4A AeroBid (blunisolide): Puffs/day? |
| 20 | RMU04A5 | Char | 1 | RMU04A5 Inhaled steroids used in last 3 months: Flovent (fluticasone) |
| 21 | RMU04A5A | Num | 8 | RMU04A5A Flovent (fluticasone): Puffs/day? |
| 22 | RMU04A5B | Char | 1 | RMU04A5B Inhaled steroids used in last 3 months: Flovent dose |
| 23 | RMU04A6 | Char | 1 | RMU04A6 Inhaled steroids used in last 3 months: Pulmicort (budesonide) |
| 24 | RMU04A6A | Num | 8 | RMU04A6A Pulmicort (budesonide): Puffs/day? |
| 25 | RMU04A6B | Char | 1 | RMU04A6B Inhaled steroids used in last 3 months: Pulmicort dose |
| 26 | RMU04A7 | Char | 1 | RMU04A7 Inhaled steroids used in last 3 months: Qvar (beclomethasone) |
| 27 | RMU04A7A | Num | 8 | RMU04A7A Qvar (beclomethasone): Puffs/day? |
| 28 | RMU04A7B | Char | 1 | RMU04A7B Inhaled steroids used in last 3 months: Qvar dose |
| 29 | RMU04A8 | Char | 1 | RMU04A8 Inhaled steroids used in last 3 months: Advair (bluticasone/salmeterol) |
| 30 | RMU04A8A | Num | 8 | RMU04A8A Advair (bluticasone/salmeterol): Puffs/day? |
| 31 | RMU04A8B | Char | 1 | RMU04A8B Inhaled steroids used in last 3 months: Advair dose |
| 32 | RMU04A9 | Char | 1 | RMU04A9 Inhaled steroids used in last 3 months: Symbicort |
| 33 | RMU04A9A | Num | 8 | RMU04A9A Symbicort): Puffs/day? |
| 34 | RMU04A9B | Char | 1 | RMU04A9B Inhaled steroids used in last 3 months: Symbicort dose |
| 35 | RMU04A10 | Char | 1 | RMU04A10 Inhaled steroids used in last 3 months: Other, specify |
| 36 | RMU04A10A | Num | 8 | RMU04A10A Other, specify: Puffs/day? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RMU04A10B | Char | 50 | RMU04A10B Inhaled steroids used in last 3 months:Specify |
| 38 | RMU05 | Char | 1 | RMU05 Inhaled bronchodilators in last three months |
| 39 | RMU05A1 | Char | 1 | RMU05A1 Inhaled bronchodilators used in last 3 months: Albuterol (Proventil, Ventolin, ProAir) |
| 40 | RMU05A1A | Num | 8 | RMU05A1A Albuterol (Proventil, Ventolin, ProAir): Puffs/day? |
| 41 | RMU05A2 | Char | 1 | RMU05A2 Inhaled bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |
| 42 | RMU05A2A | Num | 8 | RMU05A2A ipratropium bromide (Atrovent): Puffs/day? |
| 43 | RMU05A3 | Char | 1 | RMU05A3 Inhaled bronchodilators used in last 3 months: ipratropium bromide/albuterol sulfate (Combivent) |
| 44 | RMU05A3A | Num | 8 | RMU05A3A ipratropium bromide/albuterol sulfate (Combivent): Puffs/day? |
| 45 | RMU05A4 | Char | 1 | RMU05A4 Inhaled bronchodilators used in last 3 months: terbutaline (Brethaire, Brethine, Bricanyl) |
| 46 | RMU05A4A | Num | 8 | RMU05A4A terbutaline (Brethaire, Brethine, Bricanyl): Puffs/day? |
| 47 | RMU05A5 | Char | 1 | RMU05A5 Inhaled bronchodilators used in last 3 months: formoterol (Foradil) |
| 48 | RMU05A5A | Num | 8 | RMU05A5A formoterol (Foradil): Puffs/day? |
| 49 | RMU05A6 | Char | 1 | RMU05A6 Inhaled bronchodilators used in last 3 months: tiotropium (Spiriva) |
| 50 | RMU05A6A | Num | 8 | RMU05A6A tiotropium (Spiriva): Puffs/day? |
| 51 | RMU05A7 | Char | 1 | RMU05A7 Inhaled bronchodilators used in last 3 months: Salmeterol (Serevent Diskus) |
| 52 | RMU05A7A | Num | 8 | RMU05A7A Salmeterol (Serevent Diskus): Puffs/day? |
| 53 | RMU05A8 | Char | 1 | RMU05A8 Inhaled bronchodilators used in last 3 months: Pirbuterol (Maxair) |
| 54 | RMU05A8A | Num | 8 | RMU05A8A Pirbuterol (Maxair): Puffs/day? |
| 55 | RMU05A9 | Char | 1 | RMU05A9 Inhaled bronchodilators used in last 3 months: Metaproterenol (Alupent, Metaprel) |
| 56 | RMU05A10 | Char | 1 | RMU05A10 Inhaled bronchodilators used in last 3 months: levalbuterol (Tomalate) |
| 57 | RMU05A10A | Num | 8 | RMU05A10A levalbuterol (Tomalate): Puffs/day? |
| 58 | RMU05A11 | Char | 1 | RMU05A11 Inhaled bronchodilators used in last 3 months: bitolterol (Tornalate) |
| 59 | RMU05A12 | Char | 1 | RMU05A12 Inhaled bronchodilators used in last 3 months: epinephrine (Primatene, Bronkaid) |
| 60 | RMU05A12A | Num | 8 | RMU05A12A epinephrine (Primatene, Bronkaid): Puffs/day? |
| 61 | RMU05A13 | Char | 1 | RMU05A13 Inhaled bronchodilators used in last 3 months: fluticasone/salmeterol (Advair Diskus) |
| 62 | RMU05A13A | Num | 8 | RMU05A13A fluticasone/salmeterol (Advair Diskus): Puffs/day? |
| 63 | RMU05A14 | Char | 1 | RMU05A14 Inhaled bronchodilators used in last 3 months: budesonide/formoterol (Symbicort) |
| 64 | RMU05A14A | Num | 8 | RMU05A14A budesonide/formoterol (Symbicort): Puffs/day? |
| 65 | RMU05A15 | Char | 1 | RMU05A15 Inhaled bronchodilators used in last 3 months: Other) |
| 66 | RMU05A15A | Num | 8 | RMU05A15A Other: Puffs/day? |
| 67 | RMU05A15B | Char | 50 | RMU05A15B Inhaled bronchodilators used in last 3 months:Specify |
| 68 | RMU06 | Char | 1 | RMU06 Nebulized bronchodilators usage in the last three months |
| 69 | RMU06A1 | Char | 1 | RMU06A1 nebulized bronchodilators used in last 3 months: formoterol (Perforomist) |
| 70 | RMU06A2 | Char | 1 | RMU06A2 nebulized bronchodilators used in last 3 months: arformoterol (Brovana) |
| 71 | RMU06A3 | Char | 1 | RMU06A3 nebulized bronchodilators used in last 3 months: albuterol and ipratropium bromide (DuoNeb) |
| 72 | RMU06A4 | Char | 1 | RMU06A4 nebulized bronchodilators used in last 3 months: albuterol (Proventil, Ventolin, ProAir) |
| 73 | RMU06A5 | Char | 1 | RMU06A5 nebulized bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | RMU07 | Char | 1 | RMU07 Leukotriene antagonist usage in the last 3 months |
| 75 | RMU08 | Char | 1 | RMU08 Statin medications usage in the last three months |
| 76 | RMU08A1 | Char | 1 | RMU08A1 statin used in last 3 months: Crestor (resuvastatin) |
| 77 | RMU08A2 | Char | 1 | RMU08A2 statin used in last 3 months: Lescol (fluvastatin) |
| 78 | RMU08A3 | Char | 1 | RMU08A3 statin used in last 3 months: Lipitor (atorvastatin) |
| 79 | RMU08A4 | Char | 1 | RMU08A4 statin used in last 3 months: Mevacor (lovastatin) |
| 80 | RMU08A5 | Char | 1 | RMU08A5 statin used in last 3 months: Pravachol (pravastatin) |
| 81 | RMU08A6 | Char | 1 | RMU08A6 statin used in last 3 months: Vytorin (ezetimibe, simvastatin) |
| 82 | RMU08A7 | Char | 1 | RMU08A7 statin used in last 3 months: Zocor (simvastatin) |
| 83 | RMU08A8 | Char | 1 | RMU08A8 statin used in last 3 months: Other |
| 84 | RMU08A8B | Char | 50 | RMU08A8B statin used in last 3 months:Specify |
| 85 | RMU09 | Char | 1 | RMU09 Beta-blocker medications usage in the last three months |
| 86 | RMU09A1 | Char | 1 | RMU09A1 beta blocker used in last 3 months: Atenolol (tenormin, tenoretic) |
| 87 | RMU09A2 | Char | 1 | RMU09A2 beta blocker used in last 3 months: Metoprolol (lopresor, toprol) |
| 88 | RMU09A3 | Char | 1 | RMU09A3 beta blocker used in last 3 months: Carvedilol (coreg) |
| 89 | RMU09A4 | Char | 1 | RMU09A4 beta blocker used in last 3 months: Labetalol (trandate, normodyne) |
| 90 | RMU09A5 | Char | 1 | RMU09A5 beta blocker used in last 3 months: Propranalol (Inderal, Inderide) |
| 91 | RMU09A6 | Char | 1 | RMU09A6 beta blocker used in last 3 months: Sotalol (Betapace, Sorine) |
| 92 | RMU09A7 | Char | 1 | RMU09A7 beta blocker used in last 3 months: Timolol (Blocadren, timolide) |
| 93 | RMU09A8 | Char | 1 | RMU09A8 beta blocker used in last 3 months: bisoprolol (zebeta, ziac) |
| 94 | RMU09A9 | Char | 1 | RMU09A9 beta blocker used in last 3 months: pindolol (visken) |
| 95 | RMU09A10 | Char | 1 | RMU09A10 beta blocker used in last 3 months: Other |
| 96 | RMU09A10B | Char | 50 | RMU09A10B beta blocker used in last 3 months:Specify |
| 97 | RMU10 | Char | 1 | RMU10 Oral anti-oxidant supplements usage in the past three months |
| 98 | RMU10A1 | Char | 1 | RMU10A1 oral anti-oxidants used in last 3 months: Vitamin C (ascorbic acid) |
| 99 | RMU10A2 | Char | 1 | RMU10A2 oral anti-oxidants used in last 3 months: Vitamin E (alpha-tocopherol) |
| 100 | RMU10A3 | Char | 1 | RMU10A3 oral anti-oxidants used in last 3 months: beta carotene |
| 101 | RMU10A4 | Char | 1 | RMU10A4 oral anti-oxidants used in last 3 months: zinc |
| 102 | RMU10A5 | Char | 1 | RMU10A5 oral anti-oxidants used in last 3 months: copper |
| 103 | RMU10A6 | Char | 1 | RMU10A6 oral anti-oxidants used in last 3 months: fish oil |
| 104 | RMU10A7 | Char | 1 | RMU10A7 oral anti-oxidants used in last 3 months: omega 3 |
| 105 | RMU10A8 | Char | 1 | RMU10A8 oral anti-oxidants used in last 3 months: Other |
| 106 | RMU11 | Char | 1 | RMU11 Aspirin usage |
| 107 | RMU12H | Char | 50 | RMU12H Other Medication taken in the last 3 months |
| 108 | RMU12I | Char | 50 | RMU12I Other Medication taken in the last 3 months |
| 109 | RMU13D | Char | 50 | RMU13D Other Supplement taken in the last 3 months |
| 110 | RMU13E | Char | 50 | RMU13E Other Supplement taken in the last 3 months |
| 111 | RMU13F | Char | 50 | RMU13F Other Supplement taken in the last 3 months |
| 112 | RMU13G | Char | 50 | RMU13G Other Supplement taken in the last 3 months |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 113 | RMU13H | Char | 50 | RMU13H Other Supplement taken in the last 3 months |
| 114 | RMU13I | Char | 50 | RMU13I Other Supplement taken in the last 3 months |
| 115 | VERSION | Char | 21 | VERSION |
| 116 | RMU0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v2_sdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SDF01 | Char | 1 | SDF01 Exhaled CO Measured |
| 5 | SDF01A | Num | 8 | SDF01A Monitor number |
| 6 | SDF01B | Num | 8 | SDF01B eCO Measurement 1 |
| 7 | SDF01C | Num | 8 | SDF01C eCO Measurement 2 |
| 8 | SDF02 | Char | 1 | SDF02 Pre-bronchodilator spirometry |
| 9 | SDF02A | Char | 5 | SDF02A Time pre-BD slow vital capacity procedure began |
| 10 | SDF02A_AMPM | Char | 1 | SDF02A_AMPM AM/PM |
| 11 | SDF03A | Num | 8 | SDF03A Pre-BD Inspiratory Capacity |
| 12 | SDF03B | Num | 8 | SDF03B Pre-BD Expiratory slow vital capacity |
| 13 | SDF03C | Num | 8 | SDF03C Pre-BD FEV1 |
| 14 | SDF03D | Num | 8 | SDF03D Pre-BD FVC |
| 15 | SDF04 | Char | 1 | SDF04 Post-bronchodilator spirometry |
| 16 | SDF04A | Char | 5 | SDF04A Time first puff of bronchodilator administered |
| 17 | SDF04A_AMPM | Char | 1 | SDF04A_AMPM AM/PM |
| 18 | SDF04B | Char | 5 | SDF04B Time post-BD slow vital capacity procedure began |
| 19 | SDF04B_AMPM | Char | 1 | SDF04B_AMPM AM/PM |
| 20 | SDF05A | Num | 8 | SDF05A Post-BD Inspiratory Capacity |
| 21 | SDF05B | Num | 8 | SDF05B Post-BD Expiratory slow vital capacity |
| 22 | SDF05C | Num | 8 | SDF05C Post-BD FEV1 |
| 23 | SDF05D | Num | 8 | SDF05D Post-BD FVC |
| 24 | SDF06 | Char | 1 | SDF06 Post-BD Meet ATS-ERS requirements |
| 25 | SDF07 | Char | 1 | SDF07 Complications during spirometry |
| 26 | VERSION | Char | 21 | Version |
| 27 | SDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v2_sfh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFH01 | Num | 8 | SFH01 General Health |
| 5 | SFH02A | Num | 8 | SFH02A Limitations on moderate activites |
| 6 | SFH02B | Num | 8 | SFH02B Limitations on difficult activities |
| 7 | SFH03A | Char | 1 | SFH03A Limited in accomplishing tasks |
| 8 | SFH03B | Char | 1 | SFH03B Limited in daily activities |
| 9 | SFH04A | Char | 1 | SFH04A Emotional limitations on activities |
| 10 | SFH04B | Char | 1 | SHF04B Emotional limitations on daily life |
| 11 | SFH05 | Num | 8 | SFH05 Pain interfering with normal work |
| 12 | SFH06A | Num | 8 | SFH06A Feeling calm |
| 13 | SFH06B | Num | 8 | SFH06B Energy level |
| 14 | SFH06C | Num | 8 | SFH06C Feeling depressed |
| 15 | SFH07 | Num | 8 | SFH07 Physical/emotional health interfering with social life |
| 16 | VERSION | Char | 21 | Version |
| 17 | SFH_BP02 | Num | 8 | Year 1 SFH bodily pain |
| 18 | SFH_GH02 | Num | 8 | Year 1 SFH general health |
| 19 | SFH_MCS02 | Num | 8 | Year 1 SFH mental component summary |
| 20 | SFH_MH02 | Num | 8 | Year 1 SFH mental health |
| 21 | SFH_PCS02 | Num | 8 | Year 1 SFH physical component summary |
| 22 | SFH_PF02 | Num | 8 | Year 1 SFH physical functioning |
| 23 | SFH_RE02 | Num | 8 | Year 1 SFH role emotion |
| 24 | SFH_RP02 | Num | 8 | Year 1 SFH role physical |
| 25 | SFH_SF02 | Num | 8 | Year 1 SFH social functioning |
| 26 | SFH_VT02 | Num | 8 | Year 1 SFH vitality |
| 27 | SFH0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v2_sfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | SFV01 study_id |
| 5 | SFV10 | Char | 15 | SFV10 Position |
| 6 | SFV12 | Num | 8 | SFV12 visit_num |
| 7 | SFV13 | Num | 8 | SFV13 interval_num |
| 8 | SFV14 | Num | 8 | SFV14 stage_num |
| 9 | SFV15 | Num | 8 | SFV15 seq_num |
| 10 | SFV16 | Char | 10 | SFV16 vlabel |
| 11 | SFV17 | Num | 8 | SFV17 repeats |
| 12 | SFV19 | Char | 15 | SFV19 qa_grade |
| 13 | SFV20 | Char | 15 | SFV20 qa_status |
| 14 | SFV22B | Char | 8 | SFV22B time |
| 15 | SFV23B | Char | 8 | SFV23B time_best |
| 16 | SFV24B | Char | 8 | SFV24B time_first |
| 17 | SFV25 | Num | 8 | SFV25 trial_seq_num |
| 18 | SFV26 | Num | 8 | SFV26 ranking |
| 19 | SFV27 | Num | 8 | SFV27 temperature |
| 20 | SFV28 | Num | 8 | SFV28 barometric |
| 21 | SFV29 | Num | 8 | SFV29 humidity |
| 22 | SFV30 | Num | 8 | SFV30 fevpd |
| 23 | SFV31 | Num | 8 | SFV31 fvcpd |
| 24 | SFV32 | Num | 8 | SFV32 fefpd |
| 25 | SFV33 | Num | 8 | SFV33 fev1_fvcpd |
| 26 | SFV34 | Num | 8 | SFV34 pefpd |
| 27 | SFV35 | Num | 8 | SFV35 petfev |
| 28 | SFV36 | Num | 8 | SFV36 petfvc |
| 29 | SFV37 | Num | 8 | SFV37 pctfef2575 |
| 30 | SFV38 | Num | 8 | SFV38 pctpefr |
| 31 | SFV39 | Num | 8 | SFV39 pctfev_fvc |
| 32 | SFV40 | Num | 8 | SFV40 fvc |
| 33 | SFV41 | Num | 8 | SFV41 flag_fvc_best |
| 34 | SFV42B | Char | 8 | SFV42B trials_time |
| 35 | SFV43 | Num | 8 | SFV43 fev05 |
| 36 | SFV44 | Num | 8 | SFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV45 | Num | 8 | SFV45 fev1 |
| 38 | SFV46 | Num | 8 | SFV46 flag_fev_best |
| 39 | SFV47 | Num | 8 | SFV47 fev1fvc |
| 40 | SFV48 | Num | 8 | SFV48 flag_fevfvc_best |
| 41 | SFV49 | Num | 8 | SFV49 fev3 |
| 42 | SFV50 | Num | 8 | SFV50 fev3fvc |
| 43 | SFV51 | Num | 8 | SFV51 fev6 |
| 44 | SFV52 | Num | 8 | SFV52 fef212 |
| 45 | SFV53 | Num | 8 | SFV53 fef2575 |
| 46 | SFV54 | Num | 8 | SFV54 flag_fef2575_best |
| 47 | SFV55 | Num | 8 | SFV55 fef25756 |
| 48 | SFV56 | Num | 8 | SFV56 fef25 |
| 49 | SFV57 | Num | 8 | SFV57 fef50 |
| 50 | SFV58 | Num | 8 | SFV58 fef506 |
| 51 | SFV59 | Num | 8 | SFV59 fef75 |
| 52 | SFV60 | Num | 8 | SFV60 fef756 |
| 53 | SFV61 | Num | 8 | SFV61 fef7585 |
| 54 | SFV62 | Num | 8 | SFV62 pefr |
| 55 | SFV63 | Num | 8 | SFV63 flag_pefr_best |
| 56 | SFV64 | Num | 8 | SFV64 met |
| 57 | SFV65 | Num | 8 | SFV65 peft |
| 58 | SFV66 | Num | 8 | SFV66 vext |
| 59 | SFV67 | Num | 8 | SFV67 pctvext |
| 60 | SFV68 | Num | 8 | SFV68 expt |
| 61 | SFV71 | Num | 8 | SFV71 fivc |
| 62 | SFV72 | Num | 8 | SFV72 fiv05 |
| 63 | SFV73 | Num | 8 | SFV73 fiv05fivc |
| 64 | SFV74 | Num | 8 | SFV74 fiv1 |
| 65 | SFV75 | Num | 8 | SFV75 fiv1fivc |
| 66 | SFV76 | Num | 8 | SFV76 fiv3 |
| 67 | SFV77 | Num | 8 | SFV77 pifr |
| 68 | SFV78 | Num | 8 | SFV78 fif212 |
| 69 | SFV79 | Num | 8 | SFV79 fif2575 |
| 70 | SFV80 | Num | 8 | SFV80 mit |
| 71 | VERSION | Char | 21 | Version |
| 72 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 73 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 74 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 75 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v2_sgr_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SGR0 | Char | 1 | SGR01 Describe current health |
| 5 | SGR01 | Num | 8 | SGR01 chest trouble: I cough: |
| 6 | SGR02 | Num | 8 | SGR02 chest trouble: I bring up phlegm (sputum): |
| 7 | SGR03 | Num | 8 | SGR03 chest trouble: I have had shortness of breath: |
| 8 | SGR04 | Num | 8 | SGR04 chest trouble: I have attacks of wheezing: |
| 9 | SGR05 | Char | 1 | SGR05 Number of attacks |
| 10 | SGR06 | Char | 1 | SGR06 Days with little chest trouble |
| 11 | SGR07 | Char | 1 | SGR07 Wheeze in morning |
| 12 | SGR08 | Char | 1 | SGR08 Describe chest condition |
| 13 | SGR09A | Char | 1 | SGR09A Feel breathless:Getting washed or dressed |
| 14 | SGR09B | Char | 1 | SGR09B Feel breathless:Walking around the home |
| 15 | SGR09C | Char | 1 | SGR09C Feel breathless:Walking outside on the level |
| 16 | SGR09D | Char | 1 | SGR09D Feel breathless:Walking up a flight of stairs |
| 17 | SGR09E | Char | 1 | SGR09E Feel breathless:Walking up hills |
| 18 | SGR10A | Char | 1 | SGR10A About cough and breathlessness: Painful cough |
| 19 | SGR10B | Char | 1 | SGR10B About cough and breathlessness: Tiring cough |
| 20 | SGR10C | Char | 1 | SGR10C About cough and breathlessness: Breathless when talking |
| 21 | SGR10D | Char | 1 | SGR10D About cough and breathlessness: Breathless when bending over |
| 22 | SGR10E | Char | 1 | SGR10E About cough and breathlessness: Coughing/breathing disturbs sleep |
| 23 | SGR10F | Char | 1 | SGR10F About cough and breathlessness: Easily exhausted |
| 24 | SGR11A | Char | 1 | SGR11A Effect of chest trouble: Embarrassed in public |
| 25 | SGR11B | Char | 1 | SGR11B Effect of chest trouble: Chest trouble annoys others |
| 26 | SGR11C | Char | 1 | SGR11C Effect of chest trouble: Feeling panicked when out of breath |
| 27 | SGR11D | Char | 1 | SGR11D Effect of chest trouble: Chest problem beyond control |
| 28 | SGR11E | Char | 1 | SGR11E Effect of chest trouble: Frail/invalid |
| 29 | SGR11F | Char | 1 | SGR11F Effect of chest trouble: Exercise is unsafe |
| 30 | SGR11G | Char | 1 | SGR11G Effect of chest trouble: Effort |
| 31 | SGR12A | Char | 1 | SGR12A Activities effected by respiratory problems: Long time washing/dressing |
| 32 | SGR12B | Char | 1 | SGR12B Activities effected by respiratory problems: Long time bathing |
| 33 | SGR12C | Char | 1 | SGR12C Activities effected by respiratory problems: Walking slowly/pausing often |
| 34 | SGR12D | Char | 1 | SGR12D Activities effected by respiratory problems: Long time doing housework |
| 35 | SGR12E | Char | 1 | SGR12E Activities effected by respiratory problems: Walking up stairs |
| 36 | SGR12F | Char | 1 | SGR12F Activities effected by respiratory problems: Difficulty walking fast |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SGR12G | Char | 1 | SGR12G Activities effected by respiratory problems: Difficulty performing moderate <br> tasks |
| 38 | SGR12H | Char | 1 | SGR12H Activities effected by respiratory problems: Difficulty performing hard tasks |
| 39 | SGR13A | Char | 1 | SGR13A Activities usually effected by chest: Cannot play sports or games |
| 40 | SGR13B | Char | 1 | SGR13B Activities usually effected by chest: Cannot go out for recreation |
| 41 | SGR13C | Char | 1 | SGR13C Activities usually effected by chest: Cannot go out shopping |
| 42 | SGR13D | Char | 1 | SGR13DActivities usually effected by chest: Cannot do housework |
| 43 | SGR13E | Num | 1 | 8 |
| 44 | SGR14 | Char | 21 | VGR14 Personal effects of chest trouble |
| 45 | VERSION | SGR13E Activities usually effected by chest: Cannot move far from bed/chair |  |  |
| 46 | SGR_SYMPTOMSCORE02 | Num | 8 | Year 1 SGR symptom score |
| 47 | SGR_ACTIVITYSCORE02 | Num | 8 | Year 1 SGR activity score |
| 48 | SGR_IMPACTSCORE02 | Num | 8 | Year 1 SGR impact score |
| 49 | SGR_TOTALSCORE02 | Num | 8 | Year 1 SGR total score |
| 50 | SGR0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v2_smw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SMW01 | Num | 8 | SMW01 Medications taken since post-bronchodilator spirometry |
| 5 | SMW01A1 | Char | 45 | SMW01A1 Medication name |
| 6 | SMW01A2 | Char | 20 | SMW01A2 Dose |
| 7 | SMW01A3 | Char | 5 | SMW01A3 Time |
| 8 | SMW01A3_AMPM | Char | 1 | SMW01A3_AMPM AM/PM |
| 9 | SMW01B1 | Char | 45 | SMW01B1 Medication name |
| 10 | SMW01B2 | Char | 20 | SMW01B2 Dose |
| 11 | SMW01B3 | Char | 5 | SMW01B3 Time |
| 12 | SMW01B3_AMPM | Char | 1 | SMW01B3_AMPM AM/PM |
| 13 | SMW01C1 | Char | 45 | SMW01C1 Medication name |
| 14 | SMW01C2 | Char | 20 | SMW01C2 Dose |
| 15 | SMW01C3 | Char | 5 | SMW01C3 Time |
| 16 | SMW01C3_AMPM | Char | 1 | SMW01C3_AMPM AM/PM |
| 17 | SMW02 | Char | 1 | SMW02 blood pressure taken more than 4 hours prior to SMW |
| 18 | SMW02A | Num | 8 | SMW02A Systolic |
| 19 | SMW02B | Num | 8 | SMW02B Diastolic |
| 20 | SMW03 | Char | 1 | SMW03 Supplemental Oxygen |
| 21 | SMW03A | Num | 8 | SMW03A Supplemental Oxygen Flow rate |
| 22 | SMW03B | Char | 1 | SMW03B Flow Type |
| 23 | SMW04A | Num | 8 | SMW04A Oxygen saturation (SpO2) at rest prior to SMW |
| 24 | SMW04B | Num | 8 | SMW04B Pulse at rest prior to SMW |
| 25 | SMW05 | Char | 1 | SMW05 Was continuous oximetry recorded? |
| 26 | SMW06 | Char | 5 | SMW06 Start time of 6MW |
| 27 | SMW06_AMPM | Char | 1 | SMW06_AMPM AM/PM |
| 28 | SMW07A | Num | 8 | SMW07A Oxygen saturation (SpO2) immediately following SMW |
| 29 | SMW07B | Num | 8 | SMW07B Pulse immediately following SMW |
| 30 | SMW07C | Num | 8 | SMW07C Breathlessness Score immediately following SMW |
| 31 | SMW07D | Num | 8 | SMW07D Exertion score immediately following SMW |
| 32 | SMW08A | Char | 1 | SMW08A Type of SMW course used (meters, feet, or other) |
| 33 | SMW08A1 | Char | 100 | SMW08A1 Specify other type of SMW course used |
| 34 | SMW08B | Num | 8 | SMW08B Number of full laps |
| 35 | SMW08C | Num | 8 | SMW08C Distance walked final partial lap |
| 36 | SMW09 | Char | 1 | SMW09 Stopped before 6 minutes |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SMW09A1 | Num | 8 | SMW09A1 Duration (minutes) |
| 38 | SMW09A2 | Num | 8 | SMW09A2 Duration (seconds) |
| 39 | SMW09B1 | Num | 8 | SMW09B1 Primary reason for stopping/not walking faster: Desaturation to LT 80\% |
| 40 | SMW09B2 | Num | 8 | SMW09B2 Primary reason for stopping/not walking faster: Orthopedic pain |
| 41 | SMW09B3 | Num | 8 | SMW09B3 Primary reason for stopping/not walking faster: Muscle pain |
| 42 | SMW09B4 | Num | 8 | SMW09B4 Primary reason for stopping/not walking faster: Breathlessness |
| 43 | SMW09B5 | Num | 8 | SMW09B5 Primary reason for stopping/not walking faster: Adverse Event |
| 44 | SMW09B5A | Num | 8 | SMW09B5A SMW related AE: Angina |
| 45 | SMW09B5B | Num | 8 | SMW09B5B SMW related AE: Lightheadedness |
| 46 | SMW09B5C | Num | 8 | SMW09B5C SMW related AE: Intolerable dyspnea |
| 47 | SMW09B5D | Num | 8 | SMW09B5D SMW related AE: Leg cramps |
| 48 | SMW09B5E | Num | 8 | SMW09B5E SMW related AE: Staggering |
| 49 | SMW09B5F | Num | 8 | SMW09B5F SMW related AE: Diaphoresis |
| 50 | SMW09B5G | Num | 8 | SMW09B5G SMW related AE: Pale or ashen appearance |
| 51 | SMW09B5H | Num | 8 | SMW09B5H SMW related AE: Mental confusion or headache |
| 52 | SMW09B5I | Num | 8 | SMW09B5I SMW related AE: Other |
| 53 | SMW09B5ISP | Char | 100 | SMW09B5ISP Explain other AE related to SMW |
| 54 | VERSION | Char | 21 | Version |
| 55 | SMW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v2_ssv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | SSV01 study_id |
| 5 | SSV10 | Char | 15 | SSV10 position |
| 6 | SSV12 | Num | 8 | SSV12 visit_num |
| 7 | SSV13 | Num | 8 | SSV13 interval_num |
| 8 | SSV14 | Num | 8 | SSV14 stage_num |
| 9 | SSV15 | Num | 8 | SSV15 seq_num |
| 10 | SSV16 | Char | 5 | SSV16 vlabel |
| 11 | SSV17 | Num | 8 | SSV17 repeats |
| 12 | SSV19 | Char | 15 | SSV19 qa_grade |
| 13 | SSV20 | Char | 15 | SSV20 qa_status |
| 14 | SSV22B | Char | 8 | SSV22B time |
| 15 | SSV23B | Char | 8 | SSV23B time_best |
| 16 | SSV24B | Char | 8 | SSV24B time_first |
| 17 | SSV25B | Char | 8 | SSV25B trials_time |
| 18 | SSV26 | Num | 8 | SSV26 trial_seq_num |
| 19 | SSV27 | Num | 8 | SSV27 ranking |
| 20 | SSV28 | Num | 8 | SSV28 temperature |
| 21 | SSV29 | Num | 8 | SSV29 barometric |
| 22 | SSV30 | Num | 8 | SSV30 humidity |
| 23 | SSV31 | Num | 8 | SSV31 pre_washout_1 |
| 24 | SSV33 | Num | 8 | SSV33 svc |
| 25 | SSV34 | Num | 8 | SSV34 svcpd |
| 26 | SSV35 | Num | 8 | SSV35 petsvc |
| 27 | SSV36 | Num | 8 | SSV36 flag_svc_best |
| 28 | SSV37 | Num | 8 | SSV37 ic |
| 29 | SSV38 | Num | 8 | SSV38 irv |
| 30 | SSV39 | Num | 8 | SSV39 erv |
| 31 | SSV40 | Num | 8 | SSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v2_vsa_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | VSA01 | Char | 1 | VSA01 1 MET |
| 5 | VSA02 | Char | 1 | VSA02 2 METs |
| 6 | VSA03 | Char | 1 | VSA03 3 METs |
| 7 | VSA04 | Char | 1 | VSA04 4 METs |
| 8 | VSA05 | Char | 1 | VSA05 5 METs |
| 9 | VSA06 | Char | 1 | VSA06 6 METs |
| 10 | VSA07 | Char | 1 | VSA07 7 METs |
| 11 | VSA08 | Char | 1 | VSA08 8 METs |
| 12 | VSA09 | Char | 1 | VSA09 9 METs |
| 13 | VSA10 | Char | 1 | VSA10 10 METs |
| 14 | VSA11 | Char | 1 | VSA11 11 METs |
| 15 | VSA12 | Char | 1 | VSA12 12 METs |
| 16 | VSA13 | Char | 1 | VSA13 13 METs |
| 17 | VERSION | Char | 21 | Version |
| 18 | VSASCORE02 | Num | 8 | Year 1 veteran specific activity score |
| 19 | VSA0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_ant_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ANT01 | Char | 1 | ANT01 Assessment of ability to stand |
| 5 | ANT02 | Num | 8 | ANT02 Standing Height (cm) |
| 6 | ANT03 | Num | 8 | ANT03 Weight (kg) |
| 7 | ANT04 | Num | 8 | ANT04 BMI |
| 8 | ANT05 | Num | 8 | ANT05 Arm Span (cm) |
| 9 | ANT06A | Num | 8 | ANT06A Waist (cm) |
| 10 | ANT06B | Num | 8 | ANT06B Hip (cm) |
| 11 | ANT06C | Num | 8 | ANT06C Neck (cm) |
| 12 | VERSION | Char | 21 | Version |
| 13 | ANT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_bpf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BPF01 | Char | 1 | BPF01 Right arm blood pressure |
| 5 | BPF02 | Num | 8 | BPF02 Arm circumference |
| 6 | BPF03 | Char | 1 | BPF03 Cuff size |
| 7 | BPF04 | Num | 8 | BPF04 Respiration Rate |
| 8 | BPF05 | Char | 5 | BPF05 Time first blood pressure taken |
| 9 | BPF05_AMPM | Char | 1 | BPF05_AMPM first bp measurement AM/PM |
| 10 | BPF05A | Num | 8 | BPF05A First Systolic |
| 11 | BPF05B | Num | 8 | BPF05B First Diastolic |
| 12 | BPF05C | Num | 8 | BPF05C First Heart Rate |
| 13 | BPF06 | Char | 5 | BPF06 Time second blood pressure taken: |
| 14 | BPF06_AMPM | Char | 1 | BPF06_AMPM second BP measurement AM/PM |
| 15 | BPF06A | Num | 8 | BPF05A Second Systolic |
| 16 | BPF06B | Num | 8 | BPF05B Second Diastolic |
| 17 | BPF06C | Num | 8 | BPF05C Second Heart Rate |
| 18 | BPF07 | Char | 5 | BPF07 Time third blood pressure taken: |
| 19 | BPF07_AMPM | Char | 1 | BPF07_AMPM third BP measurement AM/PM |
| 20 | BPF07A | Num | 8 | BPF05A Third Systolic |
| 21 | BPF07B | Num | 8 | BPF05B Third Diastolic |
| 22 | BPF07C | Num | 8 | BPF05C Third Heart Rate |
| 23 | BPF08A | Num | 8 | BPF08A Average Systolic |
| 24 | BPF08B | Num | 8 | BPF08B Average Diastolic |
| 25 | BPF08C | Num | 8 | BPF08C Average Heart Rate |
| 26 | VERSION | Char | 21 | Version |
| 27 | BPF0A_DAYS | Num | 8 | BPF0A Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v3_bsq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BSQ01 | Char | 1 | BSQ01 Snore |
| 5 | BSQ02 | Num | 8 | BSQ02 Describe snore |
| 6 | BSQ03 | Num | 8 | BSQ03 Snoring frequency |
| 7 | BSQ04 | Char | 1 | BSQ04 Bothersome snoring |
| 8 | BSQ05 | Num | 8 | BSQ05 Breathing during sleep |
| 9 | BSQ06 | Char | 1 | BSQ06 Fatigue after sleep |
| 10 | BSQ07 | Char | 1 | BSQ07 Fatigue during waking time |
| 11 | BSQ08 | Char | 1 | BSQ08 Fatigue while driving |
| 12 | BSQ09 | Char | 1 | BSQ09 Frequency of fatigue while driving |
| 13 | BSQ10 | Char | 1 | BSQ10 High blood pressure |
| 14 | VERSION | Char | 21 | Version |
| 15 | BSQ_APNEARISK03 | Char | 5 | Year 2 Berlin Sleep apnea risk |
| 16 | BSQ0A_DAYS | Num | 8 | FORM Date - Days from enrollment |

Data Set Name: v3_cat_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CAT01 | Char | 1 | CAT01 Never cough |
| 5 | CAT02 | Char | 1 | CAT02 No phlegm |
| 6 | CAT03 | Char | 1 | CAT03 No chest tightness |
| 7 | CAT04 | Char | 1 | CAT04 Not out of breath |
| 8 | CAT05 | Char | 1 | CAT05 Not limited at home |
| 9 | CAT06 | Char | 1 | CAT06 Confidence leaving home |
| 10 | CAT07 | Char | 1 | CAT07 Sound sleeping |
| 11 | CAT08 | Char | 1 | CAT08 Energy level |
| 12 | VERSION | Char | 21 | Version |
| 13 | CAT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_dem_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | DEM01A | Num | 8 | DEM01A Age |
| 5 | DEM02 | Char | 2 | DEM02 Highest grade completed |
| 6 | DEM03 | Char | 1 | DEM03 Marital status |
| 7 | DEM04 | Char | 1 | DEM04 Total yearly household income |
| 8 | VERSION | Char | 21 | Version |
| 9 | DEM0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_derv_post_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | study_id |
| 5 | PFV10 | Char | 15 | Position |
| 6 | PFV12 | Num | 8 | visit_num |
| 7 | PFV13 | Num | 8 | interval_num |
| 8 | PFV14 | Num | 8 | stage_num |
| 9 | PFV15 | Num | 8 | seq_num |
| 10 | PFV16 | Char | 15 | vlabel |
| 11 | PFV17 | Num | 8 | repeats |
| 12 | PFV22B | Num | 8 | Mit_derv |
| 13 | PFV23B | Num | 8 | Fevpd_derv |
| 14 | PFV24B | Num | 8 | Pctfev_derv |
| 34 | PFV80_DERV | Num | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV43_DERV | Num | 8 | Fev05_derv |
| 38 | PFV45_DERV | Num | 8 | Fev1_derv |
| 39 | PFV46 | Num | 8 | flag_fev_best |
| 40 | PFV66_DERV | Num | 8 | Vext_derv |
| 41 | PFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | PFV69_DERV | Num | 8 | RVSPCA_derv |
| 43 | PFV70_DERV | Num | 8 | Fevdiff_derv |
| 44 | PFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 45 | PFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 46 | PFV44_DERV | Num | 8 | Fev05fvc_derv |
| 47 | PFV47_DERV | Num | 8 | Fev1fvc_derv |
| 48 | PFV48 | Num | 8 | flag_fevfvc_best |
| 49 | PFV50_DERV | Num | 8 | Fev3fvc_derv |
| 50 | PFV32_DERV | Num | 8 | Fefpd_derv |
| 51 | PFV37_DERV | Num | 8 | Pctfef2575_derv |
| 52 | PFV52_DERV | Num | 8 | Fef212_derv |
| 53 | PFV53_DERV | Num | 8 | Fef2575_derv |
| 54 | PFV54 | Num | 8 | flag_fef2575_best |
| 55 | PFV55_DERV | Num | 8 | Fef25756_derv |
| 56 | PFV56_DERV | Num | 8 | Fef25_derv |
| 57 | PFV57_DERV | Num | 8 | Fef50_derv |
| 58 | PFV58_DERV | Num | 8 | Fef506_derv |
| 59 | PFV59_DERV | Num | 8 | Fef75_derv |
| 60 | PFV60_DERV | Num | 8 | Fef756_derv |
| 61 | PFV61_DERV | Num | 8 | Fef7585_derv |
| 62 | PFV64_DERV | Num | 8 | Met_derv |
| 63 | PFV34_DERV | Num | 8 | Pefpd_derv |
| 64 | PFV38_DERV | Num | 8 | Pctpefr_derv |
| 65 | PFV62_DERV | Num | 8 | Pefr_derv |
| 66 | PFV63 | Num | 8 | flag_pefr_best |
| 67 | PFV65_DERV | Num | 8 | Peft_derv |
| 68 | PFV77_DERV | Num | 8 | Pifr_derv |
| 69 | POST_FEV1FVC_DERV | Num | 8 | post_BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 70 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 71 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 72 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 73 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v3_derv_post_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | study_id |
| 5 | PSV10 | Char | 15 | position |
| 6 | PSV12 | Num | 8 | visit_num |
| 7 | PSV13 | Char | 15 | interval_num |
| 8 | PSV14 | Num | 8 | stage_num |
| 9 | PSV15 | Num | 8 | seq_num |
| 10 | PSV16 | Char | 5 | vlabel |
| 11 | PSV17 | Num | 8 | repeats |
| 12 | PSV19 | Char | 15 | qa_grade |
| 13 | PSV20 | Char | 15 | qa_status |
| 14 | PSV23B | Char | 8 | time_best |
| 15 | PSV24B | Char | 8 | time_first |
| 16 | PSV28 | Num | 8 | temperature |
| 17 | PSV29 | Num | 8 | barometric |
| 18 | PSV30 | Num | 8 | humidity |
| 19 | PSV32 | Char | 5 | tom |
| 20 | VERSION | Char | 21 | Version |
| 21 | PSV33_DERV | Num | 8 | Svc_derv |
| 22 | PSV34_DERV | Num | 8 | Svcpd_derv |
| 23 | PSV35_DERV | Num | 8 | Pctsvc_derv |
| 24 | PSV36 | Num | 8 | flag_svc_best |
| 25 | PSV37_DERV | Num | 8 | IC_derv |
| 26 | PSV38_DERV | Num | 8 | IRV_derv |
| 27 | PSV39_DERV | Num | 8 | ERV_derv |
| 28 | PSV40_DERV | Num | 8 | TV_derv |
| 29 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 30 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 31 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 32 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v3_derv_pre_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | study_id |
| 5 | SFV10 | Char | 15 | Position |
| 6 | SFV12 | Num | 8 | visit_num |
| 7 | SFV13 | Num | 8 | interval_num |
| 8 | SFV14 | Num | 8 | stage_num |
| 9 | SFV15 | Num | 8 | seq_num |
| 10 | SFV16 | Char | 10 | vlabel |
| 11 | SFV17 | Num | 8 | repeats |
| 12 | SFV22B | Char | 8 | time |
| 13 | SFV23B | Char | 8 | time_best |
| 14 | SFV24B | Char | 8 | time_first |
| 15 | SFV27 | Num | 8 | temperature |
| 16 | SFV28 | Num | 8 | barometric |
| 17 | SFV29 | Num | 8 | humidity |
| 18 | VERSION | Char | 21 | Version |
| 19 | SFV31_DERV | Num | 8 | Fvcpd_derv |
| 20 | SFV36_DERV | Num | 8 | Pctfvc_derv |
| 21 | SFV40_DERV | Num | 8 | Fvc_derv |
| 22 | SFV41 | Num | 8 | flag_fvc_best |
| 23 | SFV49_DERV | Num | 8 | Fev3_derv |
| 24 | SFV51_DERV | Num | 8 | Fev6_derv |
| 25 | SFV68_DERV | Num | 8 | Expt_derv |
| 26 | SFV71_DERV | Num | 8 | Fivc_derv |
| 27 | SFV72_DERV | Num | 8 | Fiv05_derv |
| 28 | SFV73_DERV | Num | 8 | Fiv05fivc_derv |
| 29 | SFV74_DERV | Num | 8 | Fiv1_derv |
| 30 | SFV75_DERV | Num | 8 | Fiv1fivc_derv |
| 31 | SFV76_DERV | Num | 8 | Fiv3_derv |
| 32 | SFV78_DERV | Num | 8 | Fif212_derv |
| 33 | SFV79_DERV | Num | 8 | Fif2575_derv |
| 34 | SFV80_DERV | Num | 8 | Mit_derv |
| 35 | SFV30_DERV | Num | 8 | Fevpd_derv |
| 36 | SFV35_DERV | Num | 8 | Pctfev_derv |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV43_DERV | Num | 8 | Fev05_derv |
| 38 | SFV45_DERV | Num | 8 | Fev1_derv |
| 39 | SFV46 | Num | 8 | flag_fev_best |
| 40 | SFV66_DERV | Num | 8 | Vext_derv |
| 41 | SFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | SFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 43 | SFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 44 | SFV44_DERV | Num | 8 | Fev05fvc_derv |
| 45 | SFV47_DERV | Num | 8 | Fev1fvc_derv |
| 46 | SFV48 | Num | 8 | flag_fevfvc_best |
| 47 | SFV50_DERV | Num | 8 | Fev3fvc_derv |
| 48 | SFV32_DERV | Num | 8 | Fefpd_derv |
| 49 | SFV37_DERV | Num | 8 | Pctfef2575_derv |
| 50 | SFV52_DERV | Num | 8 | Fef212_derv |
| 51 | SFV53_DERV | Num | 8 | Fef2575_derv |
| 52 | SFV54 | Num | 8 | flag_fef2575_best |
| 53 | SFV55_DERV | Num | 8 | Fef25756_derv |
| 54 | SFV56_DERV | Num | 8 | Fef25_derv |
| 55 | SFV57_DERV | Num | 8 | Fef50_derv |
| 56 | SFV58_DERV | Num | 8 | Fef506_derv |
| 57 | SFV59_DERV | Num | 8 | Fef75_derv |
| 58 | SFV60_DERV | Num | 8 | Fef756_derv |
| 59 | SFV61_DERV | Num | 8 | Fef7585_derv |
| 60 | SFV64_DERV | Num | 8 | Met_derv |
| 61 | SFV34_DERV | Num | 8 | Pefpd_derv |
| 62 | SFV38_DERV | Num | 8 | Pctpefr_derv |
| 63 | SFV62_DERV | Num | 8 | Pefr_derv |
| 64 | SFV63 | Num | 8 | flag_pefr_best |
| 65 | SFV65_DERV | Num | 8 | Peft_derv |
| 66 | SFV77_DERV | Num | 8 | Pifr_derv |
| 67 | PRE_FEV1FVC_DERV | Num | 8 | pre-BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 68 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 69 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 70 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 71 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v3_derv_pre_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | study_id |
| 5 | SSV10 | Char | 15 | position |
| 6 | SSV12 | Num | 8 | visi__num |
| 7 | SSV13 | Num | 8 | interval_num |
| 8 | SSV14 | Num | 8 | stage_num |
| 9 | SSV15 | Num | 8 | seq_num |
| 10 | SSV16 | Char | 5 | vlabel |
| 11 | SSV17 | Num | 8 | repeats |
| 12 | SSV19 | Char | 15 | qa_grade |
| 13 | SSV20 | Char | 15 | qa_status |
| 14 | SSV23B | Char | 8 | time_best |
| 15 | SSV28 | Num | 8 | temperature |
| 16 | SSV29 | Num | 8 | barometric |
| 17 | SSV30 | Num | 8 | humidity |
| 18 | SSV31 | Num | 8 | pre_washout_1 |
| 19 | VERSION | Char | 21 | Version |
| 20 | SSV33_DERV | Num | 8 | Svc_derv |
| 21 | SSV34_DERV | Num | 8 | Svcpd_derv |
| 22 | SSV35_DERV | Num | 8 | Pctsvc_derv |
| 23 | SSV36 | Num | 8 | flag_svc_best |
| 24 | SSV37_DERV | Num | 8 | IC_derv |
| 25 | SSV38_DERV | Num | 8 | IRV_derv |
| 26 | SSV39_DERV | Num | 8 | ERV_derv |
| 27 | SSV40_DERV | Num | 8 | TV_derv |
| 28 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 29 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 30 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 31 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v3_eca_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECA1 | Char | 1 | 1. Have you ever used an electronic cigarette or eCigarette? |
| 5 | ECA3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 6 | ECA3B | Char | 1 | 3b. If yes, what flavor was it? |
| 7 | ECA4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 8 | ECA5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 9 | ECA5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 10 | ECA5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 11 | ECA5C1 | Num | 8 | 5 c 1 . If Yes, about how many fewer cigarettes do you now smoke? |
| 12 | ECA6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 13 | ECA7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 14 | ECA8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 15 | ECA9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 16 | ECA9B | Char | 100 | 9b. Specify: |
| 17 | ECA10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 18 | ECA11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 19 | ECA12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 20 | ECA13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 21 | ECA14A | Num | 8 | how long did you smoke eCigarettes days |
| 22 | ECA14B | Num | 8 | how long did you smoke eCigarettes months |
| 23 | ECA14C | Num | 8 | how long did you smoke eCigarettes years |
| 24 | ECA15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 25 | ECA15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 26 | ECA15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 27 | ECA16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 28 | ECA17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 29 | ECA17A | Char | 100 | 17a. Specify: |
| 30 | ECA18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 31 | ECA19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 32 | VERSION | Char | 21 | Version |
| 33 | ECA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 34 | ECA2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v3_ecf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECF0C | Char | 1 | Oc. Has this participant previously completed the ECA - eCigarette Use Assessment form? |
| 5 | ECF1 | Char | 1 | 1. Have you used electronic cigarettes or eCigarettes since your last visit? |
| 6 | ECF3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 7 | ECF3B | Char | 1 | 3b. If yes, what flavor was it? |
| 8 | ECF4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 9 | ECF5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 10 | ECF5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 11 | ECF5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 12 | ECF5C1 | Num | 8 | 5c1. If Yes, about how many fewer cigarettes do you now smoke? |
| 13 | ECF6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 14 | ECF7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 15 | ECF8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 16 | ECF9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 17 | ECF9B | Char | 100 | 9b. Specify: |
| 18 | ECF10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 19 | ECF11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 20 | ECF12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 21 | ECF13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 22 | ECF14A | Num | 8 | how long did you smoke eCigarettes days |
| 23 | ECF14B | Num | 8 | how long did you smoke eCigarettes months |
| 24 | ECF14C | Num | 8 | how long did you smoke eCigarettes years |
| 25 | ECF15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 26 | ECF15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 27 | ECF15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 28 | ECF16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 29 | ECF17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 30 | ECF17A | Char | 100 | 17a. Specify: |
| 31 | ECF18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 32 | ECF19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 33 | VERSION | Char | 21 | Version |
| 34 | ECF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 35 | ECF2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v3_eha_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | EHA1 | Char | 1 | 1. Has your employment status changed in the last 12 months? (If 'No' or 'No Answer', go to item 18.) |
| 5 | EHA2 | Char | 1 | 2. How has your employment situation changed in the last 12 months? Have you (Please read all options before recording answer): |
| 6 | EHA7 | Num | 8 | 7. On average, how many hours per week do you work? |
| 7 | EHA8 | Char | 1 | 8. Does your current job expose you to vapors, gas, dust or fumes? |
| 8 | EHA9 | Char | 1 | 9. Did you leave your last job because of breathing or lung problems? |
| 9 | EHA10 | Char | 1 | 10. Did your last job expose you to vapors, gas, dust or fumes? |
| 10 | EHA11 | Char | 1 | 11. Are you no longer working at your last job at least in part to avoid the things that caused you difficulty breathing, such as air quality, temperature, or physical exertion? |
| 11 | EHA12 | Char | 1 | 12. Thinking back to when you were last employed, did you stop working, at least in part, because of missed time due to illness? |
| 12 | EHA13A | Char | 1 | 13a. in a cotton, flax or hemp mill? |
| 13 | EHA13A1 | Num | 8 | 13a1. How many years? |
| 14 | EHA13B | Char | 1 | 13b. in a foundry? |
| 15 | EHA13B1 | Num | 8 | 13b1. How many years? |
| 16 | EHA13C | Char | 1 | 13c. in a glass works? |
| 17 | EHA13C1 | Num | 8 | 13c1. How many years? |
| 18 | EHA13D | Char | 1 | 13d. in a mine? |
| 19 | EHA13D1 | Num | 8 | 13d1. How many years? |
| 20 | EHA13E | Char | 1 | 13e. in a pottery? |
| 21 | EHA13E1 | Num | 8 | 13e1. How many years? |
| 22 | EHA13F | Char | 1 | 13f. in a power plant? |
| 23 | EHA13F1 | Num | 8 | 13f1. How many years? |
| 24 | EHA13G | Char | 1 | 13 g . in a quarry? |
| 25 | EHA13G1 | Num | 8 | 13g1. How many years? |
| 26 | EHA13H | Char | 1 | 13h. in a refinery? |
| 27 | EHA13H1 | Num | 8 | 13h1. How many years? |
| 28 | EHA13I | Char | 1 | 13i. or with asbestos? |
| 29 | EHA13I1 | Num | 8 | 13i1. How many years? |
| 30 | EHA13J | Char | 1 | 13j. in synthetic fibers or fabric manufacturing? |
| 31 | EHA13J1 | Num | 8 | 13j1. How many years? |
| 32 | EHA13K | Char | 1 | 13k. in a paper mill? |
| 33 | EHA13K1 | Num | 8 | 13k1. How many years? |
| 34 | EHA13L | Char | 1 | 13l. in building or highway construction? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 35 | EHA13L1 | Num | 8 | 1311. How many years? |
| 36 | EHA13M | Char | 1 | 13 m . in an aluminum factory? |
| 37 | EHA13M1 | Num | 8 | 13m1. How many years? |
| 38 | EHA13N | Char | 1 | 13n. in a rubber tire plant? |
| 39 | EHA13N1 | Num | 8 | 13n1. How many years? |
| 40 | EHA13O | Char | 1 | 13o. in HVAC? |
| 41 | EHA13O1 | Num | 8 | 13o1. How many years? |
| 42 | EHA13P | Char | 1 | 13p. in demolition? |
| 43 | EHA13P1 | Num | 8 | 13p1. How many years? |
| 44 | EHA13Q | Char | 1 | 13q. in remodeling? |
| 45 | EHA13Q1 | Num | 8 | 13q1. How many years? |
| 46 | EHA13R | Char | 1 | 13r. in professional cleaning? |
| 47 | EHA13R1 | Num | 8 | 13r1. How many years? |
| 48 | EHA13S | Char | 1 | 13s. in beauty care? |
| 49 | EHA13S1 | Num | 8 | 13s1. How many years? |
| 50 | EHA13T | Char | 1 | 13t. in agriculture? |
| 51 | EHA13T1 | Num | 8 | 13t1. How many years? |
| 52 | EHA13U | Char | 1 | 13u. in the flooring industry? |
| 53 | EHA13U1 | Num | 8 | 13u1. How many years? |
| 54 | EHA14A | Char | 1 | 14a. a boilermaker? |
| 55 | EHA14A1 | Num | 8 | 14a1. How many years? |
| 56 | EHA14B | Char | 1 | 14b. a carpenter? |
| 57 | EHA14B1 | Num | 8 | 14b1. How many years? |
| 58 | EHA14C | Char | 1 | 14c. a chemical worker? |
| 59 | EHA14C1 | Num | 8 | 14c1. How many years? |
| 60 | EHA14D | Char | 1 | 14d. an electrician? |
| 61 | EHA14D1 | Num | 8 | 14d1. How many years? |
| 62 | EHA14E | Char | 1 | 14e. an elevator operator? |
| 63 | EHA14E1 | Num | 8 | 14e1. How many years? |
| 64 | EHA14F | Char | 1 | 14f. an insulator? |
| 65 | EHA14F1 | Num | 8 | 14f1. How many years? |
| 66 | EHA14G | Char | 1 | 14g. a lather? |
| 67 | EHA14G1 | Num | 8 | 14g1. How many years? |
| 68 | EHA14H | Char | 1 | 14h. a machinist? |
| 69 | EHA14H1 | Num | 8 | 14h1. How many years? |
| 70 | EHA14I | Char | 1 | 14i. a mechanic? |
| 71 | EHA14I1 | Num | 8 | 14i1. How many years? |
| 72 | EHA14J | Char | 1 | 14j. a millwright? |
| 73 | EHA14J1 | Num | 8 | 14j1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | EHA14K | Char | 1 | 14k. a pipefitter? |
| 75 | EHA14K1 | Num | 8 | 14k1. How many years? |
| 76 | EHA14L | Char | 1 | 141. a plasterer? |
| 77 | EHA14L1 | Num | 8 | 1411. How many years? |
| 78 | EHA14M | Char | 1 | 14m. a plumber? |
| 79 | EHA14M1 | Num | 8 | 14m1. How many years? |
| 80 | EHA14N | Char | 1 | 14n. a sander? |
| 81 | EHA14N1 | Num | 8 | 14n1. How many years? |
| 82 | EHA14O | Char | 1 | 140. a sheet metal worker? |
| 83 | EHA14O1 | Num | 8 | 1401. How many years? |
| 84 | EHA14P | Char | 1 | 14p. a steelworker? |
| 85 | EHA14P1 | Num | 8 | 14p1. How many years? |
| 86 | EHA14Q | Char | 1 | 14q. a welder? |
| 87 | EHA14Q1 | Num | 8 | 14q1. How many years? |
| 88 | EHA14R | Char | 1 | 14r. a pig farmer? |
| 89 | EHA14R1 | Num | 8 | 14r1. How many years? |
| 90 | EHA14S | Char | 1 | 14s. a rigger? |
| 91 | EHA14S1 | Num | 8 | 14s1. How many years? |
| 92 | EHA14T | Char | 1 | 14t. a roofer? |
| 93 | EHA14T1 | Num | 8 | 14t1. How many years? |
| 94 | EHA14U | Char | 1 | 14u. a painter? |
| 95 | EHA14U1 | Num | 8 | 14u1. How many years? |
| 96 | EHA14V | Char | 1 | 14 v . a mason? |
| 97 | EHA14V1 | Num | 8 | 14v1. How many years? |
| 98 | EHA15A | Char | 1 | 15a. Irritant gases, such as chlorine or ammonia? |
| 99 | EHA15A1 | Num | 8 | 15a1. How many years? |
| 100 | EHA15B | Char | 1 | 15b. Fire, smoke or other combustion products? |
| 101 | EHA15B1 | Num | 8 | 15b1. How many years? |
| 102 | EHA15C | Char | 1 | 15c. Incinerators, boilers, or oil refineries? |
| 103 | EHA15C1 | Num | 8 | 15c1. How many years? |
| 104 | EHA15D | Char | 1 | 15d. Coal dust or powder? |
| 105 | EHA15D1 | Num | 8 | 15d1. How many years? |
| 106 | EHA15E | Char | 1 | 15e. Silica or sand, or concrete or cement dust? |
| 107 | EHA15E1 | Num | 8 | 15e1. How many years? |
| 108 | EHA15F | Char | 1 | 15f. Indoor fuel powered motors, compressors, or engines? |
| 109 | EHA15F1 | Num | 8 | 15f1. How many years? |
| 110 | EHA15G | Char | 1 | 15g. Diesel engine exhaust? |
| 111 | EHA15G1 | Num | 8 | 15g1. How many years? |
| 112 | EHA15H | Char | 1 | 15h. Wheat flour or other grain dusts? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 113 | EHA15H1 | Num | 8 | 15h1. How many years? |
| 114 | EHA15I | Char | 1 | 15i. Animal feeds or fodder? |
| 115 | EHA15I1 | Num | 8 | 15i1. How many years? |
| 116 | EHA15J | Char | 1 | 15j. Cotton dust or cotton processing? |
| 117 | EHA15J1 | Num | 8 | 15j1. How many years? |
| 118 | EHA15K | Char | 1 | 15k. Wood dust or saw dust? |
| 119 | EHA15K1 | Num | 8 | 15k1. How many years? |
| 120 | EHA15L | Char | 1 | 15l. Cadmium fumes or batteries or sliver solder? |
| 121 | EHA15L1 | Num | 8 | 15l1. How many years? |
| 122 | EHA15M | Char | 1 | 15 m . Other metal dusts or metal fumes? |
| 123 | EHA15M1 | Num | 8 | 15m1. How many years? |
| 124 | EHA15N | Char | 1 | 15n. Welding or flame cutting? |
| 125 | EHA15N1 | Num | 8 | 15n1. How many years? |
| 126 | EHA15O | Char | 1 | 150. Fiberglass or other man-made mineral fibers? |
| 127 | EHA15O1 | Num | 8 | 15o1. How many years? |
| 128 | EHA15P | Char | 1 | 15p. Explosives or blasting fumes? |
| 129 | EHA15P1 | Num | 8 | 15p1. How many years? |
| 130 | EHA16 | Char | 1 | 16. What type of mine was it? |
| 131 | EHA16A | Char | 50 | 16a. Specify: |
| 132 | EHA17 | Char | 1 | 17. What was mined? |
| 133 | EHA17A | Char | 50 | 17a. Specify: |
| 134 | EHA18A | Char | 1 | 18a. in a cotton, flax or hemp mill? |
| 135 | EHA18A1 | Num | 8 | 18a1. How many years? |
| 136 | EHA18B | Char | 1 | 18b. in a foundry? |
| 137 | EHA18B1 | Num | 8 | 18b1. How many years? |
| 138 | EHA18C | Char | 1 | 18c. in a glass works? |
| 139 | EHA18C1 | Num | 8 | 18c1. How many years? |
| 140 | EHA18D | Char | 1 | 18d. in a mine? |
| 141 | EHA18D1 | Num | 8 | 18d1. How many years? |
| 142 | EHA18E | Char | 1 | 18e. in a pottery? |
| 143 | EHA18E1 | Num | 8 | 18e1. How many years? |
| 144 | EHA18F | Char | 1 | 18f. in a power plant? |
| 145 | EHA18F1 | Num | 8 | 18f1. How many years? |
| 146 | EHA18G | Char | 1 | 18g. in a quarry? |
| 147 | EHA18G1 | Num | 8 | 18g1. How many years? |
| 148 | EHA18H | Char | 1 | 18h. in a refinery? |
| 149 | EHA18H1 | Num | 8 | 18h1. How many years? |
| 150 | EHA18I | Char | 1 | 18i. or with asbestos? |
| 151 | EHA18I1 | Num | 8 | 18i1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 152 | EHA18J | Char | 1 | 18j. in synthetic fibers or fabric manufacturing? |
| 153 | EHA18J1 | Num | 8 | 18j1. How many years? |
| 154 | EHA18K | Char | 1 | 18k. in a paper mill? |
| 155 | EHA18K1 | Num | 8 | 18k1. How many years? |
| 156 | EHA18L | Char | 1 | 181. in building or highway construction? |
| 157 | EHA18L1 | Num | 8 | 1811. How many years? |
| 158 | EHA18M | Char | 1 | 18 m . in an aluminum factory? |
| 159 | EHA18M1 | Num | 8 | 18m1. How many years? |
| 160 | EHA18N | Char | 1 | 18n. in a rubber tire plant? |
| 161 | EHA18N1 | Num | 8 | 18n1. How many years? |
| 162 | EHA18O | Char | 1 | 180. in HVAC? |
| 163 | EHA18O1 | Num | 8 | 18o1. How many years? |
| 164 | EHA18P | Char | 1 | 18p. in demolition? |
| 165 | EHA18P1 | Num | 8 | 18p1. How many years? |
| 166 | EHA18Q | Char | 1 | 18q. in remodeling? |
| 167 | EHA18Q1 | Num | 8 | 18q1. How many years? |
| 168 | EHA18R | Char | 1 | 18r. in professional cleaning? |
| 169 | EHA18R1 | Num | 8 | 18r1. How many years? |
| 170 | EHA18S | Char | 1 | 18s. in beauty care? |
| 171 | EHA18S1 | Num | 8 | 18s1. How many years? |
| 172 | EHA18T | Char | 1 | 18t. in agriculture? |
| 173 | EHA18T1 | Num | 8 | 18t1. How many years? |
| 174 | EHA18U | Char | 1 | 18u. in the flooring industry? |
| 175 | EHA18U1 | Num | 8 | 18u1. How many years? |
| 176 | EHA19A | Char | 1 | 19a. a boilermaker? |
| 177 | EHA19A1 | Num | 8 | 19a1. How many years? |
| 178 | EHA19B | Char | 1 | 19b. a carpenter? |
| 179 | EHA19B1 | Num | 8 | 19b1. How many years? |
| 180 | EHA19C | Char | 1 | 19c. a chemical worker? |
| 181 | EHA19C1 | Num | 8 | 19c1. How many years? |
| 182 | EHA19D | Char | 1 | 19d. an electrician? |
| 183 | EHA19D1 | Num | 8 | 19d1. How many years? |
| 184 | EHA19E | Char | 1 | 19e. an elevator operator? |
| 185 | EHA19E1 | Num | 8 | 19e1. How many years? |
| 186 | EHA19F | Char | 1 | 19f. an insulator? |
| 187 | EHA19F1 | Num | 8 | 19f1. How many years? |
| 188 | EHA19G | Char | 1 | 19g. a lather? |
| 189 | EHA19G1 | Num | 8 | 19g1. How many years? |
| 190 | EHA19H | Char | 1 | 19h. a machinist? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 191 | EHA19H1 | Num | 8 | 19h1. How many years? |
| 192 | EHA19I | Char | 1 | 19i. a mechanic? |
| 193 | EHA1911 | Num | 8 | 19i1. How many years? |
| 194 | EHA19J | Char | 1 | 19j. a millwright? |
| 195 | EHA19J1 | Num | 8 | 19j1. How many years? |
| 196 | EHA19K | Char | 1 | 19k. a pipefitter? |
| 197 | EHA19K1 | Num | 8 | 19k1. How many years? |
| 198 | EHA19L | Char | 1 | 191. a plasterer? |
| 199 | EHA19L1 | Num | 8 | 1911. How many years? |
| 200 | EHA19M | Char | 1 | 19m. a plumber? |
| 201 | EHA19M1 | Num | 8 | 19m1. How many years? |
| 202 | EHA19N | Char | 1 | 19n. a sander? |
| 203 | EHA19N1 | Num | 8 | 19n1. How many years? |
| 204 | EHA19O | Char | 1 | 190. a sheet metal worker? |
| 205 | EHA19O1 | Num | 8 | 1901. How many years? |
| 206 | EHA19P | Char | 1 | 19p. a steelworker? |
| 207 | EHA19P1 | Num | 8 | 19p1. How many years? |
| 208 | EHA19Q | Char | 1 | 19q. a welder? |
| 209 | EHA19Q1 | Num | 8 | 19q1. How many years? |
| 210 | EHA19R | Char | 1 | 19r. a pig farmer? |
| 211 | EHA19R1 | Num | 8 | 19r1. How many years? |
| 212 | EHA19S | Char | 1 | 19s. a rigger? |
| 213 | EHA19S1 | Num | 8 | 19s1. How many years? |
| 214 | EHA19T | Char | 1 | 19t. a roofer? |
| 215 | EHA19T1 | Num | 8 | 19t1. How many years? |
| 216 | EHA19U | Char | 1 | 19u. a painter? |
| 217 | EHA19U1 | Num | 8 | 19u1. How many years? |
| 218 | EHA19V | Char | 1 | 19v. a mason? |
| 219 | EHA19V1 | Num | 8 | 19v1. How many years? |
| 220 | EHA20A | Char | 1 | 20a. Irritant gases, such as chlorine or ammonia? |
| 221 | EHA20A1 | Num | 8 | 20a1. How many years? |
| 222 | EHA20B | Char | 1 | 20b. Fire, smoke or other combustion products? |
| 223 | EHA20B1 | Num | 8 | 20b1. How many years? |
| 224 | EHA20C | Char | 1 | 20c. Incinerators, boilers, or oil refineries? |
| 225 | EHA20C1 | Num | 8 | 20c1. How many years? |
| 226 | EHA20D | Char | 1 | 20d. Coal dust or powder? |
| 227 | EHA20D1 | Num | 8 | 20d1. How many years? |
| 228 | EHA20E | Char | 1 | 20e. Silica or sand, or concrete or cement dust? |
| 229 | EHA20E1 | Num | 8 | 20e1. How many years? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 230 | EHA20F | Char | 1 | 20f. Indoor fuel powered motors, compressors, or engines? |
| 231 | EHA20F1 | Num | 8 | 20f1. How many years? |
| 232 | EHA20G | Char | 1 | 20g. Diesel engine exhaust? |
| 233 | EHA20G1 | Num | 8 | 20g1. How many years? |
| 234 | EHA20H | Char | 1 | 20h. Wheat flour or other grain dusts? |
| 235 | EHA20H1 | Num | 8 | 20h1. How many years? |
| 236 | EHA20I | Char | 1 | 20i. Animal feeds or fodder? |
| 237 | EHA2011 | Num | 8 | 20i1. How many years? |
| 238 | EHA20J | Char | 1 | 20j. Cotton dust or cotton processing? |
| 239 | EHA20J1 | Num | 8 | 20j1. How many years? |
| 240 | EHA20K | Char | 1 | 20k. Wood dust or saw dust? |
| 241 | EHA20K1 | Num | 8 | 20k1. How many years? |
| 242 | EHA20L | Char | 1 | 201. Cadmium fumes or batteries or sliver solder? |
| 243 | EHA20L1 | Num | 8 | 2011. How many years? |
| 244 | EHA20M | Char | 1 | 20m. Other metal dusts or metal fumes? |
| 245 | EHA20M1 | Num | 8 | 20m1. How many years? |
| 246 | EHA20N | Char | 1 | 20n. Welding or flame cutting? |
| 247 | EHA20N1 | Num | 8 | 20n1. How many years? |
| 248 | EHA20O | Char | 1 | 20o. Fiberglass or other man-made mineral fibers? |
| 249 | EHA20O1 | Num | 8 | 20o1. How many years? |
| 250 | EHA20P | Char | 1 | 20p. Explosives or blasting fumes? |
| 251 | EHA20P1 | Num | 8 | 20p1. How many years? |
| 252 | EHA21 | Char | 1 | 21. What type of mine was it? |
| 253 | EHA21A | Char | 50 | 21a. Specify: |
| 254 | EHA22 | Char | 1 | 22. What was mined? |
| 255 | EHA22A | Char | 50 | 22a. Specify: |
| 256 | EHA6M | Num | 8 | Month of 6. Approximately what date did you begin working in this job? |
| 257 | EHA6D | Num | 8 | Day of 6. Approximately what date did you begin working in this job? |
| 258 | EHA6Y | Num | 8 | Year of 6. Approximately what date did you begin working in this job? |
| 259 | VERSION | Char | 21 | Version |
| 260 | EHA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 261 | EHA6_DAYS | Num | 8 | Approximately what date did you begin working in this job? - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v3_fct_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | FCT01 | Char | 1 | FCT01 Lack of energy |
| 5 | FCT02 | Char | 1 | FCT02 Nausea |
| 6 | FCT03 | Char | 1 | FCT03 Physical limitations |
| 7 | FCT04 | Char | 1 | FCT04 Pain |
| 8 | FCT05 | Char | 1 | FCT05 Side effects of treatment |
| 9 | FCT06 | Char | 1 | FCT06 Illness |
| 10 | FCT07 | Char | 1 | FCT07 Forced time in bed |
| 11 | FCT08 | Char | 1 | FCT08 Closeness to friends |
| 12 | FCT09 | Char | 1 | FCT09 Emotional support from family |
| 13 | FCT10 | Char | 1 | FCT10 Support from friends |
| 14 | FCT11 | Char | 1 | FCT11 Family accepted illness |
| 15 | FCT12 | Char | 1 | FCT12 Satisfied with communication |
| 16 | FCT13 | Char | 1 | FCT13 Closeness to partner |
| 17 | FCT14 | Num | 8 | FCT14 Answer or mark box |
| 18 | FCT15 | Char | 1 | FCT15 Satisfaction with sex life |
| 19 | FCT16 | Char | 1 | FCT16 Feeling sad |
| 20 | FCT17 | Char | 1 | FCT17 Satisfaction with coping |
| 21 | FCT18 | Char | 1 | FCT18 Loss of hope |
| 22 | FCT19 | Char | 1 | FCT19 Feeling nervous |
| 23 | FCT20 | Char | 1 | FCT20 Worries about death |
| 24 | FCT21 | Char | 1 | FCT21 Worry about worsening condition |
| 25 | FCT22 | Char | 1 | FCT22 Ability to work |
| 26 | FCT23 | Char | 1 | FCT23 Fulfillment of work |
| 27 | FCT24 | Char | 1 | FCT24 Ability to enjoy life |
| 28 | FCT25 | Char | 1 | FCT25 Acceptance of illness |
| 29 | FCT26 | Char | 1 | FCT26 Sleeping well |
| 30 | FCT27 | Char | 1 | FCT27 Enjoyment of fun activities |
| 31 | FCT28 | Char | 1 | FCT28 Content with quality of life |
| 32 | FCT29 | Char | 1 | FCT29 Feeling fatigued |
| 33 | FCT30 | Char | 1 | FCT30 Feeling weak |
| 34 | FCT31 | Char | 1 | FCT31 Feeling listless |
| 35 | FCT32 | Char | 1 | FCT32 Feeling tired |
| 36 | FCT33 | Char | 1 | FCT33 Trouble starting things |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 37 | FCT34 | Char | 1 | FCT34 Trouble finishing things |
| 38 | FCT35 | Char | 1 | FCT35 Energy |
| 39 | FCT36 | Char | 1 | FCT36 Ability to do usual activities |
| 40 | FCT37 | Char | 1 | FCT37 Need to sleep during day |
| 41 | FCT38 | Char | 1 | FCT38 Too tired to eat |
| 42 | FCT39 | Char | 1 | FCT39 Need helping with usual activities |
| 43 | FCT40 | Char | 1 | FCT40 Frustrated with fatigue |
| 44 | FCT41 | Char | 1 | FCT41 Fatigue limits social activities |
| 45 | VERSION | Char | 21 | Version |
| 46 | FACIT_PHYSICALWELLBEINGSCORE03 | Num | 8 | Year 2 FACIT physical wellbeing score |
| 47 | FACIT_SOCIALWELLBEINGSCORE03 | Num | 8 | Year 2 FACIT social wellbeing score |
| 48 | FACIT_EMOTIONALWELLBEINGSCORE03 | Num | 8 | Year 2 FACIT emotional wellbeing score |
| 49 | FACIT_FUNCTIONALWELLBEINGSCORE03 | Num | 8 | Year 2 FACIT functional wellbeing score |
| 50 | FACIT_FATIGUESCORE03 | Num | 8 | Year 2 FACIT fatigue score |
| 51 | FACIT_FTRIALOUTCOMEINDEX03 | Num | 8 | Year 2 FACIT F trial outcome index score |
| 52 | FACIT_GTOTALSCORE03 | Num | 8 | Year 2 FACIT G total score |
| 53 | FACIT_FTOTALSCORE03 | Num | 8 | Year 2 FACIT F total score |
| 54 | FCT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_hds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HDS01 | Num | 8 | HDS01 Feeling tense |
| 5 | HDS02 | Num | 8 | HDS02 Enjoyment |
| 6 | HDS03 | Char | 1 | HDS03 Feeling fearful |
| 7 | HDS04 | Char | 1 | HDS04 Sense of humor |
| 8 | HDS05 | Num | 8 | HDS05 Worried thoughts |
| 9 | HDS06 | Num | 8 | HDS06 Feeling cheerful |
| 10 | HDS07 | Num | 8 | HDS07 Ability to relax |
| 11 | HDS08 | Num | 8 | HDS08 Feeling slowed down |
| 12 | HDS09 | Num | 8 | HDS09 Feeling frightened |
| 13 | HDS10 | Num | 8 | HDS10 Lost interest in appearance |
| 14 | HDS11 | Num | 8 | HDS11 Feeling restless |
| 15 | HDS12 | Num | 8 | HDS12 Looking forward |
| 16 | HDS13 | Num | 8 | HDS13 Sudden feelings of panic |
| 17 | HDS14 | Num | 8 | HDS14 Ability to enjoy |
| 18 | VERSION | Char | 21 | Version |
| 19 | HDS_ANXIETYSCORE03 | Num | 8 | Year 2 HDS Anxiety Score |
| 20 | HDS_DEPRESSIONSCORE03 | Num | 8 | Year 2 HDS Depression Score |
| 21 | HDS0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_hef_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HEF1 | Char | 1 | 1. Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 5 | HEF1A | Num | 8 | 1a. How many episodes of chest trouble flare ups have you had since (date)? |
| 6 | HEF2A | Char | 1 | 2a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 7 | HEF2B | Char | 1 | 2b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 8 | HEF2C | Char | 1 | 2c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 9 | HEF2D | Char | 1 | 2d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 10 | HEF2E | Char | 1 | 2e. Were you evaluated in a physician's office or urgent care? |
| 11 | HEF2E1 | Num | 8 | 2e1. An additional antibiotic |
| 12 | HEF2E2 | Num | 8 | 2e2. Additional steroids |
| 13 | HEF2E3 | Num | 8 | 2e3. Don't know |
| 14 | HEF2E4 | Num | 8 | 2e4. Don't remember |
| 15 | HEF2F | Char | 1 | 2f. Were you evaluated in an Emergency Department? |
| 16 | HEF2F1 | Num | 8 | 2f1. An additional antibiotic |
| 17 | HEF2F2 | Num | 8 | 2f2. Additional steroids |
| 18 | HEF2F3 | Num | 8 | 2f3. Don't know |
| 19 | HEF2F4 | Num | 8 | 2f4. Don't remember |
| 20 | HEF2G | Char | 1 | 2g. Were you admitted to the hospital? |
| 21 | HEF4 | Char | 1 | 4. (do not ask) Did the participant have a second episode? |
| 22 | HEF5A | Char | 1 | 5a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 23 | HEF5B | Char | 1 | 5b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 24 | HEF5C | Char | 1 | 5c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 25 | HEF5D | Char | 1 | 5d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 26 | HEF5E | Char | 1 | 5e. Were you evaluated in a physician's office or urgent care? |
| 27 | HEF5E1 | Num | 8 | 5e1. An additional antibiotic |
| 28 | HEF5E2 | Num | 8 | 5e2. Additional steroids |
| 29 | HEF5E3 | Num | 8 | 5e3. Don't know |
| 30 | HEF5E4 | Num | 8 | 5e4. Don't remember |
| 31 | HEF5F | Char | 1 | 5f. Were you evaluated in an Emergency Department? |
| 32 | HEF5F1 | Num | 8 | 5f1. An additional antibiotic |
| 33 | HEF5F2 | Num | 8 | 5f2. Additional steroids |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 34 | HEF5F3 | Num | 8 | 5f3. Don't know |
| 35 | HEF5F4 | Num | 8 | 5f4. Don't remember |
| 36 | HEF5G | Char | 1 | 5 g . Were you admitted to the hospital? |
| 37 | HEF7 | Char | 1 | 7. (do not ask) Did the participant have a third episode? |
| 38 | HEF8A | Char | 1 | 8a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 39 | HEF8B | Char | 1 | 8b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 40 | HEF8C | Char | 1 | 8c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 41 | HEF8D | Char | 1 | 8d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 42 | HEF8E | Char | 1 | 8e. Were you evaluated in a physician's office or urgent care? |
| 43 | HEF8E1 | Num | 8 | 8e1. An additional antibiotic |
| 44 | HEF8E2 | Num | 8 | 8e2. Additional steroids |
| 45 | HEF8E3 | Num | 8 | 8e3. Don't know |
| 46 | HEF8E4 | Num | 8 | 8e4. Don't remember |
| 47 | HEF8F | Char | 1 | 8f. Were you evaluated in an Emergency Department? |
| 48 | HEF8F1 | Num | 8 | 8f1. An additional antibiotic |
| 49 | HEF8F2 | Num | 8 | 8f2. Additional steroids |
| 50 | HEF8F3 | Num | 8 | 8f3. Don't know |
| 51 | HEF8F4 | Num | 8 | 8f4. Don't remember |
| 52 | HEF8G | Char | 1 | 8 g . Were you admitted to the hospital? |
| 53 | HEF10 | Char | 1 | 10. (do not ask) Did the participant have a fourth episode? |
| 54 | HEF11A | Char | 1 | 11a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 55 | HEF11B | Char | 1 | 11b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 56 | HEF11C | Char | 1 | 11c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 57 | HEF11D | Char | 1 | 11d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 58 | HEF11E | Char | 1 | 11e. Were you evaluated in a physician's office or urgent care? |
| 59 | HEF11E1 | Num | 8 | 11e1. An additional antibiotic |
| 60 | HEF11E2 | Num | 8 | 11e2. Additional steroids |
| 61 | HEF11E3 | Num | 8 | 11e3. Don't know |
| 62 | HEF11E4 | Num | 8 | 11e4. Don't remember |
| 63 | HEF11F | Char | 1 | 11f. Were you evaluated in an Emergency Department? |
| 64 | HEF11F1 | Num | 8 | 11f1. An additional antibiotic |
| 65 | HEF11F2 | Num | 8 | 11f2. Additional steroids |
| 66 | HEF11F3 | Num | 8 | 11f3. Don't know |
| 67 | HEF11F4 | Num | 8 | 11f4. Don't remember |
| 68 | HEF11G | Char | 1 | 11 g . Were you admitted to the hospital? |
| 69 | HEF13 | Char | 1 | 13. (do not ask) Did the participant have a fifth episode? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 70 | HEF14A | Char | 1 | 14a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 71 | HEF14B | Char | 1 | 14b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 72 | HEF14C | Char | 1 | 14c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 73 | HEF14D | Char | 1 | 14d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 74 | HEF14E | Char | 1 | 14e. Were you evaluated in a physician's office or urgent care? |
| 75 | HEF14E1 | Num | 8 | 14e1. An additional antibiotic |
| 76 | HEF14E2 | Num | 8 | 14e2. Additional steroids |
| 77 | HEF14E3 | Num | 8 | 14e3. Don't know |
| 78 | HEF14E4 | Num | 8 | 14e4. Don't remember |
| 79 | HEF14F | Char | 1 | 14f. Were you evaluated in an Emergency Department? |
| 80 | HEF14F1 | Num | 8 | 14f1. An additional antibiotic |
| 81 | HEF14F2 | Num | 8 | 14f2. Additional steroids |
| 82 | HEF14F3 | Num | 8 | 14f3. Don't know |
| 83 | HEF14F4 | Num | 8 | 14f4. Don't remember |
| 84 | HEF14G | Char | 1 | 14 g . Were you admitted to the hospital? |
| 85 | HEF16 | Char | 1 | 16. (do not ask) Did the participant have a fifth episode? |
| 86 | HEF17A | Char | 1 | 17a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 87 | HEF17B | Char | 1 | 17b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 88 | HEF17C | Char | 1 | 17c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 89 | HEF17D | Char | 1 | 17d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 90 | HEF17E | Char | 1 | 17e. Were you evaluated in a physician's office or urgent care? |
| 91 | HEF17E1 | Num | 8 | 17e1. An additional antibiotic |
| 92 | HEF17E2 | Num | 8 | 17e2. Additional steroids |
| 93 | HEF17E3 | Num | 8 | 17e3. Don't know |
| 94 | HEF17E4 | Num | 8 | 17e4. Don't remember |
| 95 | HEF17F | Char | 1 | 17f. Were you evaluated in an Emergency Department? |
| 96 | HEF17F1 | Num | 8 | 17f1. An additional antibiotic |
| 97 | HEF17F2 | Num | 8 | 17f2. Additional steroids |
| 98 | HEF17F3 | Num | 8 | 17f3. Don't know |
| 99 | HEF17F4 | Num | 8 | 17f4. Don't remember |
| 100 | HEF17G | Char | 1 | 17 g . Were you admitted to the hospital? |
| 101 | HEF19 | Char | 1 | 19. Since your last (center visit or telephone contact) on (date), have you at any time been admitted to a hospital (For COPD Participants: for any reason other than a chest flare up)? |
| 102 | HEF20 | Num | 8 | 20. How many hospitalizations have you had since (date)? |
| 103 | HEF21E | Char | 1 | 21e. Were you admitted to a hospital any other time since your last (center visit or telephone contact)? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 104 | HEF22E | Char | 1 | 22e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 105 | HEF23E | Char | 1 | 23e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 106 | HEF24E | Char | 1 | 24e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 107 | HEF25E | Char | 1 | 25e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 108 | VERSION | Char | 21 | Version |
| 109 | HEF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 110 | HEF12A_DAYS | Num | 8 | 12a. What was the date of this event? - Days from enrollment |
| 111 | HEF15A_DAYS | Num | 8 | 15a. What was the date of this event? - Days from enrollment |
| 112 | HEF18A_DAYS | Num | 8 | 18a. What was the date of this event? - Days from enrollment |
| 113 | HEF21A_DAYS | Num | 8 | 21a. What was the date of this event? - Days from enrollment |
| 114 | HEF22A_DAYS | Num | 8 | 22a. What was the date of this event? - Days from enrollment |
| 115 | HEF23A_DAYS | Num | 8 | 23a. What was the date of this event? - Days from enrollment |
| 116 | HEF24A_DAYS | Num | 8 | 24a. What was the date of this event? - Days from enrollment |
| 117 | HEF25A_DAYS | Num | 8 | 25a. What was the date of this event? - Days from enrollment |
| 118 | HEF26A_DAYS | Num | 8 | 26a. What was the date of this event? - Days from enrollment |
| 119 | HEF3A_DAYS | Num | 8 | 3a. What was the date of this event? - Days from enrollment |
| 120 | HEF6A_DAYS | Num | 8 | 6a. What was the date of this event? - Days from enrollment |
| 121 | HEF9A_DAYS | Num | 8 | 9a. What was the date of this event? - Days from enrollment |

## Data Set Name: v3_isp_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISP01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISP01B | Num | 8 | is |
| 6 | ISP02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISP02B | Num | 8 | is |
| 8 | ISP03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISP03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISP03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISP04A | Num | 8 | a) FEV1 |
| 12 | ISP05A | Num | 8 | a) FEV1 |
| 13 | ISP06A | Num | 8 | a) FEV1 |
| 14 | ISP08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISP09A | Num | 8 | a) FEV1 |
| 16 | ISP10A | Num | 8 | a) FEV1 |
| 17 | ISP11A | Num | 8 | a) FEV1 |
| 18 | ISP12A | Num | 8 | a) FEV1 |
| 19 | ISP13A | Num | 8 | a) FEV1 |
| 20 | ISP14A | Num | 8 | a) FEV1 |
| 21 | ISP15A | Num | 8 | a) FEV1 |
| 22 | ISP16 | Char | 1 | 16) First 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 23 | ISP17 | Char | 1 | 17) If yes, \% NaCl used: |
| 24 | ISP18A | Num | 8 | a) FEV1 |
| 25 | ISP19A | Num | 8 | a) FEV1 |
| 26 | ISP20A | Num | 8 | a) FEV1 |
| 27 | ISP21A | Num | 8 | a) FEV1 |
| 28 | ISP22 | Char | 1 | 22) Second 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 29 | ISP23A | Num | 8 | a) FEV1 |
| 30 | ISP24A | Num | 8 | a) FEV1 |
| 31 | ISP25A | Num | 8 | a) FEV1 |
| 32 | ISP26A | Num | 8 | a) FEV1 |
| 33 | ISP27 | Char | 1 | 27) Was the participant able to produce sputum? |
| 34 | ISP28 | Char | 1 | 28) Was the induction terminated early? (If 'No', 30) |
| 35 | ISP29 | Char | 1 | 29) Reason terminated early |
| 36 | ISP30 | Char | 1 | 30) Did the participant require additional albuterol? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISP31A | Num | 8 | a) FEV1 |
| 38 | ISP32A | Num | 8 | a) FEV1 |
| 39 | ISP33A | Num | 8 | a) FEV1 |
| 40 | ISP0D | Char | 5 | Time Collected |
| 41 | ISP0D_AMPM | Char | 1 | AM/PM |
| 42 | VERSION | Char | 21 | Version |
| 43 | ISP0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 44 | ISP0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

## Data Set Name: v3_isw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISW01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISW01B | Num | 8 | is |
| 6 | ISW02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISW02B | Num | 8 | is |
| 8 | ISW03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISW03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISW03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISW04A | Num | 8 | a) FEV1: |
| 12 | ISW05A | Num | 8 | a) FEV1: |
| 13 | ISW06A | Num | 8 | a) FEV1: |
| 14 | ISW08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISW09A | Num | 8 | a) FEV1 |
| 16 | ISW10A | Num | 8 | a) FEV1 |
| 17 | ISW11A | Num | 8 | a) FEV1 |
| 18 | ISW12A | Num | 8 | a) FEV1 |
| 19 | ISW13A | Num | 8 | a) FEV1 |
| 20 | ISW14 | Char | 1 | 14) First 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 21 | ISW15 | Char | 1 | 15) If yes, \% NaCl used: |
| 22 | ISW16A | Num | 8 | a) FEV1 |
| 23 | ISW17A | Num | 8 | a) FEV1 |
| 24 | ISW18 | Char | 1 | 18) Second 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 25 | ISW19 | Char | 1 | 19) If yes, \% NaCl used: |
| 26 | ISW20A | Num | 8 | a) FEV1 |
| 27 | ISW21A | Num | 8 | a) FEV1 |
| 28 | ISW22 | Char | 1 | 22) Was the participant able to produce sputum? |
| 29 | ISW23 | Char | 1 | 23) Was the induction terminated early? |
| 30 | ISW24 | Char | 1 | 24) Reason terminated early |
| 31 | ISW25 | Char | 1 | 25) Did the participant require additional albuterol? |
| 32 | ISW26A | Num | 8 | a) FEV1 |
| 33 | ISW27A | Num | 8 | a) FEV1 |
| 34 | ISW28A | Num | 8 | a) FVC |
| 35 | ISW29 | Char | 2000 | 29) Note reason and time point obtained |
| 36 | ISW0D | Char | 5 | Time Collected |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISW0D_AMPM | Char | 1 | AM/PM |
| 38 | VERSION | Char | 21 | Version |
| 39 | ISW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 40 | ISW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v3_mcq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MCQ01 | Char | 1 | MCQ01 Frequency of cough today |
| 5 | MCQ02 | Char | 1 | MCQ02 Frequency of cough last night |
| 6 | MCQ03 | Char | 1 | MCQ03 Severity of cough episodes |
| 7 | MCQ04 | Char | 1 | MCQ04 Ease of coughing up sputum today |
| 8 | MCQ05 | Char | 1 | MCQ05 Chest tightness/discomfort today |
| 9 | VERSION | Char | 21 | Version |
| 10 | MCQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_mhf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MHF0C | Num | 8 | 0c. (do not read) Check here if participant is Female |
| 5 | MHF1 | Char | 1 | 1. Did you get an influenza vaccination (flu shot) in the last 12 months? |
| 6 | MHF2 | Char | 1 | 2. When was your most recent pneumonia vaccination? (Pneumovax) |
| 7 | MHF3 | Char | 1 | 3. Have you been diagnosed with alpha-1 anti-trypsin deficiency? |
| 8 | MHF4A | Char | 1 | 4a. Vision problems |
| 9 | MHF4B | Char | 1 | 4b. Hearing problems |
| 10 | MHF4C | Char | 1 | 4c. Dizziness |
| 11 | MHF4D | Char | 1 | 4d. Ears ringing |
| 12 | MHF4E | Char | 1 | 4e. Sinusitis/Rhinitis |
| 13 | MHF4F | Char | 1 | 4f. Other |
| 14 | MHF5A | Char | 1 | 5a. High blood pressure |
| 15 | MHF5B | Char | 1 | 5b. Coronary artery disease |
| 16 | MHF5C | Char | 1 | 5c. Angina (chest pain) |
| 17 | MHF5D | Char | 1 | 5d. Heart attack |
| 18 | MHF5E | Char | 1 | 5e. Murmur |
| 19 | MHF5F | Char | 1 | 5f. Palpitations, irregular heartbeat |
| 20 | MHF5G | Char | 1 | 5g. Valve disease |
| 21 | MHF5H | Char | 1 | 5h. Congestive heart failure |
| 22 | MHF5I | Char | 1 | 5i. Blood clots |
| 23 | MHF5J | Char | 1 | 5j. Poor circulation (claudication) |
| 24 | MHF5K | Char | 1 | 5k. Other |
| 25 | MHF6A | Char | 1 | 6a. Esophageal condition or disease |
| 26 | MHF6B | Char | 1 | 6b. Ulcers |
| 27 | MHF6C | Char | 1 | 6c. Hepatitis or jaundice |
| 28 | MHF6D | Char | 1 | 6d. Crohn's disease or colitis |
| 29 | MHF6E | Char | 1 | 6e. Gallstones |
| 30 | MHF6F | Char | 1 | 6f. Cirrhosis |
| 31 | MHF6F1 | Char | 75 | 6f1. Explain: |
| 32 | MHF6G | Char | 1 | 6g. GERD (heart burn) |
| 33 | MHF6H | Char | 1 | 6h. Hiatal hernia |
| 34 | MHF6I | Char | 1 | 6i. Other |
| 35 | MHF7A | Char | 1 | 7a. Intubation or respirator |
| 36 | MHF7B | Char | 1 | 7b. Pneumothorax (collapsed lung) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | MHF7C | Char | 1 | 7c. Tuberculosis |
| 38 | MHF7D | Char | 1 | 7d. Pulmonary fibrosis |
| 39 | MHF7D1 | Char | 75 | 7d1. Explain: |
| 40 | MHF7E | Char | 1 | 7e. Lung nodules |
| 41 | MHF7F | Char | 1 | 7f. Pulmonary embolism |
| 42 | MHF7G | Char | 1 | 7g. Other |
| 43 | MHF8A | Char | 1 | 8a. Cancer(except basal cell skin cancer) |
| 44 | MHF8B | Char | 1 | 8b. Anemia |
| 45 | MHF8C | Char | 1 | 8c. Other |
| 46 | MHF9A | Char | 1 | 9a. Menstrual symptoms (women) |
| 47 | MHF9B | Char | 1 | 9b. Enlarged prostate or BPH (men) |
| 48 | MHF9C | Char | 1 | 9c. Bladder or kidney problems/kidney stones |
| 49 | MHF9D | Char | 1 | 9d. Other |
| 50 | MHF10A | Char | 1 | 10a. Diabetes |
| 51 | MHF10B | Char | 1 | 10b. Thyroid |
| 52 | MHF10C | Char | 1 | 10c. Other |
| 53 | MHF11A | Char | 1 | 11a. Stroke |
| 54 | MHF11B | Char | 1 | 11b. Headaches |
| 55 | MHF11C | Char | 1 | 11c. Seizure |
| 56 | MHF11D | Char | 1 | 11d. Other |
| 57 | MHF12A | Char | 1 | 12a. Rheumatoid arthritis |
| 58 | MHF12B | Char | 1 | 12b. Gout |
| 59 | MHF12C | Char | 1 | 12c. Osteoporosis |
| 60 | MHF12D | Char | 1 | 12d. Fractures |
| 61 | MHF12E | Char | 1 | 12e. Joint pain |
| 62 | MHF12F | Char | 1 | 12f. Osteoarthritis |
| 63 | MHF12G | Char | 1 | 12g. Other |
| 64 | MHF13A | Char | 1 | 13a. Rashes/hives/ eczema |
| 65 | MHF13B | Char | 1 | 13b. Psoriasis |
| 66 | MHF13C | Char | 1 | 13c. Shingles |
| 67 | MHF13D | Char | 1 | 13d. Other |
| 68 | MHF14A | Char | 1 | 14a. Atypical mycobacteria (MAC,MAI) |
| 69 | MHF14B | Char | 1 | 14b. Fungal disease |
| 70 | MHF14C | Char | 1 | 14c. Other |
| 71 | MHF15A | Char | 1 | 15a. Anxiety |
| 72 | MHF15B | Char | 1 | 15b. Depression |
| 73 | MHF15C | Char | 1 | 15c. Other |
| 74 | MHF16 | Char | 1 | 16. Other significant problems not reported in questions 2-18 |
| 75 | MHF16C | Char | 50 | List Problem C |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | MHF17 | Char | 1 | 17. A fever, cold, flu, or sore throat? |
| 77 | MHF18 | Char | 1 | 18. A urinary tract infection? |
| 78 | MHF19 | Char | 1 | 19. Seasonal allergies? |
| 79 | MHF20 | Char | 1 | 20. A sinus infection or sinusitis? |
| 80 | MHF21 | Char | 1 | 21. A tooth infection? |
| 81 | MHF22 | Char | 1 | 22. A flare up of gout? |
| 82 | MHF23 | Char | 1 | 23. A flare up of arthritis? |
| 83 | MHF24 | Char | 1 | 24. Other? |
| 84 | MHF25 | Char | 50 | 25. Please explain: |
| 85 | MHF26 | Char | 1 | 26. Are you allergic to any medications, latex, food, or substances? |
| 86 | MHF26A | Char | 50 | 26a. List Substance: |
| 87 | MHF26A1 | Char | 50 | 26a1. Reaction: |
| 88 | MHF26B | Char | 50 | 26b. List Substance: |
| 89 | MHF26B1 | Char | 50 | 26b1. Reaction: |
| 90 | MHF26C | Char | 50 | 26c. List Substance: |
| 91 | MHF26C1 | Char | 50 | 26c1. Reaction: |
| 92 | MHF26D | Char | 50 | 26d. List Substance: |
| 93 | MHF26D1 | Char | 50 | 26d1. Reaction: |
| 94 | MHF26E | Char | 50 | 26e. List Substance: |
| 95 | MHF26E1 | Char | 50 | 26e1. Reaction: |
| 96 | MHF27 | Char | 1 | 27. In the past 12 months, how often have you consumed any beverage containing alcohol (beer, |
| wine, wine coolers, liquor, or mixed drinks such as margaritas, martinis, or daiquiris)? |  |  |  |  |
| 97 | MHF28 | Char | 1 | 28. When you drink beverage containing alcohol, how many do you usually drink at one sitting? |
| 98 | MHF29A | Num | 8 | 29a. Beer |
| 99 | MHF29B | Num | 8 | 29b. Wine |
| 100 | MHF29C | Num | 8 | 29c. Drinks containing liquor |
| 101 | MHF30 | Char | 1 | 30. How often do you have eight or more drinks on one occasion? |
| 102 | MHF31 | Char | 1 | 31. How often during the last year have you been unable to remember what happened the night |
| before because you had been drinking? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 112 | MHF41 | Char | 1 | 41. In the past 12 months did you ever breastfeed |
| 113 | MHF42 | Num | 8 | 42. If you did breastfeed, for approximately how many total months did you breastfeed (total for all <br> pregnancies)? |
| 114 | MHF43 | Char | 1 | 43. In the last 12 months have you had an ovary removed? |
| 115 | MHF44 | Char | 1 | 44. If you had an ovary removed, was one removed or both? |
| 116 | MHF45 | Num | 8 | 45. At what age was your ovary or ovaries removed? |
| 117 | MHF46 | Char | 1 | 46. Were you born premature? |
| 118 | MHF46A | Num | 8 | 46a. If yes, how many weeks were you premature? |
| 119 | MHF47A | Num | 8 | 47a. What was your birth weight? |
| 120 | MHF47B | Num | 8 | Birth Weight in Pounds/Ounces |
| 121 | MHF48 | Char | 1 | 48. Did you ever have breathing problems during the first two years of life? |
| 122 | MHF48A | Char | 1 | 48a. If yes, were you ever hospitalized for these problems? |
| 123 | MHF49 | Char | 1 | 49. Were you ever hospitalized for pneumonia before 18 years of age? |
| 124 | MHF7H | Char | 1 | 7h. Wedge Resection |
| 125 | VERSION | Char | 21 | Version |
| 126 | MHF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_mrc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MRC01 | Num | 8 | MRC01 Describe shortness of breath |
| 5 | VERSION | Char | 21 | Version |
| 6 | MRC0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_pft_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFT01 | Num | 8 | PFT01 Large meal eaten within the last 2 hours |
| 5 | PFT02 | Num | 8 | PFT02 Smoked within the last hour |
| 6 | PFT03 | Num | 8 | PFT03 Vigorous exercise in the past 30 minutes |
| 7 | PFT04 | Num | 8 | PFT04 Consumed alcohol within past 4 hours |
| 8 | PFT05 | Num | 8 | PFT05 Medication for lungs in past 48 hours |
| 9 | PFT06 | Num | 8 | PFT06 Use of Spiriva within past 48 hours |
| 10 | PFT06B | Char | 5 | PFT06B Time last used Spiriva |
| 11 | PFT06B_AMPM | Char | 1 | PFT06B_AMPM Last used Spiriva AM/PM |
| 12 | PFT07 | Num | 8 | PFT07 Use of theophylline within past 48 hrs |
| 13 | PFT07A | Num | 8 | PFT07A Most recent type of theophyline used |
| 14 | PFT07C | Char | 5 | PFT07C Time last used theophyline |
| 15 | PFT07C_AMPM | Char | 1 | PFT07C_AMPM last used theophyline AM/PM |
| 16 | PFT08 | Num | 8 | PFT08 Use of one-a-day bronchodilator |
| 17 | PFT08B | Char | 5 | PFT08B Time last used one-a-day bronchodilator |
| 18 | PFT08B_AMPM | Char | 1 | PFT08B_AMPM last used one-a-day bronchodilator AM/PM |
| 19 | PFT09 | Num | 8 | PFT09 Use of long-acting beta agonist |
| 20 | PFT09A | Num | 8 | PFT09A Most recent long-acting beta agonist used |
| 21 | PFT09A1 | Char | 50 | PFT09A1 Specify long-acting beta agonist |
| 22 | PFT09B | Char | 5 | PFT09B Time last used long-acting beta agonist |
| 23 | PFT09B_AMPM | Char | 1 | PFT09B_AMPM last used long-acting beta agonist AM/PM |
| 24 | PFT10 | Num | 8 | PFT10 Use of ipratropium within the past 8 hours |
| 25 | PFT10A | Num | 8 | PFT10A Most recent ipratropium used |
| 26 | PFT10B | Char | 5 | PFT10B Time last used ipratropium |
| 27 | PFT10C_AMPM | Char | 1 | PFT10C_AMPM last used ipratropium AM/PM |
| 28 | PFT11 | Num | 8 | PFT11 Use of short-acting beta agonist |
| 29 | PFT11A | Num | 8 | PFT11A Most recent short-acting beta agonist used |
| 30 | PFT11A7A | Char | 50 | PFT11A7A Specify short-acting beta agonist |
| 31 | PFT11B | Char | 5 | PFT11B Time last short-acting beta agonist used |
| 32 | PFT11B_AMPM | Char | 1 | PFT11B_AMPM last short-acting beta agonist used AM/PM |
| 33 | PFT12 | Char | 1 | PFT12 Consumption of caffeine in past 6 hours |
| 34 | VERSION | Char | 21 | Version |
| 35 | PFT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 36 | PFT06A_DAYS | Num | 8 | Date last used Spiriva - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | PFT07B_DAYS | Num | 8 | Date last used theophyline - Days from enrollment |
| 38 | PFT08A_DAYS | Num | 8 | Date last used one-a-day bronchodilator - Days from enrollment |

## Data Set Name: v3_pfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | PFV01 study_id |
| 5 | PFV10 | Char | 15 | PFV10 Position |
| 6 | PFV12 | Num | 8 | PFV12 visit_num |
| 7 | PFV13 | Num | 8 | PFV13 interval_num |
| 8 | PFV14 | Num | 8 | PFV14 stage_num |
| 9 | PFV15 | Num | 8 | PFV15 seq_num |
| 10 | PFV16 | Char | 15 | PFV16 vlabel |
| 11 | PFV17 | Num | 8 | PFV17 repeats |
| 12 | PFV19 | Char | 15 | PFV19 qa_grade |
| 13 | PFV20 | Char | 15 | PFV20 qa_status |
| 14 | PFV22B | Char | 8 | PFV22B time |
| 15 | PFV23B | Char | 8 | PFV23B time_best |
| 16 | PFV24B | Char | 8 | PFV24B time_first |
| 17 | PFV25 | Num | 8 | PFV25 trial_seq_num |
| 18 | PFV26 | Num | 8 | PFV26 ranking |
| 19 | PFV27 | Num | 8 | PFV27 temperature |
| 20 | PFV28 | Num | 8 | PFV28 barometric |
| 21 | PFV29 | Num | 8 | PFV29 humidity |
| 22 | PFV30 | Num | 8 | PFV30 fevpd |
| 23 | PFV31 | Num | 8 | PFV31 fvcpd |
| 24 | PFV32 | Num | 8 | PFV32 fefpd |
| 25 | PFV33 | Num | 8 | PFV33 fev1_fvcpd |
| 26 | PFV34 | Num | 8 | PFV34 pefpd |
| 27 | PFV35 | Num | 8 | PFV35 pctfev |
| 28 | PFV36 | Num | 8 | PFV36 pctfvc |
| 29 | PFV37 | Num | 8 | PFV37 pctfef2575 |
| 30 | PFV38 | Num | 8 | PFV38 pctpefr |
| 31 | PFV39 | Num | 8 | PFV39 pctfev_fvc |
| 32 | PFV40 | Num | 8 | PFV40 fvc |
| 33 | PFV41 | Num | 8 | PFV41 flag_fvc_best |
| 34 | PFV42B | Char | 8 | PFV42B trials_time |
| 35 | PFV43 | Num | 8 | PFV43 fev05 |
| 36 | PFV44 | Num | 8 | PFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV45 | Num | 8 | PFV45 fev1 |
| 38 | PFV46 | Num | 8 | PFV46 flag_fev_best |
| 39 | PFV47 | Num | 8 | PFV47 fev1fvc |
| 40 | PFV48 | Num | 8 | PFV48 flag_fevfvc_best |
| 41 | PFV49 | Num | 8 | PFV49 fev3 |
| 42 | PFV50 | Num | 8 | PFV50 fev3fvc |
| 43 | PFV51 | Num | 8 | PFV51 fev6 |
| 44 | PFV52 | Num | 8 | PFV52 fef212 |
| 45 | PFV53 | Num | 8 | PFV53 fef2575 |
| 46 | PFV54 | Num | 8 | PFV54 flag_fef2575_best |
| 47 | PFV55 | Num | 8 | PFV55 fef25756 |
| 48 | PFV56 | Num | 8 | PFV56 fef25 |
| 49 | PFV57 | Num | 8 | PFV57 fef50 |
| 50 | PFV58 | Num | 8 | PFV58 fef506 |
| 51 | PFV59 | Num | 8 | PFV59 fef75 |
| 52 | PFV60 | Num | 8 | PFV60 fef756 |
| 53 | PFV61 | Num | 8 | PFV61 fef7585 |
| 54 | PFV62 | Num | 8 | PFV62 pefr |
| 55 | PFV63 | Num | 8 | PFV63 flag_pefr_best |
| 56 | PFV64 | Num | 8 | PFV64 met |
| 57 | PFV65 | Num | 8 | PFV65 peft |
| 58 | PFV66 | Num | 8 | PFV66 vext |
| 59 | PFV67 | Num | 8 | PFV67 pctvext |
| 60 | PFV68 | Num | 8 | PFV68 expt |
| 61 | PFV69 | Num | 8 | PFV69 RVSPCA |
| 62 | PFV70 | Char | 4 | PFV70 fevdiff |
| 63 | PFV71 | Num | 8 | PFV71 fivc |
| 64 | PFV72 | Num | 8 | PFV72 fiv05 |
| 65 | PFV73 | Num | 8 | PFV73 fiv05fivc |
| 66 | PFV74 | Num | 8 | PFV74 fiv1 |
| 67 | PFV75 | Num | 8 | PFV75 fiv1fivc |
| 68 | PFV76 | Num | 8 | PFV76 fiv3 |
| 69 | PFV77 | Num | 8 | PFV77 pifr |
| 70 | PFV78 | Num | 8 | PFV78 fif212 |
| 71 | PFV79 | Num | 8 | PFV79 fif2575 |
| 72 | PFV80 | Num | 8 | PFV80 mit |
| 73 | VERSION | Char | 21 | Version |
| 74 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 75 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 76 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 77 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v3_psq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | PSAQ7 | Char | 2000 | PSAQ7 Frequency of taking medication to sleep during the last month |
| 4 | PSAQ8 | Char | 2000 | PSAQ8 Frequency of having trouble staying awake during the last month |
| 5 | PSAQ9 | Char | 2000 | PSAQ9 Difficulty keeping up enthusiasm during the last month |
| 6 | VISIT | Char | 10 | Visit |
| 7 | PSQ01 | Char | 5 | PSQ01 Usual bedtime in the past month |
| 8 | PSQ01_AMPM | Char | 1 | PSQ01_AMPM bedtime AM/PM |
| 9 | PSQ02 | Num | 8 | PSQ02 Time taken to fall asleep in the past month |
| 10 | PSQ03 | Char | 5 | PQQ03 Waking hour in the past month |
| 11 | PSQ03_AMPM | Char | 1 | PSQ03_AMPM waking hour AM/PM |
| 12 | PSQ04 | Num | 8 | PSQ04 Hours of sleep per night in the past month |
| 13 | PSQ05A | Char | 1 | PSQ05A Trouble sleeping: Cannot get to sleep within 30 minutes |
| 14 | PSQ05B | Char | 1 | PSQ05B Trouble sleeping: Wake up in the middle of the night or early morning |
| 15 | PSQ05C | Char | 1 | PSQ05C Trouble sleeping: Have to get up to use the bathroom |
| 16 | PSQ05D | Char | 1 | PSQ05D Trouble sleeping: Cannot breathe comfortably |
| 17 | PSQ05E | Char | 1 | PSQ05E Trouble sleeping: Cough or snore loudly |
| 18 | PSQ05F | Char | 1 | PSQ05F Trouble sleeping: Feel too cold |
| 19 | PSQ05G | Char | 1 | PSQ05G Trouble sleeping: Feel too hot |
| 20 | PSQ05H | Char | 1 | PSQ05H Trouble sleeping: Have bad dreams |
| 21 | PSQ05I | Char | 1 | PSQ05I Trouble sleeping: Have pain |
| 22 | PSQ05J | Char | 1 | PSQ05J Trouble sleeping: Other reasons |
| 23 | PSQ06 | Char | 1 | PSQ06 Sleep quality during the last month |
| 24 | PSQ10 | Char | 1 | PSQ10 Bed partner/roommate |
| 25 | PSQ10A | Char | 1 | PSQ10A Bed partner/roommate reports: Loud snoring |
| 26 | PSQ10B | Char | 1 | PSQ10B Bed partner/roommate reports: Long pauses between breaths while asleep |
| 27 | PSQ10C | Char | 1 | PSQ10C Bed partner/roommate reports: Legs twitching or jerking while you sleep |
| 28 | PSQ10D | Char | 1 | PSQ10D Bed partner/roommate reports: Episodes of disorientation or confusion during sleep |
| 29 | PSQ10E | Char | 1 | PSQ10E Bed partner/roommate reports: Other restlessness while you sleep |
| 30 | PSQ10E1 | Char | 2000 | PSQ10E1 Describe other restlessness during sleep |
| 31 | VERSION | Char | 21 | Version |
| 32 | PSQ_TOTALSCORE03 | Num | 8 | Year 2 Pittsburgh sleep total score |
| 33 | PSQ_DURATIONSLEEP03 | Num | 8 | Year 2 PSQ Duration of sleep) |
| 34 | PSQ_SLEEPDISTURBANCE03 | Num | 8 | Year 2 PSQ sleep disturbance |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 35 | PSQ_SLEEPLATENCY03 | Num | 8 | Year 2 PSQ sleep latency |
| 36 | PSQ_DAYSLEEPYDYSFUNC03 | Num | 8 | Year 2 PSQ day dysfunction due to sleepness |
| 37 | PSQ_SLEEPEFFICIENCY03 | Num | 8 | Year 2 PSQ sleep efficiency |
| 38 | PSQ_OVERALLSLEEPQUALITY03 | Num | 8 | Year 2 PSQ overall sleep quality |
| 39 | PSQ_NEEDMEDSTOSLEEP03 | Num | 8 | Year 2 PSQ need meds to sleep |
| 40 | PSQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_psv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | PSV01 study_id |
| 5 | PSV10 | Char | 15 | PSV10 position |
| 6 | PSV12 | Num | 8 | PSV12 visit_num |
| 7 | PSV13 | Char | 15 | PSV13 interval_num |
| 8 | PSV14 | Num | 8 | PSV14 stage_num |
| 9 | PSV15 | Num | 8 | PSV15 seq_num |
| 10 | PSV16 | Char | 5 | PSV16 vlabel |
| 11 | PSV17 | Num | 8 | PSV17 repeats |
| 12 | PSV19 | Char | 15 | PSV19 qa_grade |
| 13 | PSV20 | Char | 15 | PSV20 qa_status |
| 14 | PSV22B | Char | 8 | PSV22B time |
| 15 | PSV23B | Char | 8 | PSV23B time_best |
| 16 | PSV24B | Char | 8 | PSV24B time_first |
| 17 | PSV25B | Char | 8 | PSV25B trials_time |
| 18 | PSV26 | Num | 8 | PSV26 trial_seq_num |
| 19 | PSV27 | Num | 8 | PSV27 ranking |
| 20 | PSV28 | Num | 8 | PSV28 temperature |
| 21 | PSV29 | Num | 8 | PSV29 barometric |
| 22 | PSV30 | Num | 8 | PSV30 humidity |
| 23 | PSV32 | Char | 5 | PSV32 tom |
| 24 | PSV33 | Num | 8 | PSV33 svc |
| 25 | PSV34 | Num | 8 | PSV34 svcpd |
| 26 | PSV35 | Num | 8 | PSV35 pctsvc |
| 27 | PSV36 | Num | 8 | PSV36 flag_svc_best |
| 28 | PSV37 | Num | 8 | PSV37 ic |
| 29 | PSV38 | Num | 8 | PSV38 irv |
| 30 | PSV39 | Num | 8 | PSV39 erv |
| 31 | PSV40 | Num | 8 | PSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v3_rdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | RDF1 | Char | 1 | 1. Do you usually have a cough? (Exclude clearing of throat.) |
| 5 | RDF1A | Char | 1 | 1a. Do you usually cough as much as 4 times a day, 4 or more days out of the week? |
| 6 | RDF2 | Char | 1 | 2. Do you usually cough at all on getting up or first thing in the morning? |
| 7 | RDF3 | Char | 1 | 3. Do you usually cough at all during the rest of the day or night? |
| 8 | RDF3A | Char | 1 | 3a. Do you cough like this on most days, for 3 consecutive months or more during the year? |
| 9 | RDF3B | Num | 8 | 3b. For how many years have you had this cough? |
| 10 | RDF4 | Char | 1 | 4. Do you usually bring up phlegm from your chest? |
| 11 | RDF4A | Char | 1 | 4a. Do you usually bring up phlegm like this as much as twice a day, 4 or more days out of the |
| week? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 33 | RDF14 | Char | 1 | 14. In the last 12 months, have you been bothered by watery, itchy, or burning eyes when you did not have a cold or the flu? |
| 34 | RDF15 | Char | 1 | 15. Are you unable to walk due to a condition other than shortness of breath? |
| 35 | RDF16 | Char | 1 | 16. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with asthma? |
| 36 | RDF16A | Char | 1 | 16a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for asthma? |
| 37 | RDF17 | Char | 1 | 17. In the past 12 months, have you had hay fever (allergy involving the nose and/or eyes)? |
| 38 | RDF17A | Char | 1 | 17a. Was it diagnosed by a doctor or other health professional? |
| 39 | RDF17B | Char | 1 | 17b. In the past 12 months, have you received medical treatment, taken medications or used a nasal spray for hay fever? |
| 40 | RDF18 | Char | 1 | 18. In the past 12 months, have you had an attack of bronchitis? |
| 41 | RDF18A | Char | 1 | 18a. Was it diagnosed by a doctor or other health professional? |
| 42 | RDF18B | Num | 8 | 18b. How many times have you had bronchitis in the past 12 months? |
| 43 | RDF19 | Char | 1 | 19. In the past 12 months, have you ever had pneumonia or bronchopneumonia? |
| 44 | RDF19A | Char | 1 | 19a. Was it diagnosed by a doctor or other health professional? |
| 45 | RDF19B | Num | 8 | 19b. How many times have you had pneumonia or bronchopneumonia in the past 12 months? |
| 46 | RDF20 | Char | 1 | 20. In the past 12 months, were you newly diagnosed by a doctor or other health professional with chronic bronchitis? |
| 47 | RDF20A | Char | 1 | 20a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for chronic bronchitis? |
| 48 | RDF21 | Char | 1 | 21. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with emphysema? |
| 49 | RDF21A | Char | 1 | 21a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for emphysema? |
| 50 | RDF22 | Char | 1 | 22. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with COPD (chronic obstructive pulmonary disease)? |
| 51 | RDF22A | Char | 1 | 22a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for COPD? |
| 52 | RDF23 | Char | 1 | 23. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with sleep apnea? |
| 53 | RDF23A | Char | 1 | 23a. In the past 12 months, have you received any treatment for sleep apnea? |
| 54 | RDF23B | Char | 1 | 23b. Do you use a CPAP or BIPAP? |
| 55 | RDF23C | Char | 1 | 23c. Did you have surgery for your sleep apnea? |
| 56 | RDF23D | Char | 1 | 23d. Did you have some other treatment for your sleep apnea? |
| 57 | RDF24A | Char | 1 | 24a. Any other chest illness? |
| 58 | RDF24B | Char | 1 | 24b. Any chest operations? |
| 59 | RDF24C | Char | 1 | 24c. Any chest injuries? |
| 60 | RDF25 | Char | 1 | 25. In the past 12 months have you smoked cigarettes |
| 61 | RDF26 | Char | 1 | 26. Do you smoke cigarettes as of one month ago? |
| 62 | RDF27 | Num | 8 | 27. Cigarettes smoked in the past 24 hours: (Check here if does not apply) |
| 63 | RDF27A | Num | 8 | 27a. 24 hours |
| 64 | RDF27B | Num | 8 | 27b. 2 hours |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 65 | RDF27C | Num | 8 | 27c. 1/2 hour |
| 66 | RDF28 | Num | 8 | 28. How many cigarettes do you smoke per day now? |
| 67 | RDF29 | Num | 8 | 29. On average over the last 12 months, how many cigarettes did you smoke per day? |
| 68 | RDF30 | Char | 1 | 30. Have you ever smoked menthol cigarettes? |
| 69 | RDF30A | Num | 8 | 30a. For how long have you or did you smoke menthol cigarettes? |
| 70 | RDF31A | Char | 40 | First brand of cigarettes smoked |
| 71 | RDF31B | Char | 40 | Second brand of cigarettes smoked |
| 72 | RDF31C | Char | 40 | Third brand of cigarettes smoked |
| 73 | RDF31D | Char | 40 | Fourth brand of cigarettes smoked |
| 74 | RDF31E | Char | 40 | Fifth brand of cigarettes smoked |
| 75 | RDF32 | Char | 1 | 32. In the past twelve months have you smoked a pipe regularly? |
| 76 | RDF33 | Char | 1 | 33. Do you smoke a pipe (as of one month ago)? |
| 77 | RDF34 | Num | 8 | 34. How much pipe tobacco do you smoke per day now? |
| 78 | RDF35 | Num | 8 | 35. On average over the last 12 months, how many ounces of tobacco did you smoke per week? |
| 79 | RDF36 | Char | 1 | 36. In the past twelve months have you smoked cigars regularly? (YES means more than 1 cigar a week for one year at any time in your life) |
| 80 | RDF37 | Char | 1 | 37. Do you now smoke cigars (as of one month ago)? |
| 81 | RDF38 | Num | 8 | 38. How many cigars so you smoke per day now? |
| 82 | RDF39 | Num | 8 | 39. On average over the last 12 months, how many cigars did you smoke per week? |
| 83 | RDF40 | Char | 1 | 40. Which of the following best describes your approach to tobacco smoking in your home when you are in the house? |
| 84 | RDF41 | Char | 1 | 41. In the last 12 months, have you lived in the same household with someone who smoked tobacco products? |
| 85 | RDF42 | Char | 1 | 42. Do you currently live in the same household with someone who smokes tobacco products? |
| 86 | RDF43 | Num | 8 | 43. How many people in your household currently smoke? |
| 87 | RDF44 | Num | 8 | 44. In the last 12 months for how many months in total have you lived in the same household with someone else who smoked tobacco products? |
| 88 | RDF44A | Char | 1 | 44a. If no answer: |
| 89 | RDF45 | Char | 1 | 45. Has anyone smoked tobacco in your home during the past seven days? |
| 90 | RDF46 | Num | 8 | 46. During the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke at home? |
| 91 | RDF47 | Char | 1 | 47. During the past 7 days, did you enter a room in your home that was visibly smoky? |
| 92 | RDF48 | Char | 1 | 48. In the past 7 days, did you smell tobacco smoke in your home? |
| 93 | RDF49 | Char | 1 | 49. During the past 7 days, did you experience red eyes or eye irritation? |
| 94 | RDF50 | Char | 1 | 50. During the past 7 days, did you experience runny nose or nose irritation? |
| 95 | RDF51 | Char | 1 | 51. During the past 7 days, did you experience coughing, wheezing, or chest tightness? |
| 96 | RDF52 | Char | 1 | 52. In the past 7 days, did you take any extra handheld spray inhalers for breathing or lung problems after exposure to tobacco smoke in your home? |
| 97 | RDF53 | Char | 1 | 53. In the past 7 days, have you visited another person's home where someone was smoking tobacco products indoors? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 98 | RDF54 | Num | 8 | 54. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in another person's home? |
| 99 | RDF55 | Char | 1 | 55. During the past 7 days, did you enter a room in another person's home that was visibly smoky? |
| 100 | RDF56 | Char | 1 | 56. In the past 7 days, did you smell tobacco in another person's home? |
| 101 | RDF57 | Char | 1 | 57. In the past 7 days, have you traveled by car or other vehicle with someone else who was smoking tobacco products? |
| 102 | RDF58 | Num | 8 | 58. In the past 7 days, how many hours did you spend traveling in a car while someone else was smoking tobacco? |
| 103 | RDF59 | Char | 1 | 59. During the past 7 days, did anyone smoke tobacco inside your workplace, that is, while you were working indoors? |
| 104 | RDF60 | Num | 8 | 60. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke inside your workplace? |
| 105 | RDF61 | Char | 1 | 61. During the past 7 days, did you enter a room in your workplace that was visibly smoky? |
| 106 | RDF62 | Char | 1 | 62. In the past 7 days, did you smell tobacco smoke in your workplace? |
| 107 | RDF63 | Char | 1 | 63. Is there an outdoor area at your workplace where cigarette smokers routinely gather or congregate to smoke? |
| 108 | RDF64 | Num | 8 | 64. In the past 7 days, how many times did you walk through or past this area while others were smoking? |
| 109 | RDF65 | Num | 8 | 65. During the past 7 days, how many hours in total did you spend in an outdoor smoking area while people were smoking? |
| 110 | RDF66 | Char | 1 | 66. While walking through or past this area, did you smell smoke? |
| 111 | RDF67 | Num | 8 | 67. In the past 7 days, how many hours did you spend near coworkers who were smoking tobacco outdoors? |
| 112 | RDF68 | Char | 1 | 68. During the past 7 days, did you smell tobacco smoke while working outdoors? |
| 113 | RDF69 | Char | 1 | 69. In the past 7 days, have you been at an outdoor location (besides work) where someone was smoking tobacco products outside? |
| 114 | RDF71 | Char | 1 | 71. During the past 7 days, did you smell tobacco smoke in this outdoor location? |
| 115 | RDF72 | Num | 8 | 72. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke at this outdoor location? |
| 116 | RDF73 | Char | 1 | 73. In the past 7 days or nights, were you in a bar, nightclub, cocktail lounge, sports arena, or concert hall where someone else was smoking tobacco products? |
| 117 | RDF74 | Num | 8 | 74. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in a bar or other place of entertainment? |
| 118 | RDF75 | Char | 1 | 75. During the past 7 days, did you enter a room in a bar or other place of entertainment that was visibly smoky? |
| 119 | RDF76 | Char | 1 | 76. In the past 7 days, did you smell tobacco smoke in a bar or other place of entertainment? |
| 120 | RDF77 | Char | 1 | 77. I have asked you about exposure to someone else's tobacco smoke in your home, friend's home, work, outdoor locations, and bars or nightclubs. In the past 7 days, was there any other location where you were exposed to tobacco smoke? |
| 121 | RDF79 | Num | 8 | 79. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in this location? |
| 122 | RDF80 | Char | 1 | 80. In the last 12 months have you smoked marijuana (cannabis, pot, or hashish)? |
| 123 | RDF81 | Char | 1 | 81. In the last 12 months have you smoked marijuana regularly (five times or more in a given year)? |
| 124 | RDF82 | Num | 8 | 82. On average, in the last 12 months about how many joints per week do (did) you smoke? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 125 | RDF83 | Num | 8 | 83. On average over the entire time that you smoke(d) about how many pipes per week do (did) you smoke? |
| 126 | RDF84A | Num | 8 | 84a. In spring |
| 127 | RDF84B | Num | 8 | 84b. In summer |
| 128 | RDF84C | Num | 8 | 84c. In fall |
| 129 | RDF84D | Num | 8 | 84d. In winter |
| 130 | RDF85 | Num | 8 | 85. On average, how many hours per day do you spend in your home? |
| 131 | RDF85A | Char | 1 | 85a. Do you have central air conditioner? |
| 132 | RDF85B | Num | 8 | 85b. How many months out of the year do you use it? |
| 133 | RDF85C | Char | 1 | 85c. Do you have a room air conditioner? |
| 134 | RDF85D | Num | 8 | 85d. How many months out of the year do you use it? |
| 135 | RDF85E | Char | 1 | 85e. What kind of range or stove do you have? |
| 136 | RDF85E1 | Char | 25 | 85e1. Specify |
| 137 | RDF85F | Char | 1 | 85f. Does your range or stove have ventilation to the outdoors? |
| 138 | RDF85G | Char | 1 | 85 g . What is the main type of heating you use in your house? |
| 139 | RDF85H | Char | 1 | 85h. What is the main type of heating fuel you use in your house? |
| 140 | RDF85H1 | Char | 25 | 85h1. Specify |
| 141 | RDF85I | Num | 8 | 85i. How many months out of the year do you use the main type of heating in your house? |
| 142 | RDF85J1 | Num | 8 | 85j1. Radiator |
| 143 | RDF85J2 | Num | 8 | 85j2. Forced Air |
| 144 | RDF85J3 | Num | 8 | 85j3. Wood Stove |
| 145 | RDF85J4 | Num | 8 | 85j4. Fireplace |
| 146 | RDF85J5 | Num | 8 | 85j5. Other |
| 147 | RDF86 | Char | 1 | 86. How much time per each day to you spend communting in traffic to work in total (i.e. both ways)? |
| 148 | RDF86A | Num | 8 | 86a. How many days per week do you commute to work? |
| 149 | VERSION | Char | 21 | Version |
| 150 | RDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_rmu_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | RMU01 | Char | 1 | RMU01 Currently using Theophylline |
| 5 | RMU02 | Char | 1 | RMU02 Currently using Oral Corticosteroids |
| 6 | RMU02A1 | Num | 8 | RMU02A1 Years on oral corticosteroids |
| 7 | RMU02A2 | Num | 8 | RMU02A2 Days on oral corticosteroids |
| 8 | RMU03 | Char | 1 | RMU03 Supplemental oxygen usage |
| 9 | RMU03A | Num | 8 | RMU03A Hours using supplemental oxygen per day |
| 10 | RMU04 | Char | 1 | RMU04 Inhaled steroids usage in last three months |
| 11 | RMU04A1 | Char | 1 | RMU04A1 Inhaled steroids used in last 3 months: Azmacort (triamcinolone) |
| 12 | RMU04A1A | Num | 8 | RMU04A1A Azmacort (triamcinolone): Puffs/day? |
| 13 | RMU04A2 | Char | 1 | RMU04A2 Inhaled steroids used in last 3 months: Beclovent (beclomethasone) |
| 14 | RMU04A2A | Num | 8 | RMU04A2A Beclovent (beclomethasone): Puffs/day? |
| 15 | RMU04A3 | Char | 1 | RMU04A3 Inhaled steroids used in last 3 months: Vanceril (beclomethasone) |
| 16 | RMU04A3A | Num | 8 | RMU04A3A Vanceril (beclomethasone): Puffs/day? |
| 17 | RMU04A3B | Char | 1 | RMU04A3B Inhaled steroids used in last 3 months: Vanceril dose |
| 18 | RMU04A4 | Char | 1 | RMU04A4 Inhaled steroids used in last 3 months: AeroBid (blunisolide) |
| 19 | RMU04A4A | Num | 8 | RMU04A4A AeroBid (blunisolide): Puffs/day? |
| 20 | RMU04A5 | Char | 1 | RMU04A5 Inhaled steroids used in last 3 months: Flovent (fluticasone) |
| 21 | RMU04A5A | Num | 8 | RMU04A5A Flovent (fluticasone): Puffs/day? |
| 22 | RMU04A5B | Char | 1 | RMU04A5B Inhaled steroids used in last 3 months: Flovent dose |
| 23 | RMU04A6 | Char | 1 | RMU04A6 Inhaled steroids used in last 3 months: Pulmicort (budesonide) |
| 24 | RMU04A6A | Num | 8 | RMU04A6A Pulmicort (budesonide): Puffs/day? |
| 25 | RMU04A6B | Char | 1 | RMU04A6B Inhaled steroids used in last 3 months: Pulmicort dose |
| 26 | RMU04A7 | Char | 1 | RMU04A7 Inhaled steroids used in last 3 months: Qvar (beclomethasone) |
| 27 | RMU04A7A | Num | 8 | RMU04A7A Qvar (beclomethasone): Puffs/day? |
| 28 | RMU04A7B | Char | 1 | RMU04A7B Inhaled steroids used in last 3 months: Qvar dose |
| 29 | RMU04A8 | Char | 1 | RMU04A8 Inhaled steroids used in last 3 months: Advair (bluticasone/salmeterol) |
| 30 | RMU04A8A | Num | 8 | RMU04A8A Advair (bluticasone/salmeterol): Puffs/day? |
| 31 | RMU04A8B | Char | 1 | RMU04A8B Inhaled steroids used in last 3 months: Advair dose |
| 32 | RMU04A9 | Char | 1 | RMU04A9 Inhaled steroids used in last 3 months: Symbicort |
| 33 | RMU04A9A | Num | 8 | RMU04A9A Symbicort): Puffs/day? |
| 34 | RMU04A9B | Char | 1 | RMU04A9B Inhaled steroids used in last 3 months: Symbicort dose |
| 35 | RMU04A10 | Char | 1 | RMU04A10 Inhaled steroids used in last 3 months: Other, specify |
| 36 | RMU04A10A | Num | 8 | RMU04A10A Other, specify: Puffs/day? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RMU04A10B | Char | 50 | RMU04A10B Inhaled steroids used in last 3 months:Specify |
| 38 | RMU05 | Char | 1 | RMU05 Inhaled bronchodilators in last three months |
| 39 | RMU05A1 | Char | 1 | RMU05A1 Inhaled bronchodilators used in last 3 months: Albuterol (Proventil, Ventolin, ProAir) |
| 40 | RMU05A1A | Num | 8 | RMU05A1A Albuterol (Proventil, Ventolin, ProAir): Puffs/day? |
| 41 | RMU05A2 | Char | 1 | RMU05A2 Inhaled bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |
| 42 | RMU05A2A | Num | 8 | RMU05A2A ipratropium bromide (Atrovent): Puffs/day? |
| 43 | RMU05A3 | Char | 1 | RMU05A3 Inhaled bronchodilators used in last 3 months: ipratropium bromide/albuterol sulfate (Combivent) |
| 44 | RMU05A3A | Num | 8 | RMU05A3A ipratropium bromide/albuterol sulfate (Combivent): Puffs/day? |
| 45 | RMU05A4 | Char | 1 | RMU05A4 Inhaled bronchodilators used in last 3 months: terbutaline (Brethaire, Brethine, Bricanyl) |
| 46 | RMU05A4A | Num | 8 | RMU05A4A terbutaline (Brethaire, Brethine, Bricanyl): Puffs/day? |
| 47 | RMU05A5 | Char | 1 | RMU05A5 Inhaled bronchodilators used in last 3 months: formoterol (Foradil) |
| 48 | RMU05A5A | Num | 8 | RMU05A5A formoterol (Foradil): Puffs/day? |
| 49 | RMU05A6 | Char | 1 | RMU05A6 Inhaled bronchodilators used in last 3 months: tiotropium (Spiriva) |
| 50 | RMU05A6A | Num | 8 | RMU05A6A tiotropium (Spiriva): Puffs/day? |
| 51 | RMU05A7 | Char | 1 | RMU05A7 Inhaled bronchodilators used in last 3 months: Salmeterol (Serevent Diskus) |
| 52 | RMU05A7A | Num | 8 | RMU05A7A Salmeterol (Serevent Diskus): Puffs/day? |
| 53 | RMU05A8 | Char | 1 | RMU05A8 Inhaled bronchodilators used in last 3 months: Pirbuterol (Maxair) |
| 54 | RMU05A8A | Num | 8 | RMU05A8A Pirbuterol (Maxair): Puffs/day? |
| 55 | RMU05A9 | Char | 1 | RMU05A9 Inhaled bronchodilators used in last 3 months: Metaproterenol (Alupent, Metaprel) |
| 56 | RMU05A10 | Char | 1 | RMU05A10 Inhaled bronchodilators used in last 3 months: levalbuterol (Tomalate) |
| 57 | RMU05A10A | Num | 8 | RMU05A10A levalbuterol (Tomalate): Puffs/day? |
| 58 | RMU05A11 | Char | 1 | RMU05A11 Inhaled bronchodilators used in last 3 months: bitolterol (Tornalate) |
| 59 | RMU05A12 | Char | 1 | RMU05A12 Inhaled bronchodilators used in last 3 months: epinephrine (Primatene, Bronkaid) |
| 60 | RMU05A12A | Num | 8 | RMU05A12A epinephrine (Primatene, Bronkaid): Puffs/day? |
| 61 | RMU05A13 | Char | 1 | RMU05A13 Inhaled bronchodilators used in last 3 months: fluticasone/salmeterol (Advair Diskus) |
| 62 | RMU05A13A | Num | 8 | RMU05A13A fluticasone/salmeterol (Advair Diskus): Puffs/day? |
| 63 | RMU05A14 | Char | 1 | RMU05A14 Inhaled bronchodilators used in last 3 months: budesonide/formoterol (Symbicort) |
| 64 | RMU05A14A | Num | 8 | RMU05A14A budesonide/formoterol (Symbicort): Puffs/day? |
| 65 | RMU05A15 | Char | 1 | RMU05A15 Inhaled bronchodilators used in last 3 months: Other) |
| 66 | RMU05A15A | Num | 8 | RMU05A15A Other: Puffs/day? |
| 67 | RMU05A15B | Char | 50 | RMU05A15B Inhaled bronchodilators used in last 3 months:Specify |
| 68 | RMU06 | Char | 1 | RMU06 Nebulized bronchodilators usage in the last three months |
| 69 | RMU06A1 | Char | 1 | RMU06A1 nebulized bronchodilators used in last 3 months: formoterol (Perforomist) |
| 70 | RMU06A2 | Char | 1 | RMU06A2 nebulized bronchodilators used in last 3 months: arformoterol (Brovana) |
| 71 | RMU06A3 | Char | 1 | RMU06A3 nebulized bronchodilators used in last 3 months: albuterol and ipratropium bromide (DuoNeb) |
| 72 | RMU06A4 | Char | 1 | RMU06A4 nebulized bronchodilators used in last 3 months: albuterol (Proventil, Ventolin, ProAir) |
| 73 | RMU06A5 | Char | 1 | RMU06A5 nebulized bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | RMU07 | Char | 1 | RMU07 Leukotriene antagonist usage in the last 3 months |
| 75 | RMU08 | Char | 1 | RMU08 Statin medications usage in the last three months |
| 76 | RMU08A1 | Char | 1 | RMU08A1 statin used in last 3 months: Crestor (resuvastatin) |
| 77 | RMU08A2 | Char | 1 | RMU08A2 statin used in last 3 months: Lescol (fluvastatin) |
| 78 | RMU08A3 | Char | 1 | RMU08A3 statin used in last 3 months: Lipitor (atorvastatin) |
| 79 | RMU08A4 | Char | 1 | RMU08A4 statin used in last 3 months: Mevacor (lovastatin) |
| 80 | RMU08A5 | Char | 1 | RMU08A5 statin used in last 3 months: Pravachol (pravastatin) |
| 81 | RMU08A6 | Char | 1 | RMU08A6 statin used in last 3 months: Vytorin (ezetimibe, simvastatin) |
| 82 | RMU08A7 | Char | 1 | RMU08A7 statin used in last 3 months: Zocor (simvastatin) |
| 83 | RMU08A8 | Char | 1 | RMU08A8 statin used in last 3 months: Other |
| 84 | RMU08A8B | Char | 50 | RMU08A8B statin used in last 3 months:Specify |
| 85 | RMU09 | Char | 1 | RMU09 Beta-blocker medications usage in the last three months |
| 86 | RMU09A1 | Char | 1 | RMU09A1 beta blocker used in last 3 months: Atenolol (tenormin, tenoretic) |
| 87 | RMU09A2 | Char | 1 | RMU09A2 beta blocker used in last 3 months: Metoprolol (lopresor, toprol) |
| 88 | RMU09A3 | Char | 1 | RMU09A3 beta blocker used in last 3 months: Carvedilol (coreg) |
| 89 | RMU09A4 | Char | 1 | RMU09A4 beta blocker used in last 3 months: Labetalol (trandate, normodyne) |
| 90 | RMU09A5 | Char | 1 | RMU09A5 beta blocker used in last 3 months: Propranalol (Inderal, Inderide) |
| 91 | RMU09A6 | Char | 1 | RMU09A6 beta blocker used in last 3 months: Sotalol (Betapace, Sorine) |
| 92 | RMU09A7 | Char | 1 | RMU09A7 beta blocker used in last 3 months: Timolol (Blocadren, timolide) |
| 93 | RMU09A8 | Char | 1 | RMU09A8 beta blocker used in last 3 months: bisoprolol (zebeta, ziac) |
| 94 | RMU09A9 | Char | 1 | RMU09A9 beta blocker used in last 3 months: pindolol (visken) |
| 95 | RMU09A10 | Char | 1 | RMU09A10 beta blocker used in last 3 months: Other |
| 96 | RMU09A10B | Char | 50 | RMU09A10B beta blocker used in last 3 months:Specify |
| 97 | RMU10 | Char | 1 | RMU10 Oral anti-oxidant supplements usage in the past three months |
| 98 | RMU10A1 | Char | 1 | RMU10A1 oral anti-oxidants used in last 3 months: Vitamin C (ascorbic acid) |
| 99 | RMU10A2 | Char | 1 | RMU10A2 oral anti-oxidants used in last 3 months: Vitamin E (alpha-tocopherol) |
| 100 | RMU10A3 | Char | 1 | RMU10A3 oral anti-oxidants used in last 3 months: beta carotene |
| 101 | RMU10A4 | Char | 1 | RMU10A4 oral anti-oxidants used in last 3 months: zinc |
| 102 | RMU10A5 | Char | 1 | RMU10A5 oral anti-oxidants used in last 3 months: copper |
| 103 | RMU10A6 | Char | 1 | RMU10A6 oral anti-oxidants used in last 3 months: fish oil |
| 104 | RMU10A7 | Char | 1 | RMU10A7 oral anti-oxidants used in last 3 months: omega 3 |
| 105 | RMU10A8 | Char | 1 | RMU10A8 oral anti-oxidants used in last 3 months: Other |
| 106 | RMU11 | Char | 1 | RMU11 Aspirin usage |
| 107 | RMU12H | Char | 50 | RMU12H Other Medication taken in the last 3 months |
| 108 | RMU12I | Char | 50 | RMU12I Other Medication taken in the last 3 months |
| 109 | RMU13D | Char | 50 | RMU13D Other Supplement taken in the last 3 months |
| 110 | RMU13E | Char | 50 | RMU13E Other Supplement taken in the last 3 months |
| 111 | RMU13F | Char | 50 | RMU13F Other Supplement taken in the last 3 months |
| 112 | RMU13G | Char | 50 | RMU13G Other Supplement taken in the last 3 months |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 113 | RMU13H | Char | 50 | RMU13H Other Supplement taken in the last 3 months |
| 114 | RMU13I | Char | 50 | RMU13I Other Supplement taken in the last 3 months |
| 115 | VERSION | Char | 21 | VERSION |
| 116 | RMU0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_sdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SDF01 | Char | 1 | SDF01 Exhaled CO Measured |
| 5 | SDF01A | Num | 8 | SDF01A Monitor number |
| 6 | SDF01B | Num | 8 | SDF01B eCO Measurement 1 |
| 7 | SDF01C | Num | 8 | SDF01C eCO Measurement 2 |
| 8 | SDF02 | Char | 1 | SDF02 Pre-bronchodilator spirometry |
| 9 | SDF02A | Char | 5 | SDF02A Time pre-BD slow vital capacity procedure began |
| 10 | SDF02A_AMPM | Char | 1 | SDF02A_AMPM AM/PM |
| 11 | SDF03A | Num | 8 | SDF03A Pre-BD Inspiratory Capacity |
| 12 | SDF03B | Num | 8 | SDF03B Pre-BD Expiratory slow vital capacity |
| 13 | SDF03C | Num | 8 | SDF03C Pre-BD FEV1 |
| 14 | SDF03D | Num | 8 | SDF03D Pre-BD FVC |
| 15 | SDF04 | Char | 1 | SDF04 Post-bronchodilator spirometry |
| 16 | SDF04A | Char | 5 | SDF04A Time first puff of bronchodilator administered |
| 17 | SDF04A_AMPM | Char | 1 | SDF04A_AMPM AM/PM |
| 18 | SDF04B | Char | 5 | SDF04B Time post-BD slow vital capacity procedure began |
| 19 | SDF04B_AMPM | Char | 1 | SDF04B_AMPM AM/PM |
| 20 | SDF05A | Num | 8 | SDF05A Post-BD Inspiratory Capacity |
| 21 | SDF05B | Num | 8 | SDF05B Post-BD Expiratory slow vital capacity |
| 22 | SDF05C | Num | 8 | SDF05C Post-BD FEV1 |
| 23 | SDF05D | Num | 8 | SDF05D Post-BD FVC |
| 24 | SDF06 | Char | 1 | SDF06 Post-BD Meet ATS-ERS requirements |
| 25 | SDF07 | Char | 1 | SDF07 Complications during spirometry |
| 26 | VERSION | Char | 21 | Version |
| 27 | SDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v3_sfh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFH01 | Num | 8 | SFH01 General Health |
| 5 | SFH02A | Num | 8 | SFH02A Limitations on moderate activites |
| 6 | SFH02B | Num | 8 | SFH02B Limitations on difficult activities |
| 7 | SFH03A | Char | 1 | SFH03A Limited in accomplishing tasks |
| 8 | SFH03B | Char | 1 | SFH03B Limited in daily activities |
| 9 | SFH04A | Char | 1 | SFH04A Emotional limitations on activities |
| 10 | SFH04B | Char | 1 | SHF04B Emotional limitations on daily life |
| 11 | SFH05 | Num | 8 | SFH05 Pain interfering with normal work |
| 12 | SFH06A | Num | 8 | SFH06A Feeling calm |
| 13 | SFH06B | Num | 8 | SFH06B Energy level |
| 14 | SFH06C | Num | 8 | SFH06C Feeling depressed |
| 15 | SFH07 | Num | 8 | SFH07 Physical/emotional health interfering with social life |
| 16 | VERSION | Char | 21 | Version |
| 17 | SFH_BP03 | Num | 8 | Year 2 SFH bodily pain |
| 18 | SFH_GH03 | Num | 8 | Year 2 SFH general health |
| 19 | SFH_MCS03 | Num | 8 | Year 2 SFH mental component summary |
| 20 | SFH_MH03 | Num | 8 | Year 2 SFH mental health |
| 21 | SFH_PCS03 | Num | 8 | Year 2 SFH physical component summary |
| 22 | SFH_PF03 | Num | 8 | Year 2 SFH physical functioning |
| 23 | SFH_RE03 | Num | 8 | Year 2 SFH role emotion |
| 24 | SFH_RP03 | Num | 8 | Year 2 SFH role physical |
| 25 | SFH_SF03 | Num | 8 | Year 2 SFH social functioning |
| 26 | SFH_VT03 | Num | 8 | Year 2 SFH vitality |
| 27 | SFH0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v3_sfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | SFV01 study_id |
| 5 | SFV10 | Char | 15 | SFV10 Position |
| 6 | SFV12 | Num | 8 | SFV12 visit_num |
| 7 | SFV13 | Num | 8 | SFV13 interval_num |
| 8 | SFV14 | Num | 8 | SFV14 stage_num |
| 9 | SFV15 | Num | 8 | SFV15 seq_num |
| 10 | SFV16 | Char | 10 | SFV16 vlabel |
| 11 | SFV17 | Num | 8 | SFV17 repeats |
| 12 | SFV19 | Char | 15 | SFV19 qa_grade |
| 13 | SFV20 | Char | 15 | SFV20 qa_status |
| 14 | SFV22B | Char | 8 | SFV22B time |
| 15 | SFV23B | Char | 8 | SFV23B time_best |
| 16 | SFV24B | Char | 8 | SFV24B time_first |
| 17 | SFV25 | Num | 8 | SFV25 trial_seq_num |
| 18 | SFV26 | Num | 8 | SFV26 ranking |
| 19 | SFV27 | Num | 8 | SFV27 temperature |
| 20 | SFV28 | Num | 8 | SFV28 barometric |
| 21 | SFV29 | Num | 8 | SFV29 humidity |
| 22 | SFV30 | Num | 8 | SFV30 fevpd |
| 23 | SFV31 | Num | 8 | SFV31 fvcpd |
| 24 | SFV32 | Num | 8 | SFV32 fefpd |
| 25 | SFV33 | Num | 8 | SFV33 fev1_fvcpd |
| 26 | SFV34 | Num | 8 | SFV34 pefpd |
| 27 | SFV35 | Num | 8 | SFV35 pctfev |
| 28 | SFV36 | Num | 8 | SFV36 petfvc |
| 29 | SFV37 | Num | 8 | SFV37 pctfef2575 |
| 30 | SFV38 | Num | 8 | SFV38 pctpefr |
| 31 | SFV39 | Num | 8 | SFV39 pctfev_fvc |
| 32 | SFV40 | Num | 8 | SFV40 fvc |
| 33 | SFV41 | Num | 8 | SFV41 flag_fvc_best |
| 34 | SFV42B | Char | 8 | SFV42B trials_time |
| 35 | SFV43 | Num | 8 | SFV43 fev05 |
| 36 | SFV44 | Num | 8 | SFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV45 | Num | 8 | SFV45 fev1 |
| 38 | SFV46 | Num | 8 | SFV46 flag_fev_best |
| 39 | SFV47 | Num | 8 | SFV47 fev1fvc |
| 40 | SFV48 | Num | 8 | SFV48 flag_fevfvc_best |
| 41 | SFV49 | Num | 8 | SFV49 fev3 |
| 42 | SFV50 | Num | 8 | SFV50 fev3fvc |
| 43 | SFV51 | Num | 8 | SFV51 fev6 |
| 44 | SFV52 | Num | 8 | SFV52 fef212 |
| 45 | SFV53 | Num | 8 | SFV53 fef2575 |
| 46 | SFV54 | Num | 8 | SFV54 flag_fef2575_best |
| 47 | SFV55 | Num | 8 | SFV55 fef25756 |
| 48 | SFV56 | Num | 8 | SFV56 fef25 |
| 49 | SFV57 | Num | 8 | SFV57 fef50 |
| 50 | SFV58 | Num | 8 | SFV58 fef506 |
| 51 | SFV59 | Num | 8 | SFV59 fef75 |
| 52 | SFV60 | Num | 8 | SFV60 fef756 |
| 53 | SFV61 | Num | 8 | SFV61 fef7585 |
| 54 | SFV62 | Num | 8 | SFV62 pefr |
| 55 | SFV63 | Num | 8 | SFV63 flag_pefr_best |
| 56 | SFV64 | Num | 8 | SFV64 met |
| 57 | SFV65 | Num | 8 | SFV65 peft |
| 58 | SFV66 | Num | 8 | SFV66 vext |
| 59 | SFV67 | Num | 8 | SFV67 pctvext |
| 60 | SFV68 | Num | 8 | SFV68 expt |
| 61 | SFV71 | Num | 8 | SFV71 fivc |
| 62 | SFV72 | Num | 8 | SFV72 fiv05 |
| 63 | SFV73 | Num | 8 | SFV73 fiv05fivc |
| 64 | SFV74 | Num | 8 | SFV74 fiv1 |
| 65 | SFV75 | Num | 8 | SFV75 fiv1fivc |
| 66 | SFV76 | Num | 8 | SFV76 fiv3 |
| 67 | SFV77 | Num | 8 | SFV77 pifr |
| 68 | SFV78 | Num | 8 | SFV78 fif212 |
| 69 | SFV79 | Num | 8 | SFV79 fif2575 |
| 70 | SFV80 | Num | 8 | SFV80 mit |
| 71 | VERSION | Char | 21 | Version |
| 72 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 73 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 74 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 75 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v3_sgr_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SGR0 | Char | 1 | SGR01 Describe current health |
| 5 | SGR01 | Num | 8 | SGR01 chest trouble: I cough: |
| 6 | SGR02 | Num | 8 | SGR02 chest trouble: I bring up phlegm (sputum): |
| 7 | SGR03 | Num | 8 | SGR03 chest trouble: I have had shortness of breath: |
| 8 | SGR04 | Num | 8 | SGR04 chest trouble: I have attacks of wheezing: |
| 9 | SGR05 | Char | 1 | SGR05 Number of attacks |
| 10 | SGR06 | Char | 1 | SGR06 Days with little chest trouble |
| 11 | SGR07 | Char | 1 | SGR07 Wheeze in morning |
| 12 | SGR08 | Char | 1 | SGR08 Describe chest condition |
| 13 | SGR09A | Char | 1 | SGR09A Feel breathless:Getting washed or dressed |
| 14 | SGR09B | Char | 1 | SGR09B Feel breathless:Walking around the home |
| 15 | SGR09C | Char | 1 | SGR09C Feel breathless:Walking outside on the level |
| 16 | SGR09D | Char | 1 | SGR09D Feel breathless:Walking up a flight of stairs |
| 17 | SGR09E | Char | 1 | SGR09E Feel breathless:Walking up hills |
| 18 | SGR10A | Char | 1 | SGR10A About cough and breathlessness: Painful cough |
| 19 | SGR10B | Char | 1 | SGR10B About cough and breathlessness: Tiring cough |
| 20 | SGR10C | Char | 1 | SGR10C About cough and breathlessness: Breathless when talking |
| 21 | SGR10D | Char | 1 | SGR10D About cough and breathlessness: Breathless when bending over |
| 22 | SGR10E | Char | 1 | SGR10E About cough and breathlessness: Coughing/breathing disturbs sleep |
| 23 | SGR10F | Char | 1 | SGR10F About cough and breathlessness: Easily exhausted |
| 24 | SGR11A | Char | 1 | SGR11A Effect of chest trouble: Embarrassed in public |
| 25 | SGR11B | Char | 1 | SGR11B Effect of chest trouble: Chest trouble annoys others |
| 26 | SGR11C | Char | 1 | SGR11C Effect of chest trouble: Feeling panicked when out of breath |
| 27 | SGR11D | Char | 1 | SGR11D Effect of chest trouble: Chest problem beyond control |
| 28 | SGR11E | Char | 1 | SGR11E Effect of chest trouble: Frail/invalid |
| 29 | SGR11F | Char | 1 | SGR11F Effect of chest trouble: Exercise is unsafe |
| 30 | SGR11G | Char | 1 | SGR11G Effect of chest trouble: Effort |
| 31 | SGR12A | Char | 1 | SGR12A Activities effected by respiratory problems: Long time washing/dressing |
| 32 | SGR12B | Char | 1 | SGR12B Activities effected by respiratory problems: Long time bathing |
| 33 | SGR12C | Char | 1 | SGR12C Activities effected by respiratory problems: Walking slowly/pausing often |
| 34 | SGR12D | Char | 1 | SGR12D Activities effected by respiratory problems: Long time doing housework |
| 35 | SGR12E | Char | 1 | SGR12E Activities effected by respiratory problems: Walking up stairs |
| 36 | SGR12F | Char | 1 | SGR12F Activities effected by respiratory problems: Difficulty walking fast |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SGR12G | Char | 1 | SGR12G Activities effected by respiratory problems: Difficulty performing moderate <br> tasks |
| 38 | SGR12H | Char | 1 | SGR12H Activities effected by respiratory problems: Difficulty performing hard tasks |
| 39 | SGR13A | Char | 1 | SGR13A Activities usually effected by chest: Cannot play sports or games |
| 40 | SGR13B | Char | 1 | SGR13B Activities usually effected by chest: Cannot go out for recreation |
| 41 | SGR13C | Char | 1 | SGR13C Activities usually effected by chest: Cannot go out shopping |
| 42 | SGR13D | Char | 1 | SGR13DActivities usually effected by chest: Cannot do housework |
| 43 | SGR13E | Num | 8 | SGR14 Personal effects of chest trouble |
| 44 | SGR14 | Char | 21 | Version |
| 45 | VERSION | SGR13E Activities usually effected by chest: Cannot move far from bed/chair |  |  |
| 46 | SGR_SYMPTOMSCORE03 | Num | 8 | Year 2 SGR symptom score |
| 47 | SGR_ACTIVITYSCORE03 | Num | 8 | Year 2 SGR activity score |
| 48 | SGR_IMPACTSCORE03 | Num | 8 | Year 2 SGR impact score |
| 49 | SGR_TOTALSCORE03 | Num | 8 | Year 2 SGR total score |
| 50 | SGR0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v3_smw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SMW01 | Num | 8 | SMW01 Medications taken since post-bronchodilator spirometry |
| 5 | SMW01A1 | Char | 45 | SMW01A1 Medication name |
| 6 | SMW01A2 | Char | 20 | SMW01A2 Dose |
| 7 | SMW01A3 | Char | 5 | SMW01A3 Time |
| 8 | SMW01A3_AMPM | Char | 1 | SMW01A3_AMPM AM/PM |
| 9 | SMW01B1 | Char | 45 | SMW01B1 Medication name |
| 10 | SMW01B2 | Char | 20 | SMW01B2 Dose |
| 11 | SMW01B3 | Char | 5 | SMW01B3 Time |
| 12 | SMW01B3_AMPM | Char | 1 | SMW01B3_AMPM AM/PM |
| 13 | SMW01C1 | Char | 45 | SMW01C1 Medication name |
| 14 | SMW01C2 | Char | 20 | SMW01C2 Dose |
| 15 | SMW01C3 | Char | 5 | SMW01C3 Time |
| 16 | SMW01C3_AMPM | Char | 1 | SMW01C3_AMPM AM/PM |
| 17 | SMW02 | Char | 1 | SMW02 blood pressure taken more than 4 hours prior to SMW |
| 18 | SMW02A | Num | 8 | SMW02A Systolic |
| 19 | SMW02B | Num | 8 | SMW02B Diastolic |
| 20 | SMW03 | Char | 1 | SMW03 Supplemental Oxygen |
| 21 | SMW03A | Num | 8 | SMW03A Supplemental Oxygen Flow rate |
| 22 | SMW03B | Char | 1 | SMW03B Flow Type |
| 23 | SMW04A | Num | 8 | SMW04A Oxygen saturation (SpO2) at rest prior to SMW |
| 24 | SMW04B | Num | 8 | SMW04B Pulse at rest prior to SMW |
| 25 | SMW05 | Char | 1 | SMW05 Was continuous oximetry recorded? |
| 26 | SMW06 | Char | 5 | SMW06 Start time of 6MW |
| 27 | SMW06_AMPM | Char | 1 | SMW06_AMPM AM/PM |
| 28 | SMW07A | Num | 8 | SMW07A Oxygen saturation (SpO2) immediately following SMW |
| 29 | SMW07B | Num | 8 | SMW07B Pulse immediately following SMW |
| 30 | SMW07C | Num | 8 | SMW07C Breathlessness Score immediately following SMW |
| 31 | SMW07D | Num | 8 | SMW07D Exertion score immediately following SMW |
| 32 | SMW08A | Char | 1 | SMW08A Type of SMW course used (meters, feet, or other) |
| 33 | SMW08A1 | Char | 100 | SMW08A1 Specify other type of SMW course used |
| 34 | SMW08B | Num | 8 | SMW08B Number of full laps |
| 35 | SMW08C | Num | 8 | SMW08C Distance walked final partial lap |
| 36 | SMW09 | Char | 1 | SMW09 Stopped before 6 minutes |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SMW09A1 | Num | 8 | SMW09A1 Duration (minutes) |
| 38 | SMW09A2 | Num | 8 | SMW09A2 Duration (seconds) |
| 39 | SMW09B1 | Num | 8 | SMW09B1 Primary reason for stopping/not walking faster: Desaturation to LT 80\% |
| 40 | SMW09B2 | Num | 8 | SMW09B2 Primary reason for stopping/not walking faster: Orthopedic pain |
| 41 | SMW09B3 | Num | 8 | SMW09B3 Primary reason for stopping/not walking faster: Muscle pain |
| 42 | SMW09B4 | Num | 8 | SMW09B4 Primary reason for stopping/not walking faster: Breathlessness |
| 43 | SMW09B5 | Num | 8 | SMW09B5 Primary reason for stopping/not walking faster: Adverse Event |
| 44 | SMW09B5A | Num | 8 | SMW09B5A SMW related AE: Angina |
| 45 | SMW09B5B | Num | 8 | SMW09B5B SMW related AE: Lightheadedness |
| 46 | SMW09B5C | Num | 8 | SMW09B5C SMW related AE: Intolerable dyspnea |
| 47 | SMW09B5D | Num | 8 | SMW09B5D SMW related AE: Leg cramps |
| 48 | SMW09B5E | Num | 8 | SMW09B5E SMW related AE: Staggering |
| 49 | SMW09B5F | Num | 8 | SMW09B5F SMW related AE: Diaphoresis |
| 50 | SMW09B5G | Num | 8 | SMW09B5G SMW related AE: Pale or ashen appearance |
| 51 | SMW09B5H | Num | 8 | SMW09B5H SMW related AE: Mental confusion or headache |
| 52 | SMW09B5I | Num | 8 | SMW09B5I SMW related AE: Other |
| 53 | SMW09B5ISP | Char | 100 | SMW09B5ISP Explain other AE related to SMW |
| 54 | VERSION | Char | 21 | Version |
| 55 | SMW0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v3_ssv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | SSV01 study_id |
| 5 | SSV10 | Char | 15 | SSV10 position |
| 6 | SSV12 | Num | 8 | SSV12 visit_num |
| 7 | SSV13 | Num | 8 | SSV13 interval_num |
| 8 | SSV14 | Num | 8 | SSV14 stage_num |
| 9 | SSV15 | Num | 8 | SSV15 seq_num |
| 10 | SSV16 | Char | 5 | SSV16 vlabel |
| 11 | SSV17 | Num | 8 | SSV17 repeats |
| 12 | SSV19 | Char | 15 | SSV19 qa_grade |
| 13 | SSV20 | Char | 15 | SSV20 qa_status |
| 14 | SSV22B | Char | 8 | SSV22B time |
| 15 | SSV23B | Char | 8 | SSV23B time_best |
| 16 | SSV24B | Char | 8 | SSV24B time_first |
| 17 | SSV25B | Char | 8 | SSV25B trials_time |
| 18 | SSV26 | Num | 8 | SSV26 trial_seq_num |
| 19 | SSV27 | Num | 8 | SSV27 ranking |
| 20 | SSV28 | Num | 8 | SSV28 temperature |
| 21 | SSV29 | Num | 8 | SSV29 barometric |
| 22 | SSV30 | Num | 8 | SSV30 humidity |
| 23 | SSV31 | Num | 8 | SSV31 pre_washout_1 |
| 24 | SSV33 | Num | 8 | SSV33 svc |
| 25 | SSV34 | Num | 8 | SSV34 svcpd |
| 26 | SSV35 | Num | 8 | SSV35 pctsvc |
| 27 | SSV36 | Num | 8 | SSV36 flag_svc_best |
| 28 | SSV37 | Num | 8 | SSV37 ic |
| 29 | SSV38 | Num | 8 | SSV38 irv |
| 30 | SSV39 | Num | 8 | SSV39 erv |
| 31 | SSV40 | Num | 8 | SSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v3_vsa_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | VSA01 | Char | 1 | VSA01 1 MET |
| 5 | VSA02 | Char | 1 | VSA02 2 METs |
| 6 | VSA03 | Char | 1 | VSA03 3 METs |
| 7 | VSA04 | Char | 1 | VSA04 4 METs |
| 8 | VSA05 | Char | 1 | VSA05 5 METs |
| 9 | VSA06 | Char | 1 | VSA06 6 METs |
| 10 | VSA07 | Char | 1 | VSA07 7 METs |
| 11 | VSA08 | Char | 1 | VSA08 8 METs |
| 12 | VSA09 | Char | 1 | VSA09 9 METs |
| 13 | VSA10 | Char | 1 | VSA10 10 METs |
| 14 | VSA11 | Char | 1 | VSA11 11 METs |
| 15 | VSA12 | Char | 1 | VSA12 12 METs |
| 16 | VSA13 | Char | 1 | VSA13 13 METs |
| 17 | VERSION | Char | 21 | Version |
| 18 | VSASCORE03 | Num | 8 | Year 2 veteran specific activity score |
| 19 | VSA0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_ant_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ANT01 | Char | 1 | ANT01 Assessment of ability to stand |
| 5 | ANT02 | Num | 8 | ANT02 Standing Height (cm) |
| 6 | ANT03 | Num | 8 | ANT03 Weight (kg) |
| 7 | ANT04 | Num | 8 | ANT04 BMI |
| 8 | ANT05 | Num | 8 | ANT05 Arm Span (cm) |
| 9 | ANT06A | Num | 8 | ANT06A Waist (cm) |
| 10 | ANT06B | Num | 8 | ANT06B Hip (cm) |
| 11 | ANT06C | Num | 8 | ANT06C Neck (cm) |
| 12 | VERSION | Char | 21 | Version |
| 13 | ANT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_bio_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BIO01 | Char | 1 | BIO01 Fasting before appointment? |
| 5 | BIO02 | Char | 5 | BIO02 Time most recently eaten |
| 6 | BIO02_AMPM | Char | 1 | BIO02_AMPM Recently eaten AM/PM |
| 7 | BIO04 | Char | 5 | BIO04 Collection time |
| 8 | BIO04_AMPM | Char | 1 | BIO04_AMPM Blood collection time AM/PM |
| 9 | BIO05 | Num | 8 | BIO05 Number of venipuncture attempts |
| 10 | BIO06 | Char | 1 | BIO06 Incidents/Problems drawing blood? |
| 11 | BIO07A1 | Num | 8 | BIO07A1 Tube 1 Sample Not Drawn |
| 12 | BIO07A2 | Num | 8 | BIO07A2 Tube 2 Sample Not Drawn |
| 13 | BIO07A3 | Num | 8 | BIO07A3 Tube 3 Sample Not Drawn |
| 14 | BIO07A4 | Num | 8 | BIO07A4 Tube 4 Sample Not Drawn |
| 15 | BIO07A5 | Num | 8 | BIO07A5 Tube 5 Sample Not Drawn |
| 16 | BIO07A6 | Num | 8 | BIO07A6 Tube 6 Sample Not Drawn |
| 17 | BIO07A7 | Num | 8 | BIO07A7 Tube 7 Sample Not Drawn |
| 18 | BIO07A8 | Num | 8 | BIO07A8 Tube 8 Sample Not Drawn |
| 19 | BIO07A9 | Num | 8 | BIO07A9 Tube 9 Sample Not Drawn |
| 20 | BIO07B1 | Num | 8 | BIO07B1 Tube 1 Partial sample drawn |
| 21 | BIO07B2 | Num | 8 | BIO07B2 Tube 2 Partial sample drawn |
| 22 | BIO07B3 | Num | 8 | BIO07B3 Tube 3 Partial sample drawn |
| 23 | BIO07B4 | Num | 8 | BIO07B4 Tube 4 Partial sample drawn |
| 24 | BIO07B5 | Num | 8 | BIO07B5 Tube 5 Partial sample drawn |
| 25 | BIO07B6 | Num | 8 | BIO07B6 Tube 6 Partial sample drawn |
| 26 | BIO07B7 | Num | 8 | BIO07B7 Tube 7 Partial sample drawn |
| 27 | BIO07B8 | Num | 8 | BIO07B8 Tube 8 Partial sample drawn |
| 28 | BIO07B9 | Num | 8 | BIO07B9 Tube 9 Partial sample drawn |
| 29 | BIO07C1 | Num | 8 | BIO07C1 Tube 1 Tourniquet reapplied |
| 30 | BIO07C2 | Num | 8 | BIO07C2 Tube 2 Tourniquet reapplied |
| 31 | BIO07C3 | Num | 8 | BIO07C3 Tube 3 Tourniquet reapplied |
| 32 | BIO07C4 | Num | 8 | BIO07C4 Tube 4 Tourniquet reapplied |
| 33 | BIO07C5 | Num | 8 | BIO07C5 Tube 5 Tourniquet reapplied |
| 34 | BIO07C6 | Num | 8 | BIO07C6 Tube 6 Tourniquet reapplied |
| 35 | BIO07C7 | Num | 8 | BIO07C7 Tube 7 Tourniquet reapplied |
| 36 | BIO07C8 | Num | 8 | BIO07C8 Tube 8 Tourniquet reapplied |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BIO07C9 | Num | 8 | BIO07C9 Tube 9 Tourniquet reapplied |
| 38 | BIO07D1 | Num | 8 | BIO07D1 Tube 1 Fist clenching |
| 39 | BIO07D2 | Num | 8 | BIO07D2 Tube 2 Fist clenching |
| 40 | BIO07D3 | Num | 8 | BIO07D3 Tube 3 Fist clenching |
| 41 | BIO07D4 | Num | 8 | BIO07D4 Tube 4 Fist clenching |
| 42 | BIO07D5 | Num | 8 | BIO07D5 Tube 5 Fist clenching |
| 43 | BIO07D6 | Num | 8 | BIO07D6 Tube 6 Fist clenching |
| 44 | BIO07D7 | Num | 8 | BIO07D7 Tube 7 Fist clenching |
| 45 | BIO07D8 | Num | 8 | BIO07D8 Tube 8 Fist clenching |
| 46 | BIO07D9 | Num | 8 | BIO07D9 Tube 9 Fist clenching |
| 47 | BIO07E1 | Num | 8 | BIO07E1 Tube 1 Needle movement |
| 48 | BIO07E2 | Num | 8 | BIO07E2 Tube 2 Needle movement |
| 49 | BIO07E3 | Num | 8 | BIO07E3 Tube 3 Needle movement |
| 50 | BIO07E4 | Num | 8 | BIO07E4 Tube 4 Needle movement |
| 51 | BIO07E5 | Num | 8 | BIO07E5 Tube 5 Needle movement |
| 52 | BIO07E6 | Num | 8 | BIO07E6 Tube 6 Needle movement |
| 53 | BIO07E7 | Num | 8 | BIO07E7 Tube 7 Needle movement |
| 54 | BIO07E8 | Num | 8 | BIO07E8 Tube 8 Needle movement |
| 55 | BIO07E9 | Num | 8 | BIO07E9 Tube 9 Needle movement |
| 56 | BIO07F1 | Num | 8 | BIO07F1 Tube 1 Participant reclining |
| 57 | BIO07F2 | Num | 8 | BIO07F2 Tube 2 Participant reclining |
| 58 | BIO07F3 | Num | 8 | BIO07F3 Tube 3 Participant reclining |
| 59 | BIO07F4 | Num | 8 | BIO07F4 Tube 4 Participant reclining |
| 60 | BIO07F5 | Num | 8 | BIO07F5 Tube 5 Participant reclining |
| 61 | BIO07F6 | Num | 8 | BIO07F6 Tube 6 Participant reclining |
| 62 | BIO07F7 | Num | 8 | BIO07F7 Tube 7 Participant reclining |
| 63 | BIO07F8 | Num | 8 | BIO07F8 Tube 8 Participant reclining |
| 64 | BIO07F9 | Num | 8 | BIO07F9 Tube 9 Participant reclining |
| 65 | BIO10A | Char | 5 | BIO10A Tube 1: Time processed |
| 66 | BIO10A_AMPM | Char | 1 | BIO10A_AMPM Tube 1: Processed AM/PM |
| 67 | BIO10B | Char | 1 | BIO10B Tube 1: Problems Processing? |
| 68 | BIO10B1 | Num | 8 | BIO10B1 Tube 1: Broken tube |
| 69 | BIO10B2 | Num | 8 | BIO10B2 Tube 1: Sample re-centrifuged |
| 70 | BIO10B3 | Num | 8 | BIO10B3 Tube 1: Clotted |
| 71 | BIO10B4 | Num | 8 | BIO10B4 Tube 1: Hemolyzed |
| 72 | BIO10B5 | Num | 8 | BIO10B5 Tube 1: Lipemic |
| 73 | BIO10B6 | Num | 8 | BIO10B6 Tube 1: Other |
| 74 | BIO10B6A | Char | 30 | BIO10B6A Tube 1:Specify Problem Processing |
| 75 | BIO10C | Num | 8 | BIO10C Tube 1: Number of aliquots |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BIO10D | Num | 8 | BIO10D Tube 1: Volume in last four aliquots |
| 77 | BIO10E | Num | 8 | BIO10E Tube 1: Freezer box number |
| 78 | BIO10F | Char | 5 | BIO10F Tube 1: Time aliquots placed in freezer |
| 79 | BIO10F_AMPM | Char | 1 | BIO10F_AMPM Tube 1: Freezer AM/PM |
| 80 | BIO11A | Char | 5 | BIO11A Tube 2: Time processed |
| 81 | BIO11A_AMPM | Char | 1 | BIO11A_AMPM Tube 2: Processed AM/PM |
| 82 | BIO11B | Char | 1 | BIO11B Tube 2: Problems processing? |
| 83 | BIO11B1 | Num | 8 | BIO11B1 Tube 2: Broken tube |
| 84 | BIO11B2 | Num | 8 | BIO11B2 Tube 2: Sample re-centrifuged |
| 85 | BIO11B3 | Num | 8 | BIO11B3 Tube 2: Clotted |
| 86 | BIO11B4 | Num | 8 | BIO11B4 Tube 2: Hemolyzed |
| 87 | BIO11B5 | Num | 8 | BIO11B5 Tube 2: Lipemic |
| 88 | BIO11B6 | Num | 8 | BIO11B6 Tube 2: Other |
| 89 | BIO11B6A | Char | 30 | BIO11B6A Tube 2:Specify Problem Processing |
| 90 | BIO11C | Num | 8 | BIO11C Tube 2: Number of aliquots |
| 91 | BIO11D | Num | 8 | BIO11D Tube 2: Volume in last four aliquots |
| 92 | BIO11E | Num | 8 | BIO11E Tube 2: Freezer box number |
| 93 | BIO11F | Char | 5 | BIO11F Tube 2: Time aliquots placed in freezer |
| 94 | BIO11F_AMPM | Char | 1 | BIO11F_AMPM Tube 2: Freezer AM/PM |
| 95 | BIO12A | Char | 5 | BIO12A Tube 3: Time processed |
| 96 | BIO12A_AMPM | Char | 1 | BIO12A_AMPM Tube 3: Processed AM/PM |
| 97 | BIO12B | Char | 1 | BIO12B Tube 3: Problems processing? |
| 98 | BIO12B1 | Num | 8 | BIO12B1 Tube 3: Broken tube |
| 99 | BIO12B2 | Num | 8 | BIO12B2 Tube 3: Sample re-centrifuged |
| 100 | BIO12B3 | Num | 8 | BIO12B3 Tube 3: Clotted |
| 101 | BIO12B4 | Num | 8 | BIO12B4 Tube 3: Hemolyzed |
| 102 | BIO12B5 | Num | 8 | BIO12B5 Tube 3: Lipemic |
| 103 | BIO12B6 | Num | 8 | BIO12B6 Tube 3: Other |
| 104 | BIO12C | Num | 8 | BIO12C Tube 3: Number of aliquots |
| 105 | BIO12D | Num | 8 | BIO12D Tube 3: Volume in last four aliquots |
| 106 | BIO12E | Num | 8 | BIO12E Tube 3: Freezer box number |
| 107 | BIO12F | Char | 5 | BIO12F Tube 3: Time aliquots placed in freezer |
| 108 | BIO12F_AMPM | Char | 1 | BIO12F_AMPM Tube 3: Freezer AM/PM |
| 109 | BIO13A | Char | 5 | BIO13A Tube 4: Time processed |
| 110 | BIO13A_AMPM | Char | 1 | BIO13A_AMPM Tube 4:Processed AM/PM |
| 111 | BIO13B | Char | 1 | BIO13B Tube 4: Problems processing? |
| 112 | BIO13B1 | Num | 8 | BIO13B1 Tube 4: Broken tube |
| 113 | BIO13B2 | Num | 8 | BIO13B2 Tube 4: Sample re-centrifuged |
| 114 | BIO13B3 | Num | 8 | BIO13B3 Tube 4: Clotted |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BIO13B4 | Num | 8 | BIO13B4 Tube 4: Hemolyzed |
| 116 | BIO13B5 | Num | 8 | BIO13B5 Tube 4: Lipemic |
| 117 | BIO13B6 | Num | 8 | BIO13B6 Tube 4: Other |
| 118 | BIO13B6A | Char | 30 | BIO13B6A Tube 4:Specify Problem Processing |
| 119 | BIO13C | Num | 8 | BIO13C Tube 4: Number of aliquots |
| 120 | BIO13D | Num | 8 | BIO13D Tube 4: Volume in last four aliquots |
| 121 | BIO13E | Num | 8 | BIO13E Tube 4: Freezer box number |
| 122 | BIO13F | Char | 5 | BIO13F Tube 4: Time aliquots placed in freezer |
| 123 | BIO13F_AMPM | Char | 1 | BIO13F_AMPM Tube 4:Freezer AM/PM |
| 124 | BIO14A | Char | 5 | BIO14A Tube 5: Time processed |
| 125 | BIO14A_AMPM | Char | 1 | BIO14A_AMPM Tube 5:Processed AM/PM |
| 126 | BIO14B | Char | 1 | BIO14B Tube 5: Problems processing? |
| 127 | BIO14B1 | Num | 8 | BIO14B1 Tube 5: Broken tube |
| 128 | BIO14B2 | Num | 8 | BIO14B2 Tube 5: Sample re-centrifuged |
| 129 | BIO14B3 | Num | 8 | BIO14B3 Tube 5: Clotted |
| 130 | BIO14B4 | Num | 8 | BIO14B4 Tube 5: Hemolyzed |
| 131 | BIO14B5 | Num | 8 | BIO14B5 Tube 5: Lipemic |
| 132 | BIO14B6 | Num | 8 | BIO14B6 Tube 5: Other |
| 133 | BIO14B6A | Char | 30 | BIO14B6A Tube 5:Specify Problem Processing |
| 134 | BIO14C | Num | 8 | BIO14C Tube 5: Number of aliquots |
| 135 | BIO14D | Num | 8 | BIO14D Tube 5: Volume in last four aliquots |
| 136 | BIO14E | Num | 8 | BIO14E Tube 5: Freezer box number |
| 137 | BIO14F | Char | 5 | BIO14F Tube 5: Time aliquots placed in freezer |
| 138 | BIO14F_AMPM | Char | 1 | BIO14F_AMPM Tube 5:Freezer AM/PM |
| 139 | BIO15A | Char | 5 | BIO15A Tube 6: Time processed |
| 140 | BIO15A_AMPM | Char | 1 | BIO15A_AMPM Tube 6:Processed AM/PM |
| 141 | BIO15B | Char | 1 | BIO15B Tube 6: Problems processing? |
| 142 | BIO15B1 | Num | 8 | BIO15B1 Tube 6: Broken tube |
| 143 | BIO15B2 | Num | 8 | BIO15B2 Tube 6: Sample re-centrifuged |
| 144 | BIO15B3 | Num | 8 | BIO15B3 Tube 6: Clotted |
| 145 | BIO15B4 | Num | 8 | BIO15B4 Tube 6: Hemolyzed |
| 146 | BIO15B5 | Num | 8 | BIO15B5 Tube 6: Lipemic |
| 147 | BIO15B6 | Num | 8 | BIO15B6 Tube 6: Other |
| 148 | BIO15C | Num | 8 | BIO15C Tube 6: Number of aliquots |
| 149 | BIO15D | Num | 8 | BIO15D Tube 6: Volume in last four aliquots |
| 150 | BIO15E | Num | 8 | BIO15E Tube 6: Freezer box number |
| 151 | BIO15F | Char | 5 | BIO15F Tube 6: Time aliquots placed in freezer |
| 152 | BIO15F_AMPM | Char | 1 | BIO15F_AMPM Tube 6:Freezer AM/PM |
| 153 | BIO16A | Char | 5 | BIO16A Tube 7: Time sent to clinical center lab: |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | BIO16A_AMPM | Char | 1 | BIO16A_AMPM Tube 7: Sent to clinical lab AM/PM |
| 155 | BIO17A | Char | 5 | BIO17A Tube 8: Time processed |
| 156 | BIO17A_AMPM | Char | 1 | BIO17A_AMPM Tube 8:Processed AM/PM |
| 157 | BIO17B | Char | 1 | BIO17B Tube 8: Problems processing? |
| 158 | BIO17B1 | Num | 8 | BIO17B1 Tube 8: Broken tube |
| 159 | BIO17B2 | Num | 8 | BIO17B2 Tube 8: Sample re-centrifuged |
| 160 | BIO17B3 | Num | 8 | BIO17B3 Tube 8: Clotted |
| 161 | BIO17B4 | Num | 8 | BIO17B4 Tube 8: Hemolyzed |
| 162 | BIO17B5 | Num | 8 | BIO17B5 Tube 8: Lipemic |
| 163 | BIO17B6 | Num | 8 | BIO17B6 Tube 8: Other |
| 164 | BIO17B6A | Char | 30 | BIO17B6A Tube 8:Specify Problem Processing |
| 165 | BIO17C | Num | 8 | BIO17C Tube 8: Number of aliquots |
| 166 | BIO17D | Num | 8 | BIO17D Tube 8: Volume in last four aliquots |
| 167 | BIO17E | Num | 8 | BIO17E Tube 8: Freezer box number |
| 168 | BIO17F | Char | 5 | BIO17F Tube 8: Time aliquots placed in freezer |
| 169 | BIO17F_AMPM | Char | 1 | BIO17F_AMPM Tube 8:Freezer AM/PM |
| 170 | BIO18B | Char | 5 | BIO18B Tube 9: Time placed in freezer |
| 171 | BIO18B_AMPM | Char | 1 | BIO18B_AMPM Tube 9:Freezer AM/PM |
| 172 | BIO18C | Char | 1 | BIO18C Tube 9: Problems processing? |
| 173 | BIO18C1 | Num | 8 | BIO18C1 Tube 9: Broken tube |
| 174 | BIO18C2 | Num | 8 | BIO18C2 Tube 9: Sample re-centrifuged |
| 175 | BIO18C3 | Num | 8 | BIO18C3 Tube 9: Clotted |
| 176 | BIO18C4 | Num | 8 | BIO18C4 Tube 9: Hemolyzed |
| 177 | BIO18C5 | Num | 8 | BIO18C5 Tube 9: Lipemic |
| 178 | BIO18C6 | Num | 8 | BIO18C6 Tube 9: Other |
| 179 | BIO18C6A | Char | 30 | BIO18C6A Tube 9:Specify Problem Processing |
| 180 | BIO18D | Num | 8 | BIO18D Tube 9: Freezer box number |
| 181 | BIO19 | Char | 1 | BIO19 Urine sample collected |
| 182 | BIO21 | Char | 5 | BIO21 Time urine sample collected |
| 183 | BIO21_AMPM | Char | 1 | BIO21_AMPM urine sample collected AM/PM |
| 184 | BIO22 | Char | 5 | BIO22 Time urine sample processed |
| 185 | BIO22_AMPM | Char | 1 | BIO22 AMPM urine sample processed AM/PM |
| 186 | BIO23 | Num | 8 | BIO23 Number of aliquots with preservative: |
| 187 | BIO24 | Num | 8 | BIO24 Number of aliquots without preservative: |
| 188 | BIO25 | Char | 1 | BIO25 Able to become pregnant? |
| 189 | BIO26 | Char | 1 | BIO26 Pregnancy test requested? |
| 190 | BIO26A | Char | 1 | BIO26A Pregnant? |
| 191 | BIO24A | Char | 5 | BIO24A Time urine sample entered freezer |
| 192 | BIO24A_AMPM | Char | 1 | BIO24A_AMPM |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 193 | VERSION | Char | 21 | Version |
| 194 | BIO0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 195 | BIO03_DAYS | Num | 8 | BIO03 Date of blood collection - Days from enrollment |
| 196 | BIO18A_DAYS | Num | 8 | BIO18A Tube 9: Date placed in freezer - Days from enrollment |
| 197 | BIO20_DAYS | Num | 8 | BIO20 Date of urine sample: - Days from enrollment |

Data Set Name: v4_bpf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BPF01 | Char | 1 | BPF01 Right arm blood pressure |
| 5 | BPF02 | Num | 8 | BPF02 Arm circumference |
| 6 | BPF03 | Char | 1 | BPF03 Cuff size |
| 7 | BPF04 | Num | 8 | BPF04 Respiration Rate |
| 8 | BPF05 | Char | 5 | BPF05 Time first blood pressure taken |
| 9 | BPF05_AMPM | Char | 1 | BPF05_AMPM first bp measurement AM/PM |
| 10 | BPF05A | Num | 8 | BPF05A First Systolic |
| 11 | BPF05B | Num | 8 | BPF05B First Diastolic |
| 12 | BPF05C | Num | 8 | BPF05C First Heart Rate |
| 13 | BPF06 | Char | 5 | BPF06 Time second blood pressure taken: |
| 14 | BPF06_AMPM | Char | 1 | BPF06_AMPM second BP measurement AM/PM |
| 15 | BPF06A | Num | 8 | BPF05A Second Systolic |
| 16 | BPF06B | Num | 8 | BPF05B Second Diastolic |
| 17 | BPF06C | Num | 8 | BPF05C Second Heart Rate |
| 18 | BPF07 | Char | 5 | BPF07 Time third blood pressure taken: |
| 19 | BPF07_AMPM | Char | 1 | BPF07_AMPM third BP measurement AM/PM |
| 20 | BPF07A | Num | 8 | BPF05A Third Systolic |
| 21 | BPF07B | Num | 8 | BPF05B Third Diastolic |
| 22 | BPF07C | Num | 8 | BPF05C Third Heart Rate |
| 23 | BPF08A | Num | 8 | BPF08A Average Systolic |
| 24 | BPF08B | Num | 8 | BPF08B Average Diastolic |
| 25 | BPF08C | Num | 8 | BPF08C Average Heart Rate |
| 26 | VERSION | Char | 21 | Version |
| 27 | BPF0A_DAYS | Num | 8 | BPF0A Form Date - Days from enrollment |
|  |  |  |  |  |
|  |  | BPa |  |  |

## Data Set Name: v4_bsq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | BSQ01 | Char | 1 | BSQ01 Snore |
| 5 | BSQ02 | Num | 8 | BSQ02 Describe snore |
| 6 | BSQ03 | Num | 8 | BSQ03 Snoring frequency |
| 7 | BSQ04 | Char | 1 | BSQ04 Bothersome snoring |
| 8 | BSQ05 | Num | 8 | BSQ05 Breathing during sleep |
| 9 | BSQ06 | Char | 1 | BSQ06 Fatigue after sleep |
| 10 | BSQ07 | Char | 1 | BSQ07 Fatigue during waking time |
| 11 | BSQ08 | Char | 1 | BSQ08 Fatigue while driving |
| 12 | BSQ09 | Char | 1 | BSQ09 Frequency of fatigue while driving |
| 13 | BSQ10 | Char | 1 | BSQ10 High blood pressure |
| 14 | VERSION | Char | 21 | Version |
| 15 | BSQ_APNEARISK04 | Char | 5 | Year 3 Berlin Sleep apnea risk |
| 16 | BSQ0A_DAYS | Num | 8 | FORM Date - Days from enrollment |

Data Set Name: v4_cat_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CAT01 | Char | 1 | CAT01 Never cough |
| 5 | CAT02 | Char | 1 | CAT02 No phlegm |
| 6 | CAT03 | Char | 1 | CAT03 No chest tightness |
| 7 | CAT04 | Char | 1 | CAT04 Not out of breath |
| 8 | CAT05 | Char | 1 | CAT05 Not limited at home |
| 9 | CAT06 | Char | 1 | CAT06 Confidence leaving home |
| 10 | CAT07 | Char | 1 | CAT07 Sound sleeping |
| 11 | CAT08 | Char | 1 | CAT08 Energy level |
| 12 | VERSION | Char | 21 | Version |
| 13 | CAT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_dem_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | DEM01A | Num | 8 | DEM01A Age |
| 5 | DEM02 | Char | 2 | DEM02 Highest grade completed |
| 6 | DEM03 | Char | 1 | DEM03 Marital status |
| 7 | DEM04 | Char | 1 | DEM04 Total yearly household income |
| 8 | VERSION | Char | 21 | Version |
| 9 | DEM0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_derv_cbc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | CBC03_DERV | Num | 8 | 3) Total red blood cells |
| 5 | CBC04_DERV | Num | 8 | 4) Hemoglobin |
| 6 | CBC05_DERV | Num | 8 | 5) Hemacrit |
| 7 | CBC06_DERV | Num | 8 | 6) Mean corpuscular volume |
| 8 | CBC07_DERV | Num | 8 | 7) Red blood cell distribution width |
| 9 | CBC08_DERV | Num | 8 | 8) Total white blood cells |
| 10 | CBC09_DERV | Num | 8 | 9) Neutrophil granulocyte |
| 11 | CBC10_DERV | Num | 8 | 10) Lymphocytes |
| 12 | CBC11_DERV | Num | 8 | 11) Monocytes |
| 13 | CBC12_DERV | Num | 8 | 12) Eosinophil granuloctyes |
| 14 | CBC13_DERV | Num | 8 | 13) Basophil granuloctyes |
| 15 | CBC14_DERV | Num | 8 | 14) Platelet Count |
| 16 | CBC15_DERV | Num | 8 | 15) Mean Platelet Volume |
| 17 | CBC16_DERV | Char | 2000 | 16) Comments: |
| 18 | CBC09A_DERV | Num | 8 | 9a) Neutrophil granulocyte \% |
| 19 | CBC10A_DERV | Num | 8 | 10a) Lymphocyte \% |
| 20 | CBC11A_DERV | Num | 8 | 11a) Monocyte \% |
| 21 | CBC12A_DERV | Num | 8 | 12a) Eosinophil granuloctye \% |
| 22 | CBC13A_DERV | Num | 8 | 13a) Basophil granuloctye \% |
| 23 | VERSION | Char | 21 | Version |
| 24 | CBC0A_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 25 | CBC01_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 26 | CBC02_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_derv_post_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | study_id |
| 5 | PFV10 | Char | 15 | Position |
| 6 | PFV12 | Num | 8 | visit_num |
| 7 | PFV13 | Num | 8 | interval_num |
| 8 | PFV14 | Num | 8 | stage_num |
| 9 | PFV15 | Num | 8 | seq_num |
| 10 | PFV16 | Char | 15 | vlabel |
| 11 | PFV17 | Num | 8 | repeats |
| 12 | PFV22B | Char | 8 | time |
| 13 | PFV23B | Char | 8 | time_best |
| 14 | PFV24B | Char | 8 | time_first |
| 15 | PFV27 | Num | 8 | temperature |
| 16 | PFV28 | Num | 8 | barometric |
| 17 | PFV29 | Num | 8 | humidity |
| 18 | VERSION | Char | 21 | Version |
| 19 | PFV31_DERV | Num | 8 | Fvcpd_derv |
| 20 | PFV36_DERV | Num | 8 | Pctfvc_derv |
| 21 | PFV40_DERV | Num | 8 | Fvc_derv |
| 22 | PFV41 | Num | 8 | flag_fvc_best |
| 23 | PFV49_DERV | Num | 8 | Fev3_derv |
| 24 | PFV51_DERV | Num | 8 | Fev6_derv |
| 25 | PFV68_DERV | Num | 8 | Expt_derv |
| 26 | PFV71_DERV | Num | 8 | Fivc_derv |
| 27 | PFV72_DERV | Num | 8 | Fiv05_derv |
| 28 | PFV73_DERV | Num | 8 | Fiv05fivc_derv |
| 29 | PFV74_DERV | Num | 8 | Fiv1_derv |
| 30 | PFV75_DERV | Num | 8 | Fiv1fivc_derv |
| 31 | PFV76_DERV | Num | 8 | Fiv3_derv |
| 32 | PFV78_DERV | Num | 8 | Fif212_derv |
| 33 | PFV79_DERV | Num | 8 | Fif2575_derv |
| 34 | PFV80_DERV | Num | 8 | Mit_derv |
| 35 | PFV30_DERV | Num | 8 | Fevpd_derv |
| 36 | PFV35_DERV | Num | 8 | Pctfev_derv |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV43_DERV | Num | 8 | Fev05_derv |
| 38 | PFV45_DERV | Num | 8 | Fev1_derv |
| 39 | PFV46 | Num | 8 | flag_fev_best |
| 40 | PFV66_DERV | Num | 8 | Vext_derv |
| 41 | PFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | PFV69_DERV | Num | 8 | RVSPCA_derv |
| 43 | PFV70_DERV | Num | 8 | Fevdiff_derv |
| 44 | PFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 45 | PFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 46 | PFV44_DERV | Num | 8 | Fev05fvc_derv |
| 47 | PFV47_DERV | Num | 8 | Fev1fvc_derv |
| 48 | PFV48 | Num | 8 | flag_fevfvc_best |
| 49 | PFV50_DERV | Num | 8 | Fev3fvc_derv |
| 50 | PFV32_DERV | Num | 8 | Fefpd_derv |
| 51 | PFV37_DERV | Num | 8 | Pctfef2575_derv |
| 52 | PFV52_DERV | Num | 8 | Fef212_derv |
| 53 | PFV53_DERV | Num | 8 | Fef2575_derv |
| 54 | PFV54 | Num | 8 | flag_fef2575_best |
| 55 | PFV55_DERV | Num | 8 | Fef25756_derv |
| 56 | PFV56_DERV | Num | 8 | Fef25_derv |
| 57 | PFV57_DERV | Num | 8 | Fef50_derv |
| 58 | PFV58_DERV | Num | 8 | Fef506_derv |
| 59 | PFV59_DERV | Num | 8 | Fef75_derv |
| 60 | PFV60_DERV | Num | 8 | Fef756_derv |
| 61 | PFV61_DERV | Num | 8 | Fef7585_derv |
| 62 | PFV64_DERV | Num | 8 | Met_derv |
| 63 | PFV34_DERV | Num | 8 | Pefpd_derv |
| 64 | PFV38_DERV | Num | 8 | Pctpefr_derv |
| 65 | PFV62_DERV | Num | 8 | Pefr_derv |
| 66 | PFV63 | Num | 8 | flag_pefr_best |
| 67 | PFV65_DERV | Num | 8 | Peft_derv |
| 68 | PFV77_DERV | Num | 8 | Pifr_derv |
| 69 | POST_FEV1FVC_DERV | Num | 8 | post_BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 70 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 71 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 72 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 73 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v4_derv_post_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | study_id |
| 5 | PSV10 | Char | 15 | position |
| 6 | PSV12 | Num | 8 | visit_num |
| 7 | PSV13 | Char | 15 | interval_num |
| 8 | PSV14 | Num | 8 | stage_num |
| 9 | PSV15 | Num | 8 | seq_num |
| 10 | PSV16 | Char | 5 | vlabel |
| 11 | PSV17 | Num | 8 | repeats |
| 12 | PSV19 | Char | 15 | qa_grade |
| 13 | PSV20 | Char | 15 | qa_status |
| 14 | PSV23B | Char | 8 | time_best |
| 15 | PSV24B | Char | 8 | time_first |
| 16 | PSV28 | Num | 8 | temperature |
| 17 | PSV29 | Num | 8 | barometric |
| 18 | PSV30 | Num | 8 | humidity |
| 19 | PSV32 | Char | 5 | tom |
| 20 | VERSION | Char | 21 | Version |
| 21 | PSV33_DERV | Num | 8 | Svc_derv |
| 22 | PSV34_DERV | Num | 8 | Svcpd_derv |
| 23 | PSV35_DERV | Num | 8 | Pctsvc_derv |
| 24 | PSV36 | Num | 8 | flag_svc_best |
| 25 | PSV37_DERV | Num | 8 | IC_derv |
| 26 | PSV38_DERV | Num | 8 | IRV_derv |
| 27 | PSV39_DERV | Num | 8 | ERV_derv |
| 28 | PSV40_DERV | Num | 8 | TV_derv |
| 29 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 30 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 31 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 32 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v4_derv_pre_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | study_id |
| 5 | SFV10 | Char | 15 | Position |
| 6 | SFV12 | Num | 8 | visit_num |
| 7 | SFV13 | Num | 8 | interval_num |
| 8 | SFV14 | Num | 8 | stage_num |
| 9 | SFV15 | Num | 8 | seq_num |
| 10 | SFV16 | Char | 10 | vlabel |
| 11 | SFV17 | Num | 8 | repeats |
| 12 | SFV22B | Num | 8 | Mit_derv |
| 13 | SFV23B | Num | 8 | Fevpd_derv |
| 14 | SFV24B | 8 | time |  |
| 34 | Num | 8 | Pctfev_derv |  |
| 35 | SFV27 | Shar | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV43_DERV | Num | 8 | Fev05_derv |
| 38 | SFV45_DERV | Num | 8 | Fev1_derv |
| 39 | SFV46 | Num | 8 | flag_fev_best |
| 40 | SFV66_DERV | Num | 8 | Vext_derv |
| 41 | SFV67_DERV | Num | 8 | Pctvext_derv |
| 42 | SFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 43 | SFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 44 | SFV44_DERV | Num | 8 | Fev05fvc_derv |
| 45 | SFV47_DERV | Num | 8 | Fev1fvc_derv |
| 46 | SFV48 | Num | 8 | flag_fevfvc_best |
| 47 | SFV50_DERV | Num | 8 | Fev3fvc_derv |
| 48 | SFV32_DERV | Num | 8 | Fefpd_derv |
| 49 | SFV37_DERV | Num | 8 | Pctfef2575_derv |
| 50 | SFV52_DERV | Num | 8 | Fef212_derv |
| 51 | SFV53_DERV | Num | 8 | Fef2575_derv |
| 52 | SFV54 | Num | 8 | flag_fef2575_best |
| 53 | SFV55_DERV | Num | 8 | Fef25756_derv |
| 54 | SFV56_DERV | Num | 8 | Fef25_derv |
| 55 | SFV57_DERV | Num | 8 | Fef50_derv |
| 56 | SFV58_DERV | Num | 8 | Fef506_derv |
| 57 | SFV59_DERV | Num | 8 | Fef75_derv |
| 58 | SFV60_DERV | Num | 8 | Fef756_derv |
| 59 | SFV61_DERV | Num | 8 | Fef7585_derv |
| 60 | SFV64_DERV | Num | 8 | Met_derv |
| 61 | SFV34_DERV | Num | 8 | Pefpd_derv |
| 62 | SFV38_DERV | Num | 8 | Pctpefr_derv |
| 63 | SFV62_DERV | Num | 8 | Pefr_derv |
| 64 | SFV63 | Num | 8 | flag_pefr_best |
| 65 | SFV65_DERV | Num | 8 | Peft_derv |
| 66 | SFV77_DERV | Num | 8 | Pifr_derv |
| 67 | PRE_FEV1FVC_DERV | Num | 8 | pre-BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 68 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 69 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 70 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 71 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v4_derv_pre_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | study_id |
| 5 | SSV10 | Char | 15 | position |
| 6 | SSV12 | Num | 8 | visit_num |
| 7 | SSV13 | Num | 8 | interval_num |
| 8 | SSV14 | Num | 8 | stage_num |
| 9 | SSV15 | Num | 8 | seq_num |
| 10 | SSV16 | Char | 5 | vlabel |
| 11 | SSV17 | Num | 8 | repeats |
| 12 | SSV19 | Char | 15 | qa_grade |
| 13 | SSV20 | Char | 15 | qa_status |
| 14 | SSV23B | Char | 8 | time_best |
| 15 | SSV28 | Num | 8 | temperature |
| 16 | SSV29 | Num | 8 | barometric |
| 17 | SSV30 | Num | 8 | humidity |
| 18 | SSV31 | Num | 8 | pre_washout_1 |
| 19 | VERSION | Char | 21 | Version |
| 20 | SSV33_DERV | Num | 8 | Svc_derv |
| 21 | SSV34_DERV | Num | 8 | Svcpd_derv |
| 22 | SSV35_DERV | Num | 8 | Pctsvc_derv |
| 23 | SSV36 | Num | 8 | flag_svc_best |
| 24 | SSV37_DERV | Num | 8 | IC_derv |
| 25 | SSV38_DERV | Num | 8 | IRV_derv |
| 26 | SSV39_DERV | Num | 8 | ERV_derv |
| 27 | SSV40_DERV | Num | 8 | TV_derv |
| 28 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 29 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 30 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 31 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v4_eca_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECA1 | Char | 1 | 1. Have you ever used an electronic cigarette or eCigarette? |
| 5 | ECA3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 6 | ECA3B | Char | 1 | 3b. If yes, what flavor was it? |
| 7 | ECA4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 8 | ECA5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 9 | ECA5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 10 | ECA5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 11 | ECA5C1 | Num | 8 | 5 c 1 . If Yes, about how many fewer cigarettes do you now smoke? |
| 12 | ECA6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 13 | ECA7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 14 | ECA8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 15 | ECA9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 16 | ECA9B | Char | 100 | 9b. Specify: |
| 17 | ECA10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 18 | ECA11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 19 | ECA12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 20 | ECA13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 21 | ECA14A | Num | 8 | how long did you smoke eCigarettes days |
| 22 | ECA14B | Num | 8 | how long did you smoke eCigarettes months |
| 23 | ECA14C | Num | 8 | how long did you smoke eCigarettes years |
| 24 | ECA15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 25 | ECA15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 26 | ECA15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 27 | ECA16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 28 | ECA17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 29 | ECA17A | Char | 100 | 17a. Specify: |
| 30 | ECA18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 31 | ECA19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 32 | VERSION | Char | 21 | Version |
| 33 | ECA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 34 | ECA2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v4_ecf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ECF0C | Char | 1 | Oc. Has this participant previously completed the ECA - eCigarette Use Assessment form? |
| 5 | ECF1 | Char | 1 | 1. Have you used electronic cigarettes or eCigarettes since your last visit? |
| 6 | ECF3A | Char | 1 | 3a. Usually were the eCigarettes you smoke/smoked with flavorings? |
| 7 | ECF3B | Char | 1 | 3b. If yes, what flavor was it? |
| 8 | ECF4 | Char | 1 | 4. Do you still smoke eCigarettes? |
| 9 | ECF5A | Char | 1 | 5a. Do you still smoke regular tobacco cigarettes? |
| 10 | ECF5B | Num | 8 | 5b. If Yes, how many regular cigarettes do you smoke a day: |
| 11 | ECF5C | Char | 1 | 5c. Has your use of eCigarettes decreased the number of regular cigarettes you smoke each day? |
| 12 | ECF5C1 | Num | 8 | 5c1. If Yes, about how many fewer cigarettes do you now smoke? |
| 13 | ECF6 | Char | 1 | 6. How often do you smoke eCigarettes? |
| 14 | ECF7 | Char | 1 | 7. When did you last smoke an eCigarette? |
| 15 | ECF8 | Num | 8 | 8. In the last 24 hours, how many times have you smoked an eCigarette? |
| 16 | ECF9A | Char | 1 | 9a. What brand of eCigarette do you now smoke? |
| 17 | ECF9B | Char | 100 | 9b. Specify: |
| 18 | ECF10A | Char | 1 | 10a. What cartridge size do you use most often with your eCigarettes? |
| 19 | ECF11 | Num | 8 | 11. In one week, how many eCigarette cartridges do you use? |
| 20 | ECF12 | Char | 1 | 12. Did you start smoking eCigarettes because you wanted to cut down or stop smoking regular cigarettes? |
| 21 | ECF13 | Char | 1 | 13. Did you start smoking eCigarettes because you wanted to improve your health? |
| 22 | ECF14A | Num | 8 | how long did you smoke eCigarettes days |
| 23 | ECF14B | Num | 8 | how long did you smoke eCigarettes months |
| 24 | ECF14C | Num | 8 | how long did you smoke eCigarettes years |
| 25 | ECF15A | Num | 8 | how long has it been since you smoked eCigarettes days |
| 26 | ECF15B | Num | 8 | how long has it been since you smoked eCigarettes months |
| 27 | ECF15C | Num | 8 | how long has it been since you smoked eCigarettes years |
| 28 | ECF16 | Char | 1 | 16. When did you did smoke eCigarettes, how often did you smoke eCigarettes? |
| 29 | ECF17 | Char | 1 | 17. What brand of eCigarette did you usually smoke? |
| 30 | ECF17A | Char | 100 | 17a. Specify: |
| 31 | ECF18A | Char | 1 | 18a. What size cartridge did you use most often with your eCigarettes? |
| 32 | ECF19 | Num | 8 | 19. On average, in one week, how many eCigarette cartridges did you use? |
| 33 | VERSION | Char | 21 | Version |
| 34 | ECF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 35 | ECF2_DAYS | Num | 8 | Date first started smoking eCigarettes - Days from enrollment |

## Data Set Name: v4_eha_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | EHA1 | Char | 1 | 1. Has your employment status changed in the last 12 months? (If 'No' or 'No Answer', go to item 18.) |
| 5 | EHA2 | Char | 1 | 2. How has your employment situation changed in the last 12 months? Have you (Please read all <br> options before recording answer): |
| 6 | EHA7 | Num | 8 | 7. On average, how many hours per week do you work? |
| 7 | EHA8 | Char | 1 | 8. Does your current job expose you to vapors, gas, dust or fumes? |
| 8 | EHA9 | Char | 1 | 9. Did you leave your last job because of breathing or lung problems? |
| 9 | EHA10 | Char | 1 | 10. Did your last job expose you to vapors, gas, dust or fumes? |
| 10 | EHA11 | Char | 1 | 11. Are you no longer working at your last job at least in part to avoid the things that caused you <br> difficulty breathing, such as air quality, temperature, or physical exertion? |
| 11 | EHA12 | Char | 1 | 12. Thinking back to when you were last employed, did you stop working, at least in part, because of <br> missed time due to illness? |
| 12 | EHA13A | Char | 1 | 13a. in a cotton, flax or hemp mill? |
| 13 | EHA13A1 | Num | 8 | 13a1. How many years? |
| 14 | EHA13B | Char | 1 | 13b. in a foundry? |
| 15 | EHA13B1 | Num | 8 | 13b1. How many years? |
| 16 | EHA13C | Char | 1 | 13c. in a glass works? |
| 17 | EHA13C1 | Num | 8 | 13c1. How many years? |
| 18 | EHA13D | Char | 1 | 13d. in a mine? |
| 19 | EHA13D1 | Num | 8 | 13d1. How many years? |
| 20 | EHA13E | Char | 1 | 13e. in a pottery? |
| 21 | EHA13E1 | Num | 8 | 13e1. How many years? |
| 22 | EHA13F | Char | 1 | 13f. in a power plant? |
| 23 | EHA13F1 | Num | 8 | 13f1. How many years? |
| 24 | EHA13G | Char | 1 | 13g. in a quarry? |
| 25 | EHA13G1 | Num | 8 | 13g1. How many years? |
| 26 | EHA13H | Char | 1 | 13h. in a refinery? |
| 27 | EHA13H1 | Num | 8 | 13h1. How many years? |
| 28 | EHA13I | Char | 1 | 13i. or with asbestos? |
| 29 | EHA13I1 | Num | 8 | 13i1. How many years? |
| 30 | EHA13J | Char | 1 | 13j. in synthetic fibers or fabric manufacturing? |
| 31 | EHA13J1 | Num | 8 | 13j1. How many years? |
| 32 | EHA13K | Char | 1 | 13k. in a paper mill? |
| 33 | EHA13K1 | Num | 8 | 13k1. How many years? |
| 34 | EHA13L | Char | 1 | 13l. in building or highway construction? |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 35 | EHA13L1 | Num | 8 | 1311. How many years? |
| 36 | EHA13M | Char | 1 | 13 m . in an aluminum factory? |
| 37 | EHA13M1 | Num | 8 | 13m1. How many years? |
| 38 | EHA13N | Char | 1 | 13n. in a rubber tire plant? |
| 39 | EHA13N1 | Num | 8 | 13n1. How many years? |
| 40 | EHA13O | Char | 1 | 13o. in HVAC? |
| 41 | EHA13O1 | Num | 8 | 13o1. How many years? |
| 42 | EHA13P | Char | 1 | 13p. in demolition? |
| 43 | EHA13P1 | Num | 8 | 13p1. How many years? |
| 44 | EHA13Q | Char | 1 | 13q. in remodeling? |
| 45 | EHA13Q1 | Num | 8 | 13q1. How many years? |
| 46 | EHA13R | Char | 1 | 13r. in professional cleaning? |
| 47 | EHA13R1 | Num | 8 | 13r1. How many years? |
| 48 | EHA13S | Char | 1 | 13s. in beauty care? |
| 49 | EHA13S1 | Num | 8 | 13s1. How many years? |
| 50 | EHA13T | Char | 1 | 13t. in agriculture? |
| 51 | EHA13T1 | Num | 8 | 13t1. How many years? |
| 52 | EHA13U | Char | 1 | 13u. in the flooring industry? |
| 53 | EHA13U1 | Num | 8 | 13u1. How many years? |
| 54 | EHA14A | Char | 1 | 14a. a boilermaker? |
| 55 | EHA14A1 | Num | 8 | 14a1. How many years? |
| 56 | EHA14B | Char | 1 | 14b. a carpenter? |
| 57 | EHA14B1 | Num | 8 | 14b1. How many years? |
| 58 | EHA14C | Char | 1 | 14c. a chemical worker? |
| 59 | EHA14C1 | Num | 8 | 14c1. How many years? |
| 60 | EHA14D | Char | 1 | 14d. an electrician? |
| 61 | EHA14D1 | Num | 8 | 14d1. How many years? |
| 62 | EHA14E | Char | 1 | 14e. an elevator operator? |
| 63 | EHA14E1 | Num | 8 | 14e1. How many years? |
| 64 | EHA14F | Char | 1 | 14f. an insulator? |
| 65 | EHA14F1 | Num | 8 | 14f1. How many years? |
| 66 | EHA14G | Char | 1 | 14g. a lather? |
| 67 | EHA14G1 | Num | 8 | 14g1. How many years? |
| 68 | EHA14H | Char | 1 | 14h. a machinist? |
| 69 | EHA14H1 | Num | 8 | 14h1. How many years? |
| 70 | EHA14I | Char | 1 | 14i. a mechanic? |
| 71 | EHA14I1 | Num | 8 | 14i1. How many years? |
| 72 | EHA14J | Char | 1 | 14j. a millwright? |
| 73 | EHA14J1 | Num | 8 | 14j1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | EHA14K | Char | 1 | 14k. a pipefitter? |
| 75 | EHA14K1 | Num | 8 | 14k1. How many years? |
| 76 | EHA14L | Char | 1 | 141. a plasterer? |
| 77 | EHA14L1 | Num | 8 | 1411. How many years? |
| 78 | EHA14M | Char | 1 | 14m. a plumber? |
| 79 | EHA14M1 | Num | 8 | 14m1. How many years? |
| 80 | EHA14N | Char | 1 | 14n. a sander? |
| 81 | EHA14N1 | Num | 8 | 14n1. How many years? |
| 82 | EHA14O | Char | 1 | 14o. a sheet metal worker? |
| 83 | EHA14O1 | Num | 8 | 14o1. How many years? |
| 84 | EHA14P | Char | 1 | 14p. a steelworker? |
| 85 | EHA14P1 | Num | 8 | 14p1. How many years? |
| 86 | EHA14Q | Char | 1 | 14q. a welder? |
| 87 | EHA14Q1 | Num | 8 | 14q1. How many years? |
| 88 | EHA14R | Char | 1 | 14r. a pig farmer? |
| 89 | EHA14R1 | Num | 8 | 14r1. How many years? |
| 90 | EHA14S | Char | 1 | 14s. a rigger? |
| 91 | EHA14S1 | Num | 8 | 14s1. How many years? |
| 92 | EHA14T | Char | 1 | 14t. a roofer? |
| 93 | EHA14T1 | Num | 8 | 14t1. How many years? |
| 94 | EHA14U | Char | 1 | 14u. a painter? |
| 95 | EHA14U1 | Num | 8 | 14u1. How many years? |
| 96 | EHA14V | Char | 1 | 14 v . a mason? |
| 97 | EHA14V1 | Num | 8 | 14v1. How many years? |
| 98 | EHA15A | Char | 1 | 15a. Irritant gases, such as chlorine or ammonia? |
| 99 | EHA15A1 | Num | 8 | 15a1. How many years? |
| 100 | EHA15B | Char | 1 | 15b. Fire, smoke or other combustion products? |
| 101 | EHA15B1 | Num | 8 | 15b1. How many years? |
| 102 | EHA15C | Char | 1 | 15c. Incinerators, boilers, or oil refineries? |
| 103 | EHA15C1 | Num | 8 | 15c1. How many years? |
| 104 | EHA15D | Char | 1 | 15d. Coal dust or powder? |
| 105 | EHA15D1 | Num | 8 | 15d1. How many years? |
| 106 | EHA15E | Char | 1 | 15e. Silica or sand, or concrete or cement dust? |
| 107 | EHA15E1 | Num | 8 | 15e1. How many years? |
| 108 | EHA15F | Char | 1 | 15f. Indoor fuel powered motors, compressors, or engines? |
| 109 | EHA15F1 | Num | 8 | 15f1. How many years? |
| 110 | EHA15G | Char | 1 | 15 g . Diesel engine exhaust? |
| 111 | EHA15G1 | Num | 8 | 15g1. How many years? |
| 112 | EHA15H | Char | 1 | 15h. Wheat flour or other grain dusts? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 113 | EHA15H1 | Num | 8 | 15h1. How many years? |
| 114 | EHA15I | Char | 1 | 15i. Animal feeds or fodder? |
| 115 | EHA15I1 | Num | 8 | 15i1. How many years? |
| 116 | EHA15J | Char | 1 | 15 j . Cotton dust or cotton processing? |
| 117 | EHA15J1 | Num | 8 | 15j1. How many years? |
| 118 | EHA15K | Char | 1 | 15k. Wood dust or saw dust? |
| 119 | EHA15K1 | Num | 8 | 15k1. How many years? |
| 120 | EHA15L | Char | 1 | 151. Cadmium fumes or batteries or sliver solder? |
| 121 | EHA15L1 | Num | 8 | 1511. How many years? |
| 122 | EHA15M | Char | 1 | 15m. Other metal dusts or metal fumes? |
| 123 | EHA15M1 | Num | 8 | 15m1. How many years? |
| 124 | EHA15N | Char | 1 | 15n. Welding or flame cutting? |
| 125 | EHA15N1 | Num | 8 | 15n1. How many years? |
| 126 | EHA15O | Char | 1 | 150. Fiberglass or other man-made mineral fibers? |
| 127 | EHA15O1 | Num | 8 | 1501. How many years? |
| 128 | EHA15P | Char | 1 | 15p. Explosives or blasting fumes? |
| 129 | EHA15P1 | Num | 8 | 15p1. How many years? |
| 130 | EHA16 | Char | 1 | 16. What type of mine was it? |
| 131 | EHA16A | Char | 50 | 16a. Specify: |
| 132 | EHA17 | Char | 1 | 17. What was mined? |
| 133 | EHA17A | Char | 50 | 17a. Specify: |
| 134 | EHA18A | Char | 1 | 18a. in a cotton, flax or hemp mill? |
| 135 | EHA18A1 | Num | 8 | 18a1. How many years? |
| 136 | EHA18B | Char | 1 | 18b. in a foundry? |
| 137 | EHA18B1 | Num | 8 | 18b1. How many years? |
| 138 | EHA18C | Char | 1 | 18c. in a glass works? |
| 139 | EHA18C1 | Num | 8 | 18c1. How many years? |
| 140 | EHA18D | Char | 1 | 18d. in a mine? |
| 141 | EHA18D1 | Num | 8 | 18d1. How many years? |
| 142 | EHA18E | Char | 1 | 18e. in a pottery? |
| 143 | EHA18E1 | Num | 8 | 18e1. How many years? |
| 144 | EHA18F | Char | 1 | 18f. in a power plant? |
| 145 | EHA18F1 | Num | 8 | 18f1. How many years? |
| 146 | EHA18G | Char | 1 | 18g. in a quarry? |
| 147 | EHA18G1 | Num | 8 | 18g1. How many years? |
| 148 | EHA18H | Char | 1 | 18h. in a refinery? |
| 149 | EHA18H1 | Num | 8 | 18h1. How many years? |
| 150 | EHA18I | Char | 1 | 18i. or with asbestos? |
| 151 | EHA18I1 | Num | 8 | 18i1. How many years? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 152 | EHA18J | Char | 1 | 18j. in synthetic fibers or fabric manufacturing? |
| 153 | EHA18J1 | Num | 8 | 18j1. How many years? |
| 154 | EHA18K | Char | 1 | 18k. in a paper mill? |
| 155 | EHA18K1 | Num | 8 | 18k1. How many years? |
| 156 | EHA18L | Char | 1 | 181. in building or highway construction? |
| 157 | EHA18L1 | Num | 8 | 1811. How many years? |
| 158 | EHA18M | Char | 1 | 18 m . in an aluminum factory? |
| 159 | EHA18M1 | Num | 8 | 18m1. How many years? |
| 160 | EHA18N | Char | 1 | 18n. in a rubber tire plant? |
| 161 | EHA18N1 | Num | 8 | 18n1. How many years? |
| 162 | EHA18O | Char | 1 | 180. in HVAC? |
| 163 | EHA18O1 | Num | 8 | 18o1. How many years? |
| 164 | EHA18P | Char | 1 | 18p. in demolition? |
| 165 | EHA18P1 | Num | 8 | 18p1. How many years? |
| 166 | EHA18Q | Char | 1 | 18q. in remodeling? |
| 167 | EHA18Q1 | Num | 8 | 18q1. How many years? |
| 168 | EHA18R | Char | 1 | 18r. in professional cleaning? |
| 169 | EHA18R1 | Num | 8 | 18r1. How many years? |
| 170 | EHA18S | Char | 1 | 18s. in beauty care? |
| 171 | EHA18S1 | Num | 8 | 18s1. How many years? |
| 172 | EHA18T | Char | 1 | 18t. in agriculture? |
| 173 | EHA18T1 | Num | 8 | 18t1. How many years? |
| 174 | EHA18U | Char | 1 | 18u. in the flooring industry? |
| 175 | EHA18U1 | Num | 8 | 18u1. How many years? |
| 176 | EHA19A | Char | 1 | 19a. a boilermaker? |
| 177 | EHA19A1 | Num | 8 | 19a1. How many years? |
| 178 | EHA19B | Char | 1 | 19b. a carpenter? |
| 179 | EHA19B1 | Num | 8 | 19b1. How many years? |
| 180 | EHA19C | Char | 1 | 19c. a chemical worker? |
| 181 | EHA19C1 | Num | 8 | 19c1. How many years? |
| 182 | EHA19D | Char | 1 | 19d. an electrician? |
| 183 | EHA19D1 | Num | 8 | 19d1. How many years? |
| 184 | EHA19E | Char | 1 | 19e. an elevator operator? |
| 185 | EHA19E1 | Num | 8 | 19e1. How many years? |
| 186 | EHA19F | Char | 1 | 19f. an insulator? |
| 187 | EHA19F1 | Num | 8 | 19f1. How many years? |
| 188 | EHA19G | Char | 1 | 19g. a lather? |
| 189 | EHA19G1 | Num | 8 | 19g1. How many years? |
| 190 | EHA19H | Char | 1 | 19h. a machinist? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 191 | EHA19H1 | Num | 8 | 19h1. How many years? |
| 192 | EHA19I | Char | 1 | 19i. a mechanic? |
| 193 | EHA19I1 | Num | 8 | 19i1. How many years? |
| 194 | EHA19J | Char | 1 | 19j. a millwright? |
| 195 | EHA19J1 | Num | 8 | 19j1. How many years? |
| 196 | EHA19K | Char | 1 | 19k. a pipefitter? |
| 197 | EHA19K1 | Num | 8 | 19k1. How many years? |
| 198 | EHA19L | Char | 1 | 191. a plasterer? |
| 199 | EHA19L1 | Num | 8 | 1911. How many years? |
| 200 | EHA19M | Char | 1 | 19m. a plumber? |
| 201 | EHA19M1 | Num | 8 | 19m1. How many years? |
| 202 | EHA19N | Char | 1 | 19n. a sander? |
| 203 | EHA19N1 | Num | 8 | 19n1. How many years? |
| 204 | EHA19O | Char | 1 | 190. a sheet metal worker? |
| 205 | EHA19O1 | Num | 8 | 19o1. How many years? |
| 206 | EHA19P | Char | 1 | 19p. a steelworker? |
| 207 | EHA19P1 | Num | 8 | 19p1. How many years? |
| 208 | EHA19Q | Char | 1 | 19q. a welder? |
| 209 | EHA19Q1 | Num | 8 | 19q1. How many years? |
| 210 | EHA19R | Char | 1 | 19r. a pig farmer? |
| 211 | EHA19R1 | Num | 8 | 19r1. How many years? |
| 212 | EHA19S | Char | 1 | 19s. a rigger? |
| 213 | EHA19S1 | Num | 8 | 19s1. How many years? |
| 214 | EHA19T | Char | 1 | 19t. a roofer? |
| 215 | EHA19T1 | Num | 8 | 19t1. How many years? |
| 216 | EHA19U | Char | 1 | 19u. a painter? |
| 217 | EHA19U1 | Num | 8 | 19u1. How many years? |
| 218 | EHA19V | Char | 1 | 19v. a mason? |
| 219 | EHA19V1 | Num | 8 | 19v1. How many years? |
| 220 | EHA20A | Char | 1 | 20a. Irritant gases, such as chlorine or ammonia? |
| 221 | EHA20A1 | Num | 8 | 20a1. How many years? |
| 222 | EHA20B | Char | 1 | 20b. Fire, smoke or other combustion products? |
| 223 | EHA20B1 | Num | 8 | 20b1. How many years? |
| 224 | EHA20C | Char | 1 | 20c. Incinerators, boilers, or oil refineries? |
| 225 | EHA20C1 | Num | 8 | 20c1. How many years? |
| 226 | EHA20D | Char | 1 | 20d. Coal dust or powder? |
| 227 | EHA20D1 | Num | 8 | 20d1. How many years? |
| 228 | EHA20E | Char | 1 | 20e. Silica or sand, or concrete or cement dust? |
| 229 | EHA20E1 | Num | 8 | 20e1. How many years? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 230 | EHA20F | Char | 1 | 20f. Indoor fuel powered motors, compressors, or engines? |
| 231 | EHA20F1 | Num | 8 | 20f1. How many years? |
| 232 | EHA20G | Char | 1 | 20g. Diesel engine exhaust? |
| 233 | EHA20G1 | Num | 8 | 20g1. How many years? |
| 234 | EHA20H | Char | 1 | 20h. Wheat flour or other grain dusts? |
| 235 | EHA20H1 | Num | 8 | 20h1. How many years? |
| 236 | EHA201 | Char | 1 | 20i. Animal feeds or fodder? |
| 237 | EHA2011 | Num | 8 | 20i1. How many years? |
| 238 | EHA20J | Char | 1 | 20j. Cotton dust or cotton processing? |
| 239 | EHA20J1 | Num | 8 | 20j1. How many years? |
| 240 | EHA20K | Char | 1 | 20k. Wood dust or saw dust? |
| 241 | EHA20K1 | Num | 8 | 20k1. How many years? |
| 242 | EHA20L | Char | 1 | 201. Cadmium fumes or batteries or sliver solder? |
| 243 | EHA20L1 | Num | 8 | 2011. How many years? |
| 244 | EHA20M | Char | 1 | 20m. Other metal dusts or metal fumes? |
| 245 | EHA20M1 | Num | 8 | 20m1. How many years? |
| 246 | EHA20N | Char | 1 | 20n. Welding or flame cutting? |
| 247 | EHA20N1 | Num | 8 | 20n1. How many years? |
| 248 | EHA20O | Char | 1 | 20o. Fiberglass or other man-made mineral fibers? |
| 249 | EHA20O1 | Num | 8 | 20o1. How many years? |
| 250 | EHA20P | Char | 1 | 20p. Explosives or blasting fumes? |
| 251 | EHA20P1 | Num | 8 | 20p1. How many years? |
| 252 | EHA21 | Char | 1 | 21. What type of mine was it? |
| 253 | EHA22 | Char | 1 | 22. What was mined? |
| 254 | EHA22A | Char | 50 | 22a. Specify: |
| 255 | EHA6M | Num | 8 | Month of 6. Approximately what date did you begin working in this job? |
| 256 | EHA6D | Num | 8 | Day of 6. Approximately what date did you begin working in this job? |
| 257 | EHA6Y | Num | 8 | Year of 6. Approximately what date did you begin working in this job? |
| 258 | VERSION | Char | 21 | Version |
| 259 | EHA0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 260 | EHA6_DAYS | Num | 8 | Approximately what date did you begin working in this job? - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v4_fct_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | FCT01 | Char | 1 | FCT01 Lack of energy |
| 5 | FCT02 | Char | 1 | FCT02 Nausea |
| 6 | FCT03 | Char | 1 | FCT03 Physical limitations |
| 7 | FCT04 | Char | 1 | FCT04 Pain |
| 8 | FCT05 | Char | 1 | FCT05 Side effects of treatment |
| 9 | FCT06 | Char | 1 | FCT06 Illness |
| 10 | FCT07 | Char | 1 | FCT07 Forced time in bed |
| 11 | FCT08 | Char | 1 | FCT08 Closeness to friends |
| 12 | FCT09 | Char | 1 | FCT09 Emotional support from family |
| 13 | FCT10 | Char | 1 | FCT10 Support from friends |
| 14 | FCT11 | Char | 1 | FCT11 Family accepted illness |
| 15 | FCT12 | Char | 1 | FCT12 Satisfied with communication |
| 16 | FCT13 | Char | 1 | FCT13 Closeness to partner |
| 17 | FCT14 | Num | 8 | FCT14 Answer or mark box |
| 18 | FCT15 | Char | 1 | FCT15 Satisfaction with sex life |
| 19 | FCT16 | Char | 1 | FCT16 Feeling sad |
| 20 | FCT17 | Char | 1 | FCT17 Satisfaction with coping |
| 21 | FCT18 | Char | 1 | FCT18 Loss of hope |
| 22 | FCT19 | Char | 1 | FCT19 Feeling nervous |
| 23 | FCT20 | Char | 1 | FCT20 Worries about death |
| 24 | FCT21 | Char | 1 | FCT21 Worry about worsening condition |
| 25 | FCT22 | Char | 1 | FCT22 Ability to work |
| 26 | FCT23 | Char | 1 | FCT23 Fulfillment of work |
| 27 | FCT24 | Char | 1 | FCT24 Ability to enjoy life |
| 28 | FCT25 | Char | 1 | FCT25 Acceptance of illness |
| 29 | FCT26 | Char | 1 | FCT26 Sleeping well |
| 30 | FCT27 | Char | 1 | FCT27 Enjoyment of fun activities |
| 31 | FCT28 | Char | 1 | FCT28 Content with quality of life |
| 32 | FCT29 | Char | 1 | FCT29 Feeling fatigued |
| 33 | FCT30 | Char | 1 | FCT30 Feeling weak |
| 34 | FCT31 | Char | 1 | FCT31 Feeling listless |
| 35 | FCT32 | Char | 1 | FCT32 Feeling tired |
| 36 | FCT33 | Char | 1 | FCT33 Trouble starting things |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | FCT34 | Char | 1 | FCT34 Trouble finishing things |
| 38 | FCT35 | Char | 1 | FCT35 Energy |
| 39 | FCT36 | Char | 1 | FCT36 Ability to do usual activities |
| 40 | FCT37 | Char | 1 | FCT37 Need to sleep during day |
| 41 | FCT38 | Char | 1 | FCT38 Too tired to eat |
| 42 | FCT39 | Char | 1 | FCT39 Need helping with usual activities |
| 43 | FCT40 | Char | 1 | FCT40 Frustrated with fatigue |
| 44 | FCT41 | Char | 1 | FCT41 Fatigue limits social activities |
| 45 | VERSION | Char | 21 | Version |
| 46 | FACIT_PHYSICALWELLBEINGSCORE04 | Num | 8 | Year 3 FACIT physical wellbeing score |
| 47 | FACIT_SOCIALWELLBEINGSCORE04 | Num | 8 | Year 3 FACIT social wellbeing score |
| 48 | FACIT_EMOTIONALWELLBEINGSCORE04 | Num | 8 | Year 3 FACIT emotional wellbeing score |
| 49 | FACIT_FUNCTIONALWELLBEINGSCORE04 | Num | 8 | Year 3 FACIT functional wellbeing score |
| 50 | FACIT_FATIGUESCORE04 | Num | 8 | Year 3 FACIT fatigue score |
| 51 | FACIT_FTRIALOUTCOMEINDEX04 | Num | 8 | Year 3 FACIT F trial outcome index score |
| 52 | FACIT_GTOTALSCORE04 | Num | 8 | Year 3 FACIT G total score |
| 53 | FACIT_FTOTALSCORE04 | Num | 8 | Year 3 FACIT F total score |
| 54 | FCT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_hds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HDS01 | Num | 8 | HDS01 Feeling tense |
| 5 | HDS02 | Num | 8 | HDS02 Enjoyment |
| 6 | HDS03 | Char | 1 | HDS03 Feeling fearful |
| 7 | HDS04 | Char | 1 | HDS04 Sense of humor |
| 8 | HDS05 | Num | 8 | HDS05 Worried thoughts |
| 9 | HDS06 | Num | 8 | HDS06 Feeling cheerful |
| 10 | HDS07 | Num | 8 | HDS07 Ability to relax |
| 11 | HDS08 | Num | 8 | HDS09 Feeling frightened |
| 12 | HDS09 | Num | 8 | HDS10 Lost interest in appearance |
| 13 | HDS10 | Num | 8 | HDS11 Feeling restless |
| 14 | HDS11 | Num | 8 | HDS12 Looking forward |
| 15 | HDS12 | Num | 8 | HDS13 Sudden feelings of panic |
| 16 | HDS13 | Num | 8 | HDS14 Ability to enjoy |
| 17 | HDS14 | Char | 21 | Version |
| 18 | VERSION | Num | 8 | Year 3 HDS Anxiety Score |
| 19 | HDS_ANXIETYSCORE04 | Num | 8 | Form Date - Days from enrollment |
| 20 | HDS_DEPRESSIONSCORE04 | Num | 8 | Year 3 HDS Depression Score |
| 21 | HDS0A_DAYS |  |  |  |
|  |  |  |  |  |

## Data Set Name: v4_hef_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | HEF1 | Char | 1 | 1. Since your last (clinic visit or telephone contact) on (date), have you had a flare-up of your chest trouble? |
| 5 | HEF1A | Num | 8 | 1a. How many episodes of chest trouble flare ups have you had since (date)? |
| 6 | HEF2A | Char | 1 | 2a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 7 | HEF2B | Char | 1 | 2b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 8 | HEF2C | Char | 1 | 2c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 9 | HEF2D | Char | 1 | 2d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 10 | HEF2E | Char | 1 | 2e. Were you evaluated in a physician's office or urgent care? |
| 11 | HEF2E1 | Num | 8 | 2e1. An additional antibiotic |
| 12 | HEF2E2 | Num | 8 | 2e2. Additional steroids |
| 13 | HEF2E3 | Num | 8 | 2e3. Don't know |
| 14 | HEF2E4 | Num | 8 | 2e4. Don't remember |
| 15 | HEF2F | Char | 1 | 2f. Were you evaluated in an Emergency Department? |
| 16 | HEF2F1 | Num | 8 | 2f1. An additional antibiotic |
| 17 | HEF2F2 | Num | 8 | 2f2. Additional steroids |
| 18 | HEF2F3 | Num | 8 | 2f3. Don't know |
| 19 | HEF2F4 | Num | 8 | 2f4. Don't remember |
| 20 | HEF2G | Char | 1 | 2g. Were you admitted to the hospital? |
| 21 | HEF4 | Char | 1 | 4. (do not ask) Did the participant have a second episode? |
| 22 | HEF5A | Char | 1 | 5a. Did you take additional antibiotics after contacting your healthcare provider by telephone or email? |
| 23 | HEF5B | Char | 1 | 5b. Did you take additional oral steroids after contacting your healthcare provider by telephone or email? |
| 24 | HEF5C | Char | 1 | 5c. Did you take additional antibiotics but without contacting a healthcare provider? |
| 25 | HEF5D | Char | 1 | 5d. Did you take additional oral steroids but without contacting a healthcare provider? |
| 26 | HEF5E | Char | 1 | 5e. Were you evaluated in a physician's office or urgent care? |
| 27 | HEF5E1 | Num | 8 | 5e1. An additional antibiotic |
| 28 | HEF5E2 | Num | 8 | 5e2. Additional steroids |
| 29 | HEF5E3 | Num | 8 | 5e3. Don't know |
| 30 | HEF5E4 | Num | 8 | 5e4. Don't remember |
| 31 | HEF5F | Char | 1 | 5f. Were you evaluated in an Emergency Department? |
| 32 | HEF5F1 | Num | 8 | 5f1. An additional antibiotic |
| 33 | HEF5F2 | Num | 8 | 5f2. Additional steroids |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 34 | HEF5F3 | Num | 8 | 5f3. Don't know |
| 35 | HEF5F4 | Num | 8 | 5f4. Don't remember |
| 36 | HEF5G | Char | 1 | 5g. Were you admitted to the hospital? |
| 37 | HEF7 | Char | 1 | 7. (do not ask) Did the participant have a third episode? |
| 38 | HEF8A | Char | 1 | 8a. Did you take additional antibiotics after contacting your healthcare provider by telephone or |
| email? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 70 | HEF14A | Char | 1 | 14a. Did you take additional antibiotics after contacting your healthcare provider by telephone or <br> email? |
| 71 | HEF14B | Char | 1 | 14 l 14. Did you take additional oral steroids after contacting your healthcare provider by telephone or |
| email? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 104 | HEF22E | Char | 1 | 22e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 105 | HEF23E | Char | 1 | 23e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 106 | HEF24E | Char | 1 | 24e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 107 | HEF25E | Char | 1 | 25e. Were you admitted to a hospital any other time since your last (center visit or telephone <br> contact)? |
| 108 | VERSION | Char | 21 | Version |
| 109 | HEF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 110 | HEF12A_DAYS | Num | 8 | 12a. What was the date of this event? - Days from enrollment |
| 111 | HEF15A_DAYS | Num | 8 | 15a. What was the date of this event? - Days from enrollment |
| 112 | HEF18A_DAYS | Num | 8 | 18a. What was the date of this event? - Days from enrollment |
| 113 | HEF21A_DAYS | Num | 8 | 21a. What was the date of this event? - Days from enrollment |
| 114 | HEF22A_DAYS | Num | 8 | 22a. What was the date of this event? - Days from enrollment |
| 115 | HEF23A_DAYS | Num | 8 | 23a. What was the date of this event? - Days from enrollment |
| 116 | HEF24A_DAYS | Num | 8 | $24 a$. What was the date of this event? - Days from enrollment |
| 117 | HEF25A_DAYS | Num | 8 | 25a. What was the date of this event? - Days from enrollment |
| 118 | HEF26A_DAYS | Num | 8 | 26a. What was the date of this event? - Days from enrollment |
| 119 | HEF3A_DAYS | Num | 8 | 3a. What was the date of this event? - Days from enrollment |
| 120 | HEF6A_DAYS | Num | 8 | 6a. What was the date of this event? - Days from enrollment |
| 121 | HEF9A_DAYS | Num | 8 | 9a. What was the date of this event? - Days from enrollment |

## Data Set Name: v4_isp_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISP01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISP01B | Num | 8 | is |
| 6 | ISP02A | Num | 8 | 2) 20\% fall from |
| 7 | ISP02B | Num | 8 | is |
| 8 | ISP03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISP03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISP03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISP04A | Num | 8 | a) FEV1 |
| 12 | ISP05A | Num | 8 | a) FEV1 |
| 13 | ISP06A | Num | 8 | a) FEV1 |
| 14 | ISP08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISP09A | Num | 8 | a) FEV1 |
| 16 | ISP10A | Num | 8 | a) FEV1 |
| 17 | ISP11A | Num | 8 | a) FEV1 |
| 18 | ISP12A | Num | 8 | a) FEV1 |
| 19 | ISP13A | Num | 8 | a) FEV1 |
| 20 | ISP14A | Num | 8 | a) FEV1 |
| 21 | ISP15A | Num | 8 | a) FEV1 |
| 22 | ISP16 | Char | 1 | 16) First 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 23 | ISP17 | Char | 1 | 17) If yes, \% NaCl used: |
| 24 | ISP18A | Num | 8 | a) FEV1 |
| 25 | ISP19A | Num | 8 | a) FEV1 |
| 26 | ISP20A | Num | 8 | a) FEV1 |
| 27 | ISP21A | Num | 8 | a) FEV1 |
| 28 | ISP22 | Char | 1 | 22) Second 7 minutes complete, continue induction? (If 'No', go to item 27) |
| 29 | ISP23A | Num | 8 | a) FEV1 |
| 30 | ISP24A | Num | 8 | a) FEV1 |
| 31 | ISP25A | Num | 8 | a) FEV1 |
| 32 | ISP26A | Num | 8 | a) FEV1 |
| 33 | ISP27 | Char | 1 | 27) Was the participant able to produce sputum? |
| 34 | ISP28 | Char | 1 | 28) Was the induction terminated early? (If 'No', 30) |
| 35 | ISP29 | Char | 1 | 29) Reason terminated early |
| 36 | ISP30 | Char | 1 | 30) Did the participant require additional albuterol? |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISP31A | Num | 8 | a) FEV1 |
| 38 | ISP32A | Num | 8 | a) FEV1 |
| 39 | ISP33A | Num | 8 | a) FEV1 |
| 40 | ISP0D | Char | 5 | Time Collected |
| 41 | ISP0D_AMPM | Char | 1 | AM/PM |
| 42 | VERSION | Char | 21 | Version |
| 43 | ISP0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 44 | ISP0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v4_isw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | ISW01A | Num | 8 | 1) $10 \%$ fall from |
| 5 | ISW01B | Num | 8 | is |
| 6 | ISW02A | Num | 8 | 2) $20 \%$ fall from |
| 7 | ISW02B | Num | 8 | is |
| 8 | ISW03 | Num | 8 | 3) Was the participant given albuterol prior to suptum induction? |
| 9 | ISW03A | Num | 8 | 3a) Was this a re-dosing (e.g., >165 minutes after initial bronchodilator dose for PFTs)? |
| 10 | ISW03B | Num | 8 | 3b) How many puffs of albuterol was the participant given? |
| 11 | ISW04A | Num | 8 | a) FEV1: |
| 12 | ISW05A | Num | 8 | a) FEV1: |
| 13 | ISW06A | Num | 8 | a) FEV1: |
| 14 | ISW08 | Char | 1 | 8) Spirometry ok to continue? |
| 15 | ISW09A | Num | 8 | a) FEV1 |
| 16 | ISW10A | Num | 8 | a) FEV1 |
| 17 | ISW11A | Num | 8 | a) FEV1 |
| 18 | ISW12A | Num | 8 | a) FEV1 |
| 19 | ISW13A | Num | 8 | a) FEV1 |
| 20 | ISW14 | Char | 1 | 14) First 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 21 | ISW15 | Char | 1 | 15) If yes, \% NaCl used: |
| 22 | ISW16A | Num | 8 | a) FEV1 |
| 23 | ISW17A | Num | 8 | a) FEV1 |
| 24 | ISW18 | Char | 1 | 18) Second 7 minutes complete, continue induction? (If 'No', go to item 20) |
| 25 | ISW19 | Char | 1 | 19) If yes, \% NaCl used: |
| 26 | ISW20A | Num | 8 | a) FEV1 |
| 27 | ISW21A | Num | 8 | a) FEV1 |
| 28 | ISW22 | Char | 1 | 22) Was the participant able to produce sputum? |
| 29 | ISW23 | Char | 1 | 23) Was the induction terminated early? |
| 30 | ISW24 | Char | 1 | 24) Reason terminated early |
| 31 | ISW25 | Char | 1 | 25) Did the participant require additional albuterol? |
| 32 | ISW26A | Num | 8 | a) FEV1 |
| 33 | ISW27A | Num | 8 | a) FEV1 |
| 34 | ISW28A | Num | 8 | a) FVC |
| 35 | ISW29 | Char | 2000 | 29) Note reason and time point obtained |
| 36 | ISW0D | Char | 5 | Time Collected |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ISW0D_AMPM | Char | 1 | AM/PM |
| 38 | VERSION | Char | 21 | Version |
| 39 | ISW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 40 | ISW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: v4_mcq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MCQ01 | Char | 1 | MCQ01 Frequency of cough today |
| 5 | MCQ02 | Char | 1 | MCQ02 Frequency of cough last night |
| 6 | MCQ03 | Char | 1 | MCQ03 Severity of cough episodes |
| 7 | MCQ04 | Char | 1 | MCQ04 Ease of coughing up sputum today |
| 8 | MCQ05 | Char | 1 | MCQ05 Chest tightness/discomfort today |
| 9 | VERSION | Char | 21 | Version |
| 10 | MCQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_mhf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MHFOC | Num | 8 | 0c. (do not read) Check here if participant is Female |
| 5 | MHF1 | Char | 1 | 1. Did you get an influenza vaccination (flu shot) in the last 12 months? |
| 6 | MHF2 | Char | 1 | 2. When was your most recent pneumonia vaccination? (Pneumovax) |
| 7 | MHF3 | Char | 1 | 3. Have you been diagnosed with alpha-1 anti-trypsin deficiency? |
| 8 | MHF4A | Char | 1 | 4a. Vision problems |
| 9 | MHF4B | Char | 1 | 4b. Hearing problems |
| 10 | MHF4C | Char | 1 | 4c. Dizziness |
| 11 | MHF4D | Char | 1 | 4d. Ears ringing |
| 12 | MHF4E | Char | 1 | 4e. Sinusitis/Rhinitis |
| 13 | MHF4F | Char | 1 | 4f. Other |
| 14 | MHF5A | Char | 1 | 5a. High blood pressure |
| 15 | MHF5B | Char | 1 | 5b. Coronary artery disease |
| 16 | MHF5C | Char | 1 | 5c. Angina (chest pain) |
| 17 | MHF5D | Char | 1 | 5d. Heart attack |
| 18 | MHF5E | Char | 1 | 5e. Murmur |
| 19 | MHF5F | Char | 1 | 5f. Palpitations, irregular heartbeat |
| 20 | MHF5G | Char | 1 | 5 g . Valve disease |
| 21 | MHF5H | Char | 1 | 5h. Congestive heart failure |
| 22 | MHF5I | Char | 1 | 5i. Blood clots |
| 23 | MHF5J | Char | 1 | 5j. Poor circulation (claudication) |
| 24 | MHF5K | Char | 1 | 5k. Other |
| 25 | MHF6A | Char | 1 | 6a. Esophageal condition or disease |
| 26 | MHF6B | Char | 1 | 6b. Ulcers |
| 27 | MHF6C | Char | 1 | 6c. Hepatitis or jaundice |
| 28 | MHF6D | Char | 1 | 6d. Crohn's disease or colitis |
| 29 | MHF6E | Char | 1 | 6e. Gallstones |
| 30 | MHF6F | Char | 1 | 6f. Cirrhosis |
| 31 | MHF6F1 | Char | 75 | 6f1. Explain: |
| 32 | MHF6G | Char | 1 | 6g. GERD (heart burn) |
| 33 | MHF6H | Char | 1 | 6h. Hiatal hernia |
| 34 | MHF6I | Char | 1 | 6i. Other |
| 35 | MHF7A | Char | 1 | 7a. Intubation or respirator |
| 36 | MHF7B | Char | 1 | 7b. Pneumothorax (collapsed lung) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | MHF7C | Char | 1 | 7c. Tuberculosis |
| 38 | MHF7D | Char | 1 | 7d. Pulmonary fibrosis |
| 39 | MHF7E | Char | 1 | 7e. Lung nodules |
| 40 | MHF7F | Char | 1 | 7f. Pulmonary embolism |
| 41 | MHF7G | Char | 1 | 7 g . Other |
| 42 | MHF8A | Char | 1 | 8a. Cancer(except basal cell skin cancer) |
| 43 | MHF8B | Char | 1 | 8b. Anemia |
| 44 | MHF8C | Char | 1 | 8c. Other |
| 45 | MHF9A | Char | 1 | 9a. Menstrual symptoms (women) |
| 46 | MHF9B | Char | 1 | 9b. Enlarged prostate or BPH (men) |
| 47 | MHF9C | Char | 1 | 9c. Bladder or kidney problems/kidney stones |
| 48 | MHF9D | Char | 1 | 9d. Other |
| 49 | MHF10A | Char | 1 | 10a. Diabetes |
| 50 | MHF10B | Char | 1 | 10b. Thyroid |
| 51 | MHF10C | Char | 1 | 10c. Other |
| 52 | MHF11A | Char | 1 | 11a. Stroke |
| 53 | MHF11B | Char | 1 | 11b. Headaches |
| 54 | MHF11C | Char | 1 | 11c. Seizure |
| 55 | MHF11D | Char | 1 | 11d. Other |
| 56 | MHF12A | Char | 1 | 12a. Rheumatoid arthritis |
| 57 | MHF12B | Char | 1 | 12b. Gout |
| 58 | MHF12C | Char | 1 | 12c. Osteoporosis |
| 59 | MHF12D | Char | 1 | 12d. Fractures |
| 60 | MHF12E | Char | 1 | 12e. Joint pain |
| 61 | MHF12F | Char | 1 | 12f. Osteoarthritis |
| 62 | MHF12G | Char | 1 | 12g. Other |
| 63 | MHF13A | Char | 1 | 13a. Rashes/hives/ eczema |
| 64 | MHF13B | Char | 1 | 13b. Psoriasis |
| 65 | MHF13C | Char | 1 | 13c. Shingles |
| 66 | MHF13D | Char | 1 | 13d. Other |
| 67 | MHF14A | Char | 1 | 14a. Atypical mycobacteria (MAC,MAI) |
| 68 | MHF14B | Char | 1 | 14b. Fungal disease |
| 69 | MHF14C | Char | 1 | 14c. Other |
| 70 | MHF15A | Char | 1 | 15a. Anxiety |
| 71 | MHF15B | Char | 1 | 15b. Depression |
| 72 | MHF15C | Char | 1 | 15c. Other |
| 73 | MHF16 | Char | 1 | 16. Other significant problems not reported in questions 2-18 |
| 74 | MHF17 | Char | 1 | 17. A fever, cold, flu, or sore throat? |
| 75 | MHF18 | Char | 1 | 18. A urinary tract infection? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | MHF19 | Char | 1 | 19. Seasonal allergies? |
| 77 | MHF20 | Char | 1 | 20. A sinus infection or sinusitis? |
| 78 | MHF21 | Char | 1 | 21. A tooth infection? |
| 79 | MHF22 | Char | 1 | 22. A flare up of gout? |
| 80 | MHF23 | Char | 1 | 23. A flare up of arthritis? |
| 81 | MHF24 | Char | 1 | 24. Other? |
| 82 | MHF26 | Char | 1 | 26. Are you allergic to any medications, latex, food, or substances? |
| 83 | MHF26A | Char | 50 | 26a. List Substance: |
| 84 | MHF26A1 | Char | 50 | 26a1. Reaction: |
| 85 | MHF26B | Char | 50 | 26b. List Substance: |
| 86 | MHF26B1 | Char | 50 | 26b1. Reaction: |
| 87 | MHF26C | Char | 50 | 26c. List Substance: |
| 88 | MHF26C1 | Char | 50 | 26c1. Reaction: |
| 89 | MHF26D | Char | 50 | 26d. List Substance: |
| 90 | MHF26D1 | Char | 50 | 26d1. Reaction: |
| 91 | MHF26E | Char | 50 | 26e. List Substance: |
| 92 | MHF26E1 | Char | 50 | 26e1. Reaction: |
| 93 | MHF27 | Char | 1 | 27. In the past 12 months, how often have you consumed any beverage containing alcohol (beer, |
| wine, wine coolers, liquor, or mixed drinks such as margaritas, martinis, or daiquiris)? |  |  |  |  |
| 94 | MHF28 | Char | 1 | 28. When you drink beverage containing alcohol, how many do you usually drink at one sitting? |
| 95 | MHF29A | Num | 8 | 29a. Beer |
| 96 | MHF29B | Num | 8 | 29b. Wine |
| 97 | MHF29C | Num | 8 | 29c. Drinks containing liquor |
| 98 | MHF30 | Char | 1 | 30. How often do you have eight or more drinks on one occasion? |
| 99 | MHF31 | Char | 1 | 31. How often during the last year have you been unable to remember what happened the night |
| before because you had been drinking? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 111 | MHF43 | Char | 1 | 43. In the last 12 months have you had an ovary removed? |
| 112 | MHF44 | Char | 1 | 44. If you had an ovary removed, was one removed or both? |
| 113 | MHF45 | Num | 8 | 45. At what age was your ovary or ovaries removed? |
| 114 | MHF46 | Char | 1 | 46. Were you born premature? |
| 115 | MHF46A | Num | 8 | 46a. If yes, how many weeks were you premature? |
| 116 | MHF47A | Num | 8 | 47a. What was your birth weight? |
| 117 | MHF47B | Num | 8 | Birth Weight in Pounds/Ounces |
| 118 | MHF48 | Char | 1 | 48. Did you ever have breathing problems during the first two years of life? |
| 119 | MHF48A | Char | 1 | 48a. If yes, were you ever hospitalized for these problems? |
| 120 | MHF49 | Char | 1 | 49. Were you ever hospitalized for pneumonia before 18 years of age? |
| 121 | MHF7H | Char | 1 | 7h. Wedge Resection |
| 122 | VERSION | Char | 21 | Version |
| 123 | MHF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_mrc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | MRC01 | Num | 8 | MRC01 Describe shortness of breath |
| 5 | VERSION | Char | 21 | Version |
| 6 | MRC0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_pft_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFT01 | Num | 8 | PFT01 Large meal eaten within the last 2 hours |
| 5 | PFT02 | Num | 8 | PFT02 Smoked within the last hour |
| 6 | PFT03 | Num | 8 | PFT03 Vigorous exercise in the past 30 minutes |
| 7 | PFT04 | Num | 8 | PFT04 Consumed alcohol within past 4 hours |
| 8 | PFT05 | Num | 8 | PFT05 Medication for lungs in past 48 hours |
| 9 | PFT06 | Num | 8 | PFT06 Use of Spiriva within past 48 hours |
| 10 | PFT06B | Char | 5 | PFT06B Time last used Spiriva |
| 11 | PFT06B_AMPM | Char | 1 | PFT06B_AMPM Last used Spiriva AM/PM |
| 12 | PFT07 | Num | 8 | PFT07 Use of theophylline within past 48 hrs |
| 13 | PFT07A | Num | 8 | PFT07A Most recent type of theophyline used |
| 14 | PFT07C | Char | 5 | PFT07C Time last used theophyline |
| 15 | PFT07C_AMPM | Char | 1 | PFT07C_AMPM last used theophyline AM/PM |
| 16 | PFT08 | Num | 8 | PFT08 Use of one-a-day bronchodilator |
| 17 | PFT08B | Char | 5 | PFT08B Time last used one-a-day bronchodilator |
| 18 | PFT08B_AMPM | Char | 1 | PFT08B_AMPM last used one-a-day bronchodilator AM/PM |
| 19 | PFT09 | Num | 8 | PFT09 Use of long-acting beta agonist |
| 20 | PFT09A | Num | 8 | PFT09A Most recent long-acting beta agonist used |
| 21 | PFT09A1 | Char | 50 | PFT09A1 Specify long-acting beta agonist |
| 22 | PFT09B | Char | 5 | PFT09B Time last used long-acting beta agonist |
| 23 | PFT09B_AMPM | Char | 1 | PFT09B_AMPM last used long-acting beta agonist AM/PM |
| 24 | PFT10 | Num | 8 | PFT10 Use of ipratropium within the past 8 hours |
| 25 | PFT10A | Num | 8 | PFT10A Most recent ipratropium used |
| 26 | PFT10B | Char | 5 | PFT10B Time last used ipratropium |
| 27 | PFT10C_AMPM | Char | 1 | PFT10C_AMPM last used ipratropium AM/PM |
| 28 | PFT11 | Num | 8 | PFT11 Use of short-acting beta agonist |
| 29 | PFT11A | Num | 8 | PFT11A Most recent short-acting beta agonist used |
| 30 | PFT11B | Char | 5 | PFT11B Time last short-acting beta agonist used |
| 31 | PFT11B_AMPM | Char | 1 | PFT11B_AMPM last short-acting beta agonist used AM/PM |
| 32 | PFT12 | Char | 1 | PFT12 Consumption of caffeine in past 6 hours |
| 33 | VERSION | Char | 21 | Version |
| 34 | PFT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 35 | PFT06A_DAYS | Num | 8 | Date last used Spiriva - Days from enrollment |
| 36 | PFT07B_DAYS | Num | 8 | Date last used theophyline - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | PFT08A_DAYS | Num | 8 | Date last used one-a-day bronchodilator - Days from enrollment |

Data Set Name: v4_pfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PFV01 | Char | 9 | PFV01 study_id |
| 5 | PFV10 | Char | 15 | PFV10 Position |
| 6 | PFV12 | Num | 8 | PFV12 visit_num |
| 7 | PFV13 | Num | 8 | PFV13 interval_num |
| 8 | PFV14 | Num | 8 | PFV14 stage_num |
| 9 | PFV15 | Num | 8 | PFV15 seq_num |
| 10 | PFV16 | Char | 15 | PFV16 vlabel |
| 11 | PFV17 | Num | 8 | PFV17 repeats |
| 12 | PFV19 | Char | 15 | PFV19 qa_grade |
| 13 | PFV20 | Char | 15 | PFV20 qa_status |
| 14 | PFV22B | Char | 8 | PFV22B time |
| 15 | PFV23B | Char | 8 | PFV23B time_best |
| 16 | PFV24B | Char | 8 | PFV24B time_first |
| 17 | PFV25 | Num | 8 | PFV25 trial_seq_num |
| 18 | PFV26 | Num | 8 | PFV26 ranking |
| 19 | PFV27 | Num | 8 | PFV27 temperature |
| 20 | PFV28 | Num | 8 | PFV28 barometric |
| 21 | PFV29 | Num | 8 | PFV29 humidity |
| 22 | PFV30 | Num | 8 | PFV30 fevpd |
| 23 | PFV31 | Num | 8 | PFV31 fvcpd |
| 24 | PFV32 | Num | 8 | PFV32 fefpd |
| 25 | PFV33 | Num | 8 | PFV33 fev1_fvcpd |
| 26 | PFV34 | Num | 8 | PFV34 pefpd |
| 27 | PFV35 | Num | 8 | PFV35 pctfev |
| 28 | PFV36 | Num | 8 | PFV36 petfvc |
| 29 | PFV37 | Num | 8 | PFV37 pctfef2575 |
| 30 | PFV38 | Num | 8 | PFV38 pctpefr |
| 31 | PFV39 | Num | 8 | PFV39 pctfev_fvc |
| 32 | PFV40 | Num | 8 | PFV40 fvc |
| 33 | PFV41 | Num | 8 | PFV41 flag_fvc_best |
| 34 | PFV42B | Char | 8 | PFV42B trials_time |
| 35 | PFV43 | Num | 8 | PFV43 fev05 |
| 36 | PFV44 | Num | 8 | PFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV45 | Num | 8 | PFV45 fev1 |
| 38 | PFV46 | Num | 8 | PFV46 flag_fev_best |
| 39 | PFV47 | Num | 8 | PFV47 fev1fvc |
| 40 | PFV48 | Num | 8 | PFV48 flag_fevfvc_best |
| 41 | PFV49 | Num | 8 | PFV49 fev3 |
| 42 | PFV50 | Num | 8 | PFV50 fev3fvc |
| 43 | PFV51 | Num | 8 | PFV51 fev6 |
| 44 | PFV52 | Num | 8 | PFV52 fef212 |
| 45 | PFV53 | Num | 8 | PFV53 fef2575 |
| 46 | PFV54 | Num | 8 | PFV54 flag_fef2575_best |
| 47 | PFV55 | Num | 8 | PFV55 fef25756 |
| 48 | PFV56 | Num | 8 | PFV56 fef25 |
| 49 | PFV57 | Num | 8 | PFV57 fef50 |
| 50 | PFV58 | Num | 8 | PFV58 fef506 |
| 51 | PFV59 | Num | 8 | PFV59 fef75 |
| 52 | PFV60 | Num | 8 | PFV60 fef756 |
| 53 | PFV61 | Num | 8 | PFV61 fef7585 |
| 54 | PFV62 | Num | 8 | PFV62 pefr |
| 55 | PFV63 | Num | 8 | PFV63 flag_pefr_best |
| 56 | PFV64 | Num | 8 | PFV64 met |
| 57 | PFV65 | Num | 8 | PFV65 peft |
| 58 | PFV66 | Num | 8 | PFV66 vext |
| 59 | PFV67 | Num | 8 | PFV67 pctvext |
| 60 | PFV68 | Num | 8 | PFV68 expt |
| 61 | PFV69 | Num | 8 | PFV69 RVSPCA |
| 62 | PFV70 | Char | 4 | PFV70 fevdiff |
| 63 | PFV71 | Num | 8 | PFV71 fivc |
| 64 | PFV72 | Num | 8 | PFV72 fiv05 |
| 65 | PFV73 | Num | 8 | PFV73 fiv05fivc |
| 66 | PFV74 | Num | 8 | PFV74 fiv1 |
| 67 | PFV75 | Num | 8 | PFV75 fiv1fivc |
| 68 | PFV76 | Num | 8 | PFV76 fiv3 |
| 69 | PFV77 | Num | 8 | PFV77 pifr |
| 70 | PFV78 | Num | 8 | PFV78 fif212 |
| 71 | PFV79 | Num | 8 | PFV79 fif2575 |
| 72 | PFV80 | Num | 8 | PFV80 mit |
| 73 | VERSION | Char | 21 | Version |
| 74 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 75 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :---: | ---: | :--- |
| 76 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 77 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v4_psq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | PSAQ7 | Char | 2000 | PSAQ7 Frequency of taking medication to sleep during the last month |
| 4 | PSAQ8 | Char | 2000 | PSAQ9 Frequency of having trouble staying awake during the last moenth |
| 5 | PSAQ9 | Char | 10 | Visit |
| 6 | VISIT | Char | 5 | PSQ01 Usual bedtime in the past month during the last month |
| 7 | PSQ01 | Char | 1 | PSQ01_AMPM bedtime AM/PM |
| 8 | PSQ01_AMPM | Num | 8 | PSQ02 Time taken to fall asleep in the past month |
| 9 | PSQ02 | Char | 5 | PQQ03 Waking hour in the past month |
| 10 | PSQ03 | Char | 1 | PSQ03_AMPM waking hour AM/PM |
| 11 | PSQ03_AMPM | Num | 8 | PSQ04 Hours of sleep per night in the past month |
| 12 | PSQ04 | Char | 1 | PSQ05A Trouble sleeping: Cannot get to sleep within 30 minutes |
| 13 | PSQ05A | 1 | PSQ05B Trouble sleeping: Wake up in the middle of the night or early |  |
| 14 | PSQ05B | Char | 1 | PSQ05C Trouble sleeping: Have to get up to use the bathroom |
| 15 | PSQ05C | Char | 1 | PSQ05D Trouble sleeping: Cannot breathe comfortably |
| 16 | PSQ05D | Char | 1 | PSQ05E Trouble sleeping: Cough or snore loudly |
| 17 | PSQ05E | Char | 1 | PSQ05F Trouble sleeping: Feel too cold |
| 18 | PSQ05F | Char | 1 | PSQ05G Trouble sleeping: Feel too hot |
| 19 | PSQ05G | Char | 1 | PSQ05H Trouble sleeping: Have bad dreams |
| 20 | PSQ05H | Num | 8 | Year 3 PSQ Duration of sleep) |
| 21 | PSQ05I | Char | 1 | PSQ05I Trouble sleeping: Have pain |
| 22 | PSQ05J | Char | 1 | PSQ05J Trouble sleeping: Other reasons |
| 23 | PSQ06 | Char | 1 | PSQ06 Sleep quality during the last month |
| 24 | PSQ10 | Char | 1 | PSQ10 Bed partner/roommate |
| 25 | PSQ10A | Char | 1 | PSQ10A Bed partner/roommate reports: Loud snoring |
| 26 | PSQ10B | Char | 1 | PSQ10B Bed partner/roommate reports: Long pauses between breaths while |
| asleep |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 35 | PSQ_SLEEPLATENCY04 | Num | 8 | Year 3 PSQ sleep latency |
| 36 | PSQ_DAYSLEEPYDYSFUNC04 | Num | 8 | Year 3 PSQ day dysfunction due to sleepness |
| 37 | PSQ_SLEEPEFFICIENCY04 | Num | 8 | Year 3 PSQ sleep efficiency |
| 38 | PSQ_OVERALLSLEEPQUALITY04 | Num | 8 | Year 3 PSQ overall sleep quality |
| 39 | PSQ_NEEDMEDSTOSLEEP04 | Num | 8 | Year 3 PSQ need meds to sleep |
| 40 | PSQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_psv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | PSV01 | Char | 9 | PSV01 study_id |
| 5 | PSV10 | Char | 15 | PSV10 position |
| 6 | PSV12 | Num | 8 | PSV12 visit_num |
| 7 | PSV13 | Char | 15 | PSV13 interval_num |
| 8 | PSV14 | Num | 8 | PSV14 stage_num |
| 9 | PSV15 | Num | 8 | PSV15 seq_num |
| 10 | PSV16 | Char | 5 | PSV16 vlabel |
| 11 | PSV17 | Num | 8 | PSV17 repeats |
| 12 | PSV19 | Char | 15 | PSV19 qa_grade |
| 13 | PSV20 | Char | 15 | PSV20 qa_status |
| 14 | PSV22B | Char | 8 | PSV22B time |
| 15 | PSV23B | Char | 8 | PSV23B time_best |
| 16 | PSV24B | Char | 8 | PSV24B time_first |
| 17 | PSV25B | Char | 8 | PSV25B trials_time |
| 18 | PSV26 | Num | 8 | PSV26 trial_seq_num |
| 19 | PSV27 | Num | 8 | PSV27 ranking |
| 20 | PSV28 | Num | 8 | PSV28 temperature |
| 21 | PSV29 | Num | 8 | PSV29 barometric |
| 22 | PSV30 | Num | 8 | PSV30 humidity |
| 23 | PSV32 | Char | 5 | PSV32 tom |
| 24 | PSV33 | Num | 8 | PSV33 svc |
| 25 | PSV34 | Num | 8 | PSV34 svcpd |
| 26 | PSV35 | Num | 8 | PSV35 pctsvc |
| 27 | PSV36 | Num | 8 | PSV36 flag_svc_best |
| 28 | PSV37 | Num | 8 | PSV37 ic |
| 29 | PSV38 | Num | 8 | PSV38 irv |
| 30 | PSV39 | Num | 8 | PSV39 erv |
| 31 | PSV40 | Num | 8 | PSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v4_rdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | RDF1 | Char | 1 | 1. Do you usually have a cough? (Exclude clearing of throat.) |
| 5 | RDF1A | Char | 1 | 1a. Do you usually cough as much as 4 times a day, 4 or more days out of the week? |
| 6 | RDF2 | Char | 1 | 2. Do you usually cough at all on getting up or first thing in the morning? |
| 7 | RDF3 | Char | 1 | 3. Do you usually cough at all during the rest of the day or night? |
| 8 | RDF3A | Char | 1 | 3a. Do you cough like this on most days, for 3 consecutive months or more during the year? |
| 9 | RDF3B | Num | 8 | 3b. For how many years have you had this cough? |
| 10 | RDF4 | Char | 1 | 4. Do you usually bring up phlegm from your chest? |
| 11 | RDF4A | Char | 1 | 4a. Do you usually bring up phlegm like this as much as twice a day, 4 or more days out of the |
| week? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 33 | RDF14 | Char | 1 | 14. In the last 12 months, have you been bothered by watery, itchy, or burning eyes when you did not have a cold or the flu? |
| 34 | RDF15 | Char | 1 | 15. Are you unable to walk due to a condition other than shortness of breath? |
| 35 | RDF16 | Char | 1 | 16. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with asthma? |
| 36 | RDF16A | Char | 1 | 16a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for asthma? |
| 37 | RDF17 | Char | 1 | 17. In the past 12 months, have you had hay fever (allergy involving the nose and/or eyes)? |
| 38 | RDF17A | Char | 1 | 17a. Was it diagnosed by a doctor or other health professional? |
| 39 | RDF17B | Char | 1 | 17b. In the past 12 months, have you received medical treatment, taken medications or used a nasal spray for hay fever? |
| 40 | RDF18 | Char | 1 | 18. In the past 12 months, have you had an attack of bronchitis? |
| 41 | RDF18A | Char | 1 | 18a. Was it diagnosed by a doctor or other health professional? |
| 42 | RDF18B | Num | 8 | 18b. How many times have you had bronchitis in the past 12 months? |
| 43 | RDF19 | Char | 1 | 19. In the past 12 months, have you ever had pneumonia or bronchopneumonia? |
| 44 | RDF19A | Char | 1 | 19a. Was it diagnosed by a doctor or other health professional? |
| 45 | RDF19B | Num | 8 | 19b. How many times have you had pneumonia or bronchopneumonia in the past 12 months? |
| 46 | RDF20 | Char | 1 | 20. In the past 12 months, were you newly diagnosed by a doctor or other health professional with chronic bronchitis? |
| 47 | RDF20A | Char | 1 | 20a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for chronic bronchitis? |
| 48 | RDF21 | Char | 1 | 21. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with emphysema? |
| 49 | RDF21A | Char | 1 | 21a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for emphysema? |
| 50 | RDF22 | Char | 1 | 22. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with COPD (chronic obstructive pulmonary disease)? |
| 51 | RDF22A | Char | 1 | 22a. In the past 12 months, have you received medical treatment, taken medications or used an inhaler for COPD? |
| 52 | RDF23 | Char | 1 | 23. In the past 12 months, have you been newly diagnosed by a doctor or other health professional with sleep apnea? |
| 53 | RDF23A | Char | 1 | 23a. In the past 12 months, have you received any treatment for sleep apnea? |
| 54 | RDF23B | Char | 1 | 23b. Do you use a CPAP or BIPAP? |
| 55 | RDF23C | Char | 1 | 23c. Did you have surgery for your sleep apnea? |
| 56 | RDF23D | Char | 1 | 23d. Did you have some other treatment for your sleep apnea? |
| 57 | RDF24A | Char | 1 | 24a. Any other chest illness? |
| 58 | RDF24B | Char | 1 | 24b. Any chest operations? |
| 59 | RDF24C | Char | 1 | 24c. Any chest injuries? |
| 60 | RDF25 | Char | 1 | 25. In the past 12 months have you smoked cigarettes |
| 61 | RDF26 | Char | 1 | 26. Do you smoke cigarettes as of one month ago? |
| 62 | RDF27 | Num | 8 | 27. Cigarettes smoked in the past 24 hours: (Check here if does not apply) |
| 63 | RDF27A | Num | 8 | 27a. 24 hours |
| 64 | RDF27B | Num | 8 | 27b. 2 hours |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 65 | RDF27C | Num | 8 | 27c. $1 / 2$ hour |
| 66 | RDF28 | Num | 8 | 28. How many cigarettes do you smoke per day now? |
| 67 | RDF29 | Num | 8 | 29. On average over the last 12 months, how many cigarettes did you smoke per day? |
| 68 | RDF30 | Char | 1 | 30. Have you ever smoked menthol cigarettes? |
| 69 | RDF30A | Num | 8 | 30a. For how long have you or did you smoke menthol cigarettes? |
| 70 | RDF31A | Char | 40 | First brand of cigarettes smoked |
| 71 | RDF31B | Char | 40 | Second brand of cigarettes smoked |
| 72 | RDF31C | Char | 40 | Third brand of cigarettes smoked |
| 73 | RDF31D | Char | 40 | Fourth brand of cigarettes smoked |
| 74 | RDF31E | Char | 40 | Fifth brand of cigarettes smoked |
| 75 | RDF32 | Char | 1 | 32. In the past twelve months have you smoked a pipe regularly? |
| 76 | RDF33 | Char | 1 | 33. Do you smoke a pipe (as of one month ago)? |
| 77 | RDF34 | Num | 8 | 34. How much pipe tobacco do you smoke per day now? |
| 78 | RDF35 | Num | 8 | 35. On average over the last 12 months, how many ounces of tobacco did you smoke per week? |
| 79 | RDF36 | Char | 1 | 36. In the past twelve months have you smoked cigars regularly? (YES means more than 1 cigar a <br> week for one year at any time in your life) |
| 80 | RDF37 | Char | 1 | 37. Do you now smoke cigars (as of one month ago)? |
| 81 | RDF38 | Num | 8 | 38. How many cigars so you smoke per day now? |
| 82 | RDF39 | Num | 8 | 39. On average over the last 12 months, how many cigars did you smoke per week? |
| 83 | RDF40 | Char | 1 | 40. Which of the following best describes your approach to tobacco smoking in your home when you <br> are in the house? |
| 97 | RDF53 | Char | 1 | 5. |
| 84 | RDF41 | Char |  |  |
| products indoors? |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 98 | RDF54 | Num | 8 | 54. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in another person's home? |
| 99 | RDF55 | Char | 1 | 55. During the past 7 days, did you enter a room in another person's home that was visibly smoky? |
| 100 | RDF56 | Char | 1 | 56. In the past 7 days, did you smell tobacco in another person's home? |
| 101 | RDF57 | Char | 1 | 57. In the past 7 days, have you traveled by car or other vehicle with someone else who was smoking tobacco products? |
| 102 | RDF58 | Num | 8 | 58. In the past 7 days, how many hours did you spend traveling in a car while someone else was smoking tobacco? |
| 103 | RDF59 | Char | 1 | 59. During the past 7 days, did anyone smoke tobacco inside your workplace, that is, while you were working indoors? |
| 104 | RDF60 | Num | 8 | 60. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke inside your workplace? |
| 105 | RDF61 | Char | 1 | 61. During the past 7 days, did you enter a room in your workplace that was visibly smoky? |
| 106 | RDF62 | Char | 1 | 62. In the past 7 days, did you smell tobacco smoke in your workplace? |
| 107 | RDF63 | Char | 1 | 63. Is there an outdoor area at your workplace where cigarette smokers routinely gather or congregate to smoke? |
| 108 | RDF64 | Num | 8 | 64. In the past 7 days, how many times did you walk through or past this area while others were smoking? |
| 109 | RDF65 | Num | 8 | 65. During the past 7 days, how many hours in total did you spend in an outdoor smoking area while people were smoking? |
| 110 | RDF66 | Char | 1 | 66. While walking through or past this area, did you smell smoke? |
| 111 | RDF67 | Num | 8 | 67. In the past 7 days, how many hours did you spend near coworkers who were smoking tobacco outdoors? |
| 112 | RDF68 | Char | 1 | 68. During the past 7 days, did you smell tobacco smoke while working outdoors? |
| 113 | RDF69 | Char | 1 | 69. In the past 7 days, have you been at an outdoor location (besides work) where someone was smoking tobacco products outside? |
| 114 | RDF71 | Char | 1 | 71. During the past 7 days, did you smell tobacco smoke in this outdoor location? |
| 115 | RDF72 | Num | 8 | 72. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke at this outdoor location? |
| 116 | RDF73 | Char | 1 | 73. In the past 7 days or nights, were you in a bar, nightclub, cocktail lounge, sports arena, or concert hall where someone else was smoking tobacco products? |
| 117 | RDF74 | Num | 8 | 74. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in a bar or other place of entertainment? |
| 118 | RDF75 | Char | 1 | 75. During the past 7 days, did you enter a room in a bar or other place of entertainment that was visibly smoky? |
| 119 | RDF76 | Char | 1 | 76. In the past 7 days, did you smell tobacco smoke in a bar or other place of entertainment? |
| 120 | RDF77 | Char | 1 | 77. I have asked you about exposure to someone else's tobacco smoke in your home, friend's home, work, outdoor locations, and bars or nightclubs. In the past 7 days, was there any other location where you were exposed to tobacco smoke? |
| 121 | RDF79 | Num | 8 | 79. In the past 7 days, how many hours in total were you exposed to someone else's tobacco smoke in this location? |
| 122 | RDF80 | Char | 1 | 80. In the last 12 months have you smoked marijuana (cannabis, pot, or hashish)? |
| 123 | RDF81 | Char | 1 | 81. In the last 12 months have you smoked marijuana regularly (five times or more in a given year)? |
| 124 | RDF82 | Num | 8 | 82. On average, in the last 12 months about how many joints per week do (did) you smoke? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 125 | RDF83 | Num | 8 | 83. On average over the entire time that you smoke(d) about how many pipes per week do (did) you smoke? |
| 126 | RDF84A | Num | 8 | 84a. In spring |
| 127 | RDF84B | Num | 8 | 84b. In summer |
| 128 | RDF84C | Num | 8 | 84c. In fall |
| 129 | RDF84D | Num | 8 | 84d. In winter |
| 130 | RDF85 | Num | 8 | 85. On average, how many hours per day do you spend in your home? |
| 131 | RDF85A | Char | 1 | 85a. Do you have central air conditioner? |
| 132 | RDF85B | Num | 8 | 85b. How many months out of the year do you use it? |
| 133 | RDF85C | Char | 1 | 85c. Do you have a room air conditioner? |
| 134 | RDF85D | Num | 8 | 85d. How many months out of the year do you use it? |
| 135 | RDF85E | Char | 1 | 85e. What kind of range or stove do you have? |
| 136 | RDF85E1 | Char | 25 | 85e1. Specify |
| 137 | RDF85F | Char | 1 | 85f. Does your range or stove have ventilation to the outdoors? |
| 138 | RDF85G | Char | 1 | 85 g . What is the main type of heating you use in your house? |
| 139 | RDF85H | Char | 1 | 85h. What is the main type of heating fuel you use in your house? |
| 140 | RDF85H1 | Char | 25 | 85h1. Specify |
| 141 | RDF85I | Num | 8 | 85i. How many months out of the year do you use the main type of heating in your house? |
| 142 | RDF85J1 | Num | 8 | 85j1. Radiator |
| 143 | RDF85J2 | Num | 8 | 85j2. Forced Air |
| 144 | RDF85J3 | Num | 8 | 85j3. Wood Stove |
| 145 | RDF85J4 | Num | 8 | 85j4. Fireplace |
| 146 | RDF85J5 | Num | 8 | 85j5. Other |
| 147 | RDF86 | Char | 1 | 86. How much time per each day to you spend communting in traffic to work in total (i.e. both ways)? |
| 148 | RDF86A | Num | 8 | 86a. How many days per week do you commute to work? |
| 149 | VERSION | Char | 21 | Version |
| 150 | RDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_rmu_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | VISIT |
| 4 | RMU01 | Char | 1 | RMU01 Currently using Theophylline |
| 5 | RMU02 | Char | 1 | RMU02 Currently using Oral Corticosteroids |
| 6 | RMU02A1 | Num | 8 | RMU02A1 Years on oral corticosteroids |
| 7 | RMU02A2 | Num | 8 | RMU02A2 Days on oral corticosteroids |
| 8 | RMU03 | Char | 1 | RMU03 Supplemental oxygen usage |
| 9 | RMU03A | Num | 8 | RMU03A Hours using supplemental oxygen per day |
| 10 | RMU04 | Char | 1 | RMU04 Inhaled steroids usage in last three months |
| 11 | RMU04A1 | Char | 1 | RMU04A1 Inhaled steroids used in last 3 months: Azmacort (triamcinolone) |
| 12 | RMU04A1A | Num | 8 | RMU04A1A Azmacort (triamcinolone): Puffs/day? |
| 13 | RMU04A2 | Char | 1 | RMU04A2 Inhaled steroids used in last 3 months: Beclovent (beclomethasone) |
| 14 | RMU04A2A | Num | 8 | RMU04A2A Beclovent (beclomethasone): Puffs/day? |
| 15 | RMU04A3 | Char | 1 | RMU04A3 Inhaled steroids used in last 3 months: Vanceril (beclomethasone) |
| 16 | RMU04A3A | Num | 8 | RMU04A3A Vanceril (beclomethasone): Puffs/day? |
| 17 | RMU04A3B | Char | 1 | RMU04A3B Inhaled steroids used in last 3 months: Vanceril dose |
| 18 | RMU04A4 | Char | 1 | RMU04A4 Inhaled steroids used in last 3 months: AeroBid (blunisolide) |
| 19 | RMU04A4A | Num | 8 | RMU04A4A AeroBid (blunisolide): Puffs/day? |
| 20 | RMU04A5 | Char | 1 | RMU04A5 Inhaled steroids used in last 3 months: Flovent (fluticasone) |
| 21 | RMU04A5A | Num | 8 | RMU04A5A Flovent (fluticasone): Puffs/day? |
| 22 | RMU04A5B | Char | 1 | RMU04A5B Inhaled steroids used in last 3 months: Flovent dose |
| 23 | RMU04A6 | Char | 1 | RMU04A6 Inhaled steroids used in last 3 months: Pulmicort (budesonide) |
| 24 | RMU04A6A | Num | 8 | RMU04A6A Pulmicort (budesonide): Puffs/day? |
| 25 | RMU04A6B | Char | 1 | RMU04A6B Inhaled steroids used in last 3 months: Pulmicort dose |
| 26 | RMU04A7 | Char | 1 | RMU04A7 Inhaled steroids used in last 3 months: Qvar (beclomethasone) |
| 27 | RMU04A7A | Num | 8 | RMU04A7A Qvar (beclomethasone): Puffs/day? |
| 28 | RMU04A7B | Char | 1 | RMU04A7B Inhaled steroids used in last 3 months: Qvar dose |
| 29 | RMU04A8 | Char | 1 | RMU04A8 Inhaled steroids used in last 3 months: Advair (bluticasone/salmeterol) |
| 30 | RMU04A8A | Num | 8 | RMU04A8A Advair (bluticasone/salmeterol): Puffs/day? |
| 31 | RMU04A8B | Char | 1 | RMU04A8B Inhaled steroids used in last 3 months: Advair dose |
| 32 | RMU04A9 | Char | 1 | RMU04A9 Inhaled steroids used in last 3 months: Symbicort |
| 33 | RMU04A9A | Num | 8 | RMU04A9A Symbicort): Puffs/day? |
| 34 | RMU04A9B | Char | 1 | RMU04A9B Inhaled steroids used in last 3 months: Symbicort dose |
| 35 | RMU04A10 | Char | 1 | RMU04A10 Inhaled steroids used in last 3 months: Other, specify |
| 36 | RMU04A10A | Num | 8 | RMU04A10A Other, specify: Puffs/day? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RMU04A10B | Char | 50 | RMU04A10B Inhaled steroids used in last 3 months:Specify |
| 38 | RMU05 | Char | 1 | RMU05 Inhaled bronchodilators in last three months |
| 39 | RMU05A1 | Char | 1 | RMU05A1 Inhaled bronchodilators used in last 3 months: Albuterol (Proventil, Ventolin, ProAir) |
| 40 | RMU05A1A | Num | 8 | RMU05A1A Albuterol (Proventil, Ventolin, ProAir): Puffs/day? |
| 41 | RMU05A2 | Char | 1 | RMU05A2 Inhaled bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |
| 42 | RMU05A2A | Num | 8 | RMU05A2A ipratropium bromide (Atrovent): Puffs/day? |
| 43 | RMU05A3 | Char | 1 | RMU05A3 Inhaled bronchodilators used in last 3 months: ipratropium bromide/albuterol sulfate (Combivent) |
| 44 | RMU05A3A | Num | 8 | RMU05A3A ipratropium bromide/albuterol sulfate (Combivent): Puffs/day? |
| 45 | RMU05A4 | Char | 1 | RMU05A4 Inhaled bronchodilators used in last 3 months: terbutaline (Brethaire, Brethine, Bricanyl) |
| 46 | RMU05A4A | Num | 8 | RMU05A4A terbutaline (Brethaire, Brethine, Bricanyl): Puffs/day? |
| 47 | RMU05A5 | Char | 1 | RMU05A5 Inhaled bronchodilators used in last 3 months: formoterol (Foradil) |
| 48 | RMU05A5A | Num | 8 | RMU05A5A formoterol (Foradil): Puffs/day? |
| 49 | RMU05A6 | Char | 1 | RMU05A6 Inhaled bronchodilators used in last 3 months: tiotropium (Spiriva) |
| 50 | RMU05A6A | Num | 8 | RMU05A6A tiotropium (Spiriva): Puffs/day? |
| 51 | RMU05A7 | Char | 1 | RMU05A7 Inhaled bronchodilators used in last 3 months: Salmeterol (Serevent Diskus) |
| 52 | RMU05A7A | Num | 8 | RMU05A7A Salmeterol (Serevent Diskus): Puffs/day? |
| 53 | RMU05A8 | Char | 1 | RMU05A8 Inhaled bronchodilators used in last 3 months: Pirbuterol (Maxair) |
| 54 | RMU05A8A | Num | 8 | RMU05A8A Pirbuterol (Maxair): Puffs/day? |
| 55 | RMU05A9 | Char | 1 | RMU05A9 Inhaled bronchodilators used in last 3 months: Metaproterenol (Alupent, Metaprel) |
| 56 | RMU05A10 | Char | 1 | RMU05A10 Inhaled bronchodilators used in last 3 months: levalbuterol (Tomalate) |
| 57 | RMU05A10A | Num | 8 | RMU05A10A levalbuterol (Tomalate): Puffs/day? |
| 58 | RMU05A11 | Char | 1 | RMU05A11 Inhaled bronchodilators used in last 3 months: bitolterol (Tornalate) |
| 59 | RMU05A12 | Char | 1 | RMU05A12 Inhaled bronchodilators used in last 3 months: epinephrine (Primatene, Bronkaid) |
| 60 | RMU05A12A | Num | 8 | RMU05A12A epinephrine (Primatene, Bronkaid): Puffs/day? |
| 61 | RMU05A13 | Char | 1 | RMU05A13 Inhaled bronchodilators used in last 3 months: fluticasone/salmeterol (Advair Diskus) |
| 62 | RMU05A13A | Num | 8 | RMU05A13A fluticasone/salmeterol (Advair Diskus): Puffs/day? |
| 63 | RMU05A14 | Char | 1 | RMU05A14 Inhaled bronchodilators used in last 3 months: budesonide/formoterol (Symbicort) |
| 64 | RMU05A14A | Num | 8 | RMU05A14A budesonide/formoterol (Symbicort): Puffs/day? |
| 65 | RMU05A15 | Char | 1 | RMU05A15 Inhaled bronchodilators used in last 3 months: Other) |
| 66 | RMU05A15A | Num | 8 | RMU05A15A Other: Puffs/day? |
| 67 | RMU05A15B | Char | 50 | RMU05A15B Inhaled bronchodilators used in last 3 months:Specify |
| 68 | RMU06 | Char | 1 | RMU06 Nebulized bronchodilators usage in the last three months |
| 69 | RMU06A1 | Char | 1 | RMU06A1 nebulized bronchodilators used in last 3 months: formoterol (Perforomist) |
| 70 | RMU06A2 | Char | 1 | RMU06A2 nebulized bronchodilators used in last 3 months: arformoterol (Brovana) |
| 71 | RMU06A3 | Char | 1 | RMU06A3 nebulized bronchodilators used in last 3 months: albuterol and ipratropium bromide (DuoNeb) |
| 72 | RMU06A4 | Char | 1 | RMU06A4 nebulized bronchodilators used in last 3 months: albuterol (Proventil, Ventolin, ProAir) |
| 73 | RMU06A5 | Char | 1 | RMU06A5 nebulized bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | RMU07 | Char | 1 | RMU07 Leukotriene antagonist usage in the last 3 months |
| 75 | RMU08 | Char | 1 | RMU08 Statin medications usage in the last three months |
| 76 | RMU08A1 | Char | 1 | RMU08A1 statin used in last 3 months: Crestor (resuvastatin) |
| 77 | RMU08A2 | Char | 1 | RMU08A2 statin used in last 3 months: Lescol (fluvastatin) |
| 78 | RMU08A3 | Char | 1 | RMU08A3 statin used in last 3 months: Lipitor (atorvastatin) |
| 79 | RMU08A4 | Char | 1 | RMU08A4 statin used in last 3 months: Mevacor (lovastatin) |
| 80 | RMU08A5 | Char | 1 | RMU08A5 statin used in last 3 months: Pravachol (pravastatin) |
| 81 | RMU08A6 | Char | 1 | RMU08A6 statin used in last 3 months: Vytorin (ezetimibe, simvastatin) |
| 82 | RMU08A7 | Char | 1 | RMU08A7 statin used in last 3 months: Zocor (simvastatin) |
| 83 | RMU08A8 | Char | 1 | RMU08A8 statin used in last 3 months: Other |
| 84 | RMU08A8B | Char | 50 | RMU08A8B statin used in last 3 months:Specify |
| 85 | RMU09 | Char | 1 | RMU09 Beta-blocker medications usage in the last three months |
| 86 | RMU09A1 | Char | 1 | RMU09A1 beta blocker used in last 3 months: Atenolol (tenormin, tenoretic) |
| 87 | RMU09A2 | Char | 1 | RMU09A2 beta blocker used in last 3 months: Metoprolol (lopresor, toprol) |
| 88 | RMU09A3 | Char | 1 | RMU09A3 beta blocker used in last 3 months: Carvedilol (coreg) |
| 89 | RMU09A4 | Char | 1 | RMU09A4 beta blocker used in last 3 months: Labetalol (trandate, normodyne) |
| 90 | RMU09A5 | Char | 1 | RMU09A5 beta blocker used in last 3 months: Propranalol (Inderal, Inderide) |
| 91 | RMU09A6 | Char | 1 | RMU09A6 beta blocker used in last 3 months: Sotalol (Betapace, Sorine) |
| 92 | RMU09A7 | Char | 1 | RMU09A7 beta blocker used in last 3 months: Timolol (Blocadren, timolide) |
| 93 | RMU09A8 | Char | 1 | RMU09A8 beta blocker used in last 3 months: bisoprolol (zebeta, ziac) |
| 94 | RMU09A9 | Char | 1 | RMU09A9 beta blocker used in last 3 months: pindolol (visken) |
| 95 | RMU09A10 | Char | 1 | RMU09A10 beta blocker used in last 3 months: Other |
| 96 | RMU09A10B | Char | 50 | RMU09A10B beta blocker used in last 3 months:Specify |
| 97 | RMU10 | Char | 1 | RMU10 Oral anti-oxidant supplements usage in the past three months |
| 98 | RMU10A1 | Char | 1 | RMU10A1 oral anti-oxidants used in last 3 months: Vitamin C (ascorbic acid) |
| 99 | RMU10A2 | Char | 1 | RMU10A2 oral anti-oxidants used in last 3 months: Vitamin E (alpha-tocopherol) |
| 100 | RMU10A3 | Char | 1 | RMU10A3 oral anti-oxidants used in last 3 months: beta carotene |
| 101 | RMU10A4 | Char | 1 | RMU10A4 oral anti-oxidants used in last 3 months: zinc |
| 102 | RMU10A5 | Char | 1 | RMU10A5 oral anti-oxidants used in last 3 months: copper |
| 103 | RMU10A6 | Char | 1 | RMU10A6 oral anti-oxidants used in last 3 months: fish oil |
| 104 | RMU10A7 | Char | 1 | RMU10A7 oral anti-oxidants used in last 3 months: omega 3 |
| 105 | RMU10A8 | Char | 1 | RMU10A8 oral anti-oxidants used in last 3 months: Other |
| 106 | RMU11 | Char | 1 | RMU11 Aspirin usage |
| 107 | RMU12H | Char | 50 | RMU12H Other Medication taken in the last 3 months |
| 108 | RMU12I | Char | 50 | RMU12I Other Medication taken in the last 3 months |
| 109 | RMU13D | Char | 50 | RMU13D Other Supplement taken in the last 3 months |
| 110 | RMU13E | Char | 50 | RMU13E Other Supplement taken in the last 3 months |
| 111 | RMU13F | Char | 50 | RMU13F Other Supplement taken in the last 3 months |
| 112 | RMU13G | Char | 50 | RMU13G Other Supplement taken in the last 3 months |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 113 | RMU13H | Char | 50 | RMU13H Other Supplement taken in the last 3 months |
| 114 | RMU13I | Char | 50 | RMU13I Other Supplement taken in the last 3 months |
| 115 | VERSION | Char | 21 | VERSION |
| 116 | RMU0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: v4_sdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SDF01 | Char | 1 | SDF01 Exhaled CO Measured |
| 5 | SDF01A | Num | 8 | SDF01A Monitor number |
| 6 | SDF01B | Num | 8 | SDF01B eCO Measurement 1 |
| 7 | SDF01C | Num | 8 | SDF01C eCO Measurement 2 |
| 8 | SDF02 | Char | 1 | SDF02 Pre-bronchodilator spirometry |
| 9 | SDF02A | Char | 5 | SDF02A Time pre-BD slow vital capacity procedure began |
| 10 | SDF02A_AMPM | Char | 1 | SDF02A_AMPM AM/PM |
| 11 | SDF03A | Num | 8 | SDF03A Pre-BD Inspiratory Capacity |
| 12 | SDF03B | Num | 8 | SDF03B Pre-BD Expiratory slow vital capacity |
| 13 | SDF03C | Num | 8 | SDF03C Pre-BD FEV1 |
| 14 | SDF03D | Num | 8 | SDF03D Pre-BD FVC |
| 15 | SDF04 | Char | 1 | SDF04 Post-bronchodilator spirometry |
| 16 | SDF04A | Char | 5 | SDF04A Time first puff of bronchodilator administered |
| 17 | SDF04A_AMPM | Char | 1 | SDF04A_AMPM AM/PM |
| 18 | SDF04B | Char | 5 | SDF04B Time post-BD slow vital capacity procedure began |
| 19 | SDF04B_AMPM | Char | 1 | SDF04B_AMPM AM/PM |
| 20 | SDF05A | Num | 8 | SDF05A Post-BD Inspiratory Capacity |
| 21 | SDF05B | Num | 8 | SDF05B Post-BD Expiratory slow vital capacity |
| 22 | SDF05C | Num | 8 | SDF05C Post-BD FEV1 |
| 23 | SDF05D | Num | 8 | SDF05D Post-BD FVC |
| 24 | SDF06 | Char | 1 | SDF06 Post-BD Meet ATS-ERS requirements |
| 25 | SDF07 | Char | 1 | SDF07 Complications during spirometry |
| 26 | VERSION | Char | 21 | Version |
| 27 | SDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: v4_sfh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFH01 | Num | 8 | SFH01 General Health |
| 5 | SFH02A | Num | 8 | SFH02A Limitations on moderate activites |
| 6 | SFH02B | Num | 8 | SFH02B Limitations on difficult activities |
| 7 | SFH03A | Char | 1 | SFH03A Limited in accomplishing tasks |
| 8 | SFH03B | Char | 1 | SFH03B Limited in daily activities |
| 9 | SFH04A | Char | 1 | SFH04A Emotional limitations on activities |
| 10 | SFH04B | Char | 1 | SHF04B Emotional limitations on daily life |
| 11 | SFH05 | Num | 8 | SFH05 Pain interfering with normal work |
| 12 | SFH06A | Num | 8 | SFH06A Feeling calm |
| 13 | SFH06B | Num | 8 | SFH06B Energy level |
| 14 | SFH06C | Num | 8 | SFH06C Feeling depressed |
| 15 | SFH07 | Num | 8 | SFH07 Physical/emotional health interfering with social life |
| 16 | VERSION | Char | 21 | Version |
| 17 | SFH_BP04 | Num | 8 | Year 3 SFH bodily pain |
| 18 | SFH_GH04 | Num | 8 | Year 3 SFH general health |
| 19 | SFH_MCS04 | Num | 8 | Year 3 SFH mental component summary |
| 20 | SFH_MH04 | Num | 8 | Year 3 SFH mental health |
| 21 | SFH_PCS04 | Num | 8 | Year 3 SFH physical component summary |
| 22 | SFH_PF04 | Num | 8 | Year 3 SFH physical functioning |
| 23 | SFH_RE04 | Num | 8 | Year 3 SFH role emotion |
| 24 | SFH_RP04 | Num | 8 | Year 3 SFH role physical |
| 25 | SFH_SF04 | Num | 8 | Year 3 SFH social functioning |
| 26 | SFH_VT04 | Num | 8 | Year 3 SFH vitality |
| 27 | SFH0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: v4_sfv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SFV01 | Char | 9 | SFV01 study_id |
| 5 | SFV10 | Char | 15 | SFV10 Position |
| 6 | SFV12 | Num | 8 | SFV12 visit_num |
| 7 | SFV13 | Num | 8 | SFV13 interval_num |
| 8 | SFV14 | Num | 8 | SFV14 stage_num |
| 9 | SFV15 | Num | 8 | SFV15 seq_num |
| 10 | SFV16 | Char | 10 | SFV16 vlabel |
| 11 | SFV17 | Num | 8 | SFV17 repeats |
| 12 | SFV19 | Char | 15 | SFV19 qa_grade |
| 13 | SFV20 | Char | 15 | SFV20 qa_status |
| 14 | SFV22B | Char | 8 | SFV22B time |
| 15 | SFV23B | Char | 8 | SFV23B time_best |
| 16 | SFV24B | Char | 8 | SFV24B time_first |
| 17 | SFV25 | Num | 8 | SFV25 trial_seq_num |
| 18 | SFV26 | Num | 8 | SFV26 ranking |
| 19 | SFV27 | Num | 8 | SFV27 temperature |
| 20 | SFV28 | Num | 8 | SFV28 barometric |
| 21 | SFV29 | Num | 8 | SFV29 humidity |
| 22 | SFV30 | Num | 8 | SFV30 fevpd |
| 23 | SFV31 | Num | 8 | SFV31 fvcpd |
| 24 | SFV32 | Num | 8 | SFV32 fefpd |
| 25 | SFV33 | Num | 8 | SFV33 fev1_fvcpd |
| 26 | SFV34 | Num | 8 | SFV34 pefpd |
| 27 | SFV35 | Num | 8 | SFV35 pctfev |
| 28 | SFV36 | Num | 8 | SFV36 petfvc |
| 29 | SFV37 | Num | 8 | SFV37 pctfef2575 |
| 30 | SFV38 | Num | 8 | SFV38 pctpefr |
| 31 | SFV39 | Num | 8 | SFV39 pctfev_fvc |
| 32 | SFV40 | Num | 8 | SFV40 fvc |
| 33 | SFV41 | Num | 8 | SFV41 flag_fvc_best |
| 34 | SFV42B | Char | 8 | SFV42B trials_time |
| 35 | SFV43 | Num | 8 | SFV43 fev05 |
| 36 | SFV44 | Num | 8 | SFV44 fev05fvc |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV45 | Num | 8 | SFV45 fev1 |
| 38 | SFV46 | Num | 8 | SFV46 flag_fev_best |
| 39 | SFV47 | Num | 8 | SFV47 fev1fvc |
| 40 | SFV48 | Num | 8 | SFV48 flag_fevfvc_best |
| 41 | SFV49 | Num | 8 | SFV49 fev3 |
| 42 | SFV50 | Num | 8 | SFV50 fev3fvc |
| 43 | SFV51 | Num | 8 | SFV51 fev6 |
| 44 | SFV52 | Num | 8 | SFV52 fef212 |
| 45 | SFV53 | Num | 8 | SFV53 fef2575 |
| 46 | SFV54 | Num | 8 | SFV54 flag_fef2575_best |
| 47 | SFV55 | Num | 8 | SFV55 fef25756 |
| 48 | SFV56 | Num | 8 | SFV56 fef25 |
| 49 | SFV57 | Num | 8 | SFV57 fef50 |
| 50 | SFV58 | Num | 8 | SFV58 fef506 |
| 51 | SFV59 | Num | 8 | SFV59 fef75 |
| 52 | SFV60 | Num | 8 | SFV60 fef756 |
| 53 | SFV61 | Num | 8 | SFV61 fef7585 |
| 54 | SFV62 | Num | 8 | SFV62 pefr |
| 55 | SFV63 | Num | 8 | SFV63 flag_pefr_best |
| 56 | SFV64 | Num | 8 | SFV64 met |
| 57 | SFV65 | Num | 8 | SFV65 peft |
| 58 | SFV66 | Num | 8 | SFV66 vext |
| 59 | SFV67 | Num | 8 | SFV67 pctvext |
| 60 | SFV68 | Num | 8 | SFV68 expt |
| 61 | SFV71 | Num | 8 | SFV71 fivc |
| 62 | SFV72 | Num | 8 | SFV72 fiv05 |
| 63 | SFV73 | Num | 8 | SFV73 fiv05fivc |
| 64 | SFV74 | Num | 8 | SFV74 fiv1 |
| 65 | SFV75 | Num | 8 | SFV75 fiv1fivc |
| 66 | SFV76 | Num | 8 | SFV76 fiv3 |
| 67 | SFV77 | Num | 8 | SFV77 pifr |
| 68 | SFV78 | Num | 8 | SFV78 fif212 |
| 69 | SFV79 | Num | 8 | SFV79 fif2575 |
| 70 | SFV80 | Num | 8 | SFV80 mit |
| 71 | VERSION | Char | 21 | Version |
| 72 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 73 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 74 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 75 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: v4_sgr_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SGR0 | Char | 1 | SGR01 Describe current health |
| 5 | SGR01 | Num | 8 | SGR01 chest trouble: I cough: |
| 6 | SGR02 | Num | 8 | SGR02 chest trouble: I bring up phlegm (sputum): |
| 7 | SGR03 | Num | 8 | SGR03 chest trouble: I have had shortness of breath: |
| 8 | SGR04 | Num | 8 | SGR04 chest trouble: I have attacks of wheezing: |
| 9 | SGR05 | Char | 1 | SGR05 Number of attacks |
| 10 | SGR06 | Char | 1 | SGR06 Days with little chest trouble |
| 11 | SGR07 | Char | 1 | SGR07 Wheeze in morning |
| 12 | SGR08 | Char | 1 | SGR08 Describe chest condition |
| 13 | SGR09A | Char | 1 | SGR09A Feel breathless:Getting washed or dressed |
| 14 | SGR09B | Char | 1 | SGR09B Feel breathless:Walking around the home |
| 15 | SGR09C | Char | 1 | SGR09C Feel breathless:Walking outside on the level |
| 16 | SGR09D | Char | 1 | SGR09D Feel breathless:Walking up a flight of stairs |
| 17 | SGR09E | Char | 1 | SGR09E Feel breathless:Walking up hills |
| 18 | SGR10A | Char | 1 | SGR10A About cough and breathlessness: Painful cough |
| 19 | SGR10B | Char | 1 | SGR10B About cough and breathlessness: Tiring cough |
| 20 | SGR10C | Char | 1 | SGR10C About cough and breathlessness: Breathless when talking |
| 21 | SGR10D | Char | 1 | SGR10D About cough and breathlessness: Breathless when bending over |
| 22 | SGR10E | Char | 1 | SGR10E About cough and breathlessness: Coughing/breathing disturbs sleep |
| 23 | SGR10F | Char | 1 | SGR10F About cough and breathlessness: Easily exhausted |
| 24 | SGR11A | Char | 1 | SGR11A Effect of chest trouble: Embarrassed in public |
| 25 | SGR11B | Char | 1 | SGR11B Effect of chest trouble: Chest trouble annoys others |
| 26 | SGR11C | Char | 1 | SGR11C Effect of chest trouble: Feeling panicked when out of breath |
| 27 | SGR11D | Char | 1 | SGR11D Effect of chest trouble: Chest problem beyond control |
| 28 | SGR11E | Char | 1 | SGR11E Effect of chest trouble: Frail/invalid |
| 29 | SGR11F | Char | 1 | SGR11F Effect of chest trouble: Exercise is unsafe |
| 30 | SGR11G | Char | 1 | SGR11G Effect of chest trouble: Effort |
| 31 | SGR12A | Char | 1 | SGR12A Activities effected by respiratory problems: Long time washing/dressing |
| 32 | SGR12B | Char | 1 | SGR12B Activities effected by respiratory problems: Long time bathing |
| 33 | SGR12C | Char | 1 | SGR12C Activities effected by respiratory problems: Walking slowly/pausing often |
| 34 | SGR12D | Char | 1 | SGR12D Activities effected by respiratory problems: Long time doing housework |
| 35 | SGR12E | Char | 1 | SGR12E Activities effected by respiratory problems: Walking up stairs |
| 36 | SGR12F | Char | 1 | SGR12F Activities effected by respiratory problems: Difficulty walking fast |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SGR12G | Char | 1 | SGR12G Activities effected by respiratory problems: Difficulty performing moderate <br> tasks |
| 38 | SGR12H | Char | 1 | SGR12H Activities effected by respiratory problems: Difficulty performing hard tasks |
| 39 | SGR13A | Char | 1 | SGR13A Activities usually effected by chest: Cannot play sports or games |
| 40 | SGR13B | Char | 1 | SGR13B Activities usually effected by chest: Cannot go out for recreation |
| 41 | SGR13C | Char | 1 | SGR13C Activities usually effected by chest: Cannot go out shopping |
| 42 | SGR13D | Char | 1 | SGR13DActivities usually effected by chest: Cannot do housework |
| 43 | SGR13E | Num | 8 | SGR14 Personal effects of chest trouble |
| 44 | SGR14 | Char | 21 | Version |
| 45 | VERSION | SGR13E Activities usually effected by chest: Cannot move far from bed/chair |  |  |
| 46 | SGR_SYMPTOMSCORE04 | Num | 8 | Year 3 SGR symptom score |
| 47 | SGR_ACTIVITYSCORE04 | Num | 8 | Year 3 SGR activity score |
| 48 | SGR_IMPACTSCORE04 | Num | 8 | Year 3 SGR impact score |
| 49 | SGR_TOTALSCORE04 | Num | 8 | Year 3 SGR total score |
| 50 | SGR0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_smw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SMW01 | Num | 8 | SMW01 Medications taken since post-bronchodilator spirometry |
| 5 | SMW01A1 | Char | 45 | SMW01A1 Medication name |
| 6 | SMW01A2 | Char | 20 | SMW01A2 Dose |
| 7 | SMW01A3 | Char | 5 | SMW01A3 Time |
| 8 | SMW01A3_AMPM | Char | 1 | SMW01A3_AMPM AM/PM |
| 9 | SMW01B3 | Char | 5 | SMW01B3 Time |
| 10 | SMW01B3_AMPM | Char | 1 | SMW01B3_AMPM AM/PM |
| 11 | SMW01C3 | Char | 5 | SMW01C3 Time |
| 12 | SMW01C3_AMPM | Char | 1 | SMW01C3_AMPM AM/PM |
| 13 | SMW02 | Char | 1 | SMW02 blood pressure taken more than 4 hours prior to SMW |
| 14 | SMW02A | Num | 8 | SMW02A Systolic |
| 15 | SMW02B | Num | 8 | SMW02B Diastolic |
| 16 | SMW03 | Char | 1 | SMW03 Supplemental Oxygen |
| 17 | SMW03A | Num | 8 | SMW03A Supplemental Oxygen Flow rate |
| 18 | SMW03B | Char | 1 | SMW03B Flow Type |
| 19 | SMW04A | Num | 8 | SMW04A Oxygen saturation (SpO2) at rest prior to SMW |
| 20 | SMW04B | Num | 8 | SMW04B Pulse at rest prior to SMW |
| 21 | SMW05 | Char | 1 | SMW05 Was continuous oximetry recorded? |
| 22 | SMW06 | Char | 5 | SMW06 Start time of 6MW |
| 23 | SMW06_AMPM | Char | 1 | SMW06_AMPM AM/PM |
| 24 | SMW07A | Num | 8 | SMW07A Oxygen saturation (SpO2) immediately following SMW |
| 25 | SMW07B | Num | 8 | SMW07B Pulse immediately following SMW |
| 26 | SMW07C | Num | 8 | SMW07C Breathlessness Score immediately following SMW |
| 27 | SMW07D | Num | 8 | SMW07D Exertion score immediately following SMW |
| 28 | SMW08A | Char | 1 | SMW08A Type of SMW course used (meters, feet, or other) |
| 29 | SMW08B | Num | 8 | SMW08B Number of full laps |
| 30 | SMW08C | Num | 8 | SMW08C Distance walked final partial lap |
| 31 | SMW09 | Char | 1 | SMW09 Stopped before 6 minutes |
| 32 | SMW09A1 | Num | 8 | SMW09A1 Duration (minutes) |
| 33 | SMW09A2 | Num | 8 | SMW09A2 Duration (seconds) |
| 34 | SMW09B1 | Num | 8 | SMW09B1 Primary reason for stopping/not walking faster: Desaturation to LT 80\% |
| 35 | SMW09B2 | SM | 8 | SMW09B2 Primary reason for stopping/not walking faster: Orthopedic pain |
| $3609 B 3$ | SM | SMW09B3 Primary reason for stopping/not walking faster: Muscle pain |  |  |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SMW09B4 | Num | 8 | SMW09B4 Primary reason for stopping/not walking faster: Breathlessness |
| 38 | SMW09B5 | Num | 8 | SMW09B5 Primary reason for stopping/not walking faster: Adverse Event |
| 39 | SMW09B5A | Num | 8 | SMW09B5A SMW related AE: Angina |
| 40 | SMW09B5B | Num | 8 | SMW09B5B SMW related AE: Lightheadedness |
| 41 | SMW09B5C | Num | 8 | SMW09B5C SMW related AE: Intolerable dyspnea |
| 42 | SMW09B5D | Num | 8 | SMW09B5D SMW related AE: Leg cramps |
| 43 | SMW09B5E | Num | 8 | SMW09B5E SMW related AE: Staggering |
| 44 | SMW09B5F | Num | 8 | SMW09B5F SMW related AE: Diaphoresis |
| 45 | SMW09B5G | Num | 8 | SMW09B5G SMW related AE: Pale or ashen appearance |
| 46 | SMW09B5H | Num | 8 | SMW09B5H SMW related AE: Mental confusion or headache |
| 47 | SMW09B5I | Num | 8 | SMW09B5I SMW related AE: Other |
| 48 | SMW09B5ISP | Char | 100 | SMW09B5ISP Explain other AE related to SMW |
| 49 | VERSION | Char | 21 | Version |
| 50 | SMW0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: v4_ssv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | SSV01 | Char | 9 | SSV01 study_id |
| 5 | SSV10 | Char | 15 | SSV10 position |
| 6 | SSV12 | Num | 8 | SSV12 visit_num |
| 7 | SSV13 | Num | 8 | SSV13 interval_num |
| 8 | SSV14 | Num | 8 | SSV14 stage_num |
| 9 | SSV15 | Num | 8 | SSV15 seq_num |
| 10 | SSV16 | Char | 5 | SSV16 vlabel |
| 11 | SSV17 | Num | 8 | SSV17 repeats |
| 12 | SSV19 | Char | 15 | SSV19 qa_grade |
| 13 | SSV20 | Char | 15 | SSV20 qa_status |
| 14 | SSV22B | Char | 8 | SSV22B time |
| 15 | SSV23B | Char | 8 | SSV23B time_best |
| 16 | SSV24B | Char | 8 | SSV24B time_first |
| 17 | SSV25B | Char | 8 | SSV25B trials_time |
| 18 | SSV26 | Num | 8 | SSV26 trial_seq_num |
| 19 | SSV27 | Num | 8 | SSV27 ranking |
| 20 | SSV28 | Num | 8 | SSV28 temperature |
| 21 | SSV29 | Num | 8 | SSV29 barometric |
| 22 | SSV30 | Num | 8 | SSV30 humidity |
| 23 | SSV31 | Num | 8 | SSV31 pre_washout_1 |
| 24 | SSV33 | Num | 8 | SSV33 svc |
| 25 | SSV34 | Num | 8 | SSV34 svcpd |
| 26 | SSV35 | Num | 8 | SSV35 petsvc |
| 27 | SSV36 | Num | 8 | SSV36 flag_svc_best |
| 28 | SSV37 | Num | 8 | SSV37 ic |
| 29 | SSV38 | Num | 8 | SSV38 irv |
| 30 | SSV39 | Num | 8 | SSV39 erv |
| 31 | SSV40 | Num | 8 | SSV40 tv |
| 32 | VERSION | Char | 21 | Version |
| 33 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: v4_vsa_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | FORM | Char | 10 | Form |
| 3 | VISIT | Char | 10 | Visit |
| 4 | VSA01 | Char | 1 | VSA01 1 MET |
| 5 | VSA02 | Char | 1 | VSA02 2 METs |
| 6 | VSA03 | Char | 1 | VSA03 3 METs |
| 7 | VSA04 | Char | 1 | VSA04 4 METs |
| 8 | VSA05 | Char | 1 | VSA05 5 METs |
| 9 | VSA06 | Char | 1 | VSA06 6 METs |
| 10 | VSA07 | Char | 1 | VSA07 7 METs |
| 11 | VSA08 | Char | 1 | VSA08 8 METs |
| 12 | VSA09 | Char | 1 | VSA09 9 METs |
| 13 | VSA10 | Char | 1 | VSA10 10 METs |
| 14 | VSA11 | Char | 1 | VSA11 11 METs |
| 15 | VSA12 | Char | 1 | VSA12 12 METs |
| 16 | VSA13 | Char | 1 | VSA13 13 METs |
| 17 | VERSION | Char | 21 | Version |
| 18 | VSASCORE04 | Num | 8 | Year 3 veteran specific activity score |
| 19 | VSA0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: arup_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | ANAB_URN | Char | 14 | Anabasine level. Anabasine is a minor alkaloid in the tobacco plant and is a biomarker of <br> active tobacco use. However, anabasine is detected in the urine of approximately 5\% of <br> non-tobacco users. |
| 3 | COT_3H_URN | Char | 14 | Cotinine 3OH level. Nicotine is metabolized to cotinine, and 3-OH-cotinine is a <br> metabolite of cotinine. This metabolite may persist beyond 2 weeks of abstinence from <br> nicotine use. |
| 4 | CRT_DL_URINE | Char | 14 | Urine creatinine level |
| 5 | COT_URN | Char | 14 | Cotinine level. Cotinine is the major metabolite of nicotine and has a half-life of <br> approximately 16 hours. |
| 6 | NRNC_URN | Char | 14 | Nornicotine level. Nornicotine may be present in tobacco products or may result from <br> metabolism of nicotine. |
| 7 | NIC_URN | Char | 14 | Nicotine level |
| 8 | ANAB_URN_UNIT | Char | 8 | Anabasine unit |
| 9 | COT_3H_URN_UNIT | Char | 8 | Cotinine 3OH unit |
| 10 | CRT_DL_URINE_UNIT | Char | 8 | Urine creatinine unit |
| 11 | COT_URN_UNIT | Char | 8 | Cotinine unit |
| 12 | NRNC_URN_UNIT | Char | 8 | Nornicotine unit |
| 13 | NIC_URN_UNIT | Char | 8 | Nicotine unit |
| 14 | VISIT | Char | 10 | Visit |
| 15 | NICOTINE_UR | Num | 8 | Indicator if nicotine levels are elevated (1 - Nic_URN>2, 0 - Nic_URN<=2) |
| 16 | COTININE_UR | Num | 8 | Indicator if cotinine levels are elevated (1 - Cot_URN>5, 0 - Cot_URN<=5) |
| 17 | COTININE_3OH_UR | Num | 8 | Indicator if cotinine 3OH levels are elevated (1 - Cot_3H_URN>50, 0 - |
| Cot_3H_URN<=50) |  |  |  |  |

## Data Set Name: biomark_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | ADIPOQ_RAW | Char | 7 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 3 | SERPINA1_RAW | Char | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 4 | A2M_RAW | Char | 7 | Alpha-2-Macroglobulin (A2M) |
| 5 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 6 | SLPI_RAW | Char | 6 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 7 | LPA_RAW | Char | 7 | Lipoprotein, (Lp(a) (LPA) |
| 8 | AXL_RAW | Char | 6 | AXL Receptor Tyrosine Kinase (AXL) |
| 9 | B2M_RAW | Char | 8 | Beta-2-microglobulin (B2M) |
| 10 | BDNF_RAW | Char | 6 | Brain-derived neurotrophic factor (BDNF) |
| 11 | CRP_RAW | Char | 8 | C-reactive protein, pentraxin-related (CRP) |
| 12 | CDH1_RAW | Char | 5 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 13 | CDH13_RAW | Char | 5 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 14 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 15 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 16 | CCL16_RAW | Char | 6 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 17 | CHGA_RAW | Char | 5 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 18 | C3_RAW | Char | 8 | Complement component C3 (C3) |
| 19 | CKM_CKB_RAW | Char | 5 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 20 | CSTB_RAW | Char | 6 | Cystatin B (stefin B) (CSTB) |
| 21 | DCN_RAW | Char | 5 | Decorin (DCN) |
| 22 | SELE_RAW | Char | 5 | Selectin E (SELE) |
| 23 | S100A12_RAW | Char | 6 | S100 calcium binding protein A12 (ENRAGE) |
| 24 | CCL11_RAW | Char | 5 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 25 | CCL24_RAW | Char | 5 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 26 | CXCL5_RAW | Char | 6 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 27 | F7_RAW | Char | 5 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 28 | FAS_RAW | Char | 5 | Fas cell surface death receptor (FAS) |
| 29 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 30 | FTL_FTH1_RAW | Char | 6 | Ferritin [FT(L/H1)] |
| 31 | FGA_FGB_FGG_RAW | Char | 8 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 32 | CSF2_RAW | Char | 5 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 33 | CXCL1_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 34 | HP_RAW | Char | 8 | Haptoglobin (HP) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 35 | HGF_RAW | Char | 5 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 36 | IGA_RAW | Char | 8 | Immunoglobulin A (IgA) |
| 37 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |
| 38 | IGM_RAW | Char | 8 | Immunoglobulin M |
| 39 | ICAM1_RAW | Char | 5 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 40 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 41 | CXCL10_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 42 | IL1A_RAW | Char | 8 | Interleukin 1, alpha (IL1A) |
| 43 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 44 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 45 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 46 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 47 | IL3_RAW | Char | 7 | Interleukin 3 (IL3) |
| 48 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 49 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 50 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |
| 51 | IL6R_RAW | Char | 6 | Interleukin-6 receptor (IL6R) |
| 52 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 53 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 54 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 55 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 56 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 57 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 58 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 59 | IL16_RAW | Char | 5 | Interleukin 16 (IL16) |
| 60 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 61 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 62 | IL18BP_RAW | Char | 6 | Interleukin 18 binding protein (IL18BP) |
| 63 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 64 | LTF_RAW | Char | 5 | Lactotransferrin |
| 65 | TGFB1_LAP_RAW | Char | 5 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 66 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 67 | CCL22_RAW | Char | 5 | chemokine (C-C motif) ligand 22 (CCL22) |
| 68 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 69 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 70 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 71 | KIT_RAW | Char | 6 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 72 | MMP3_RAW | Char | 6 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 73 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 74 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 75 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 76 | CCL8_RAW | Char | 5 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 77 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 78 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 79 | CCL23_RAW | Char | 6 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 80 | MB_RAW | Char | 5 | Myoglobin (MB) |
| 81 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 82 | NGF_RAW | Char | 6 | Nerve growth gactor (beta polypeptide) (NGF) |
| 83 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 84 | TNFRSF11B_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 85 | SPINK1_RAW | Char | 7 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 86 | SERPINE1_RAW | Char | 6 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 87 | PECAM1_RAW | Char | 5 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 88 | KLK3_F_RAW | Char | 7 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 89 | CCL18_RAW | Char | 6 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) |
| 90 | SFTPD_RAW | Char | 5 | Surfactant protein D (SFTPD) |
| 91 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 92 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 93 | APCS_RAW | Char | 8 | Amyloid P-component, serum (APCS) |
| 94 | SHBG_RAW | Char | 7 | Sex Hormone-Binding Globulin (SHBG) |
| 95 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |
| 96 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |
| 97 | SOD1_RAW | Char | 5 | Superoxide Dismutase 1, soluble (SOD1) |
| 98 | CCL5_RAW | Char | 7 | chemokine (C-C motif) ligand 5 (CCL5) |
| 99 | THBD_RAW | Char | 5 | Thrombomodulin (THBD) |
| 100 | SERPINA7_RAW | Char | 7 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 101 | TIMP1_RAW | Char | 6 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 102 | TIMP2_RAW | Char | 5 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 103 | TNFRSF10C_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 104 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 105 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 106 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 107 | TNFRSF1B_RAW | Char | 6 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 108 | VCAM1_RAW | Char | 6 | Vascular cell adhesion molecule 1 (VCAM1) |
| 109 | VEGFA_RAW | Char | 5 | Vascular endothelial growth factor (VEGFA) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 110 | GC_RAW | Char | 8 | Group-specific component (vitamin D binding protein) (GC) |
| 111 | VTN_RAW | Char | 5 | Vitronectin |
| 112 | VWF_RAW | Char | 7 | von Willebrand Factor (vWF) |
| 113 | A2M_UNIT | Char | 7 | Analyte unit |
| 114 | ADIPOQ_UNIT | Char | 7 | Analyte unit |
| 115 | AGER_UNIT | Char | 5 | Analyte unit |
| 116 | ANGPT1_UNIT | Char | 5 | Analyte unit |
| 117 | APCS_UNIT | Char | 8 | Analyte unit |
| 118 | AXL_UNIT | Char | 6 | Analyte unit |
| 119 | B2M_UNIT | Char | 8 | Analyte unit |
| 120 | BDNF_UNIT | Char | 6 | Analyte unit |
| 121 | C3_UNIT | Char | 8 | Analyte unit |
| 122 | CA9_UNIT | Char | 5 | Analyte unit |
| 123 | CCL2_UNIT | Char | 5 | Analyte unit |
| 124 | CCL3_UNIT | Char | 5 | Analyte unit |
| 125 | CCL4_UNIT | Char | 5 | Analyte unit |
| 126 | CCL5_UNIT | Char | 7 | Analyte unit |
| 127 | CCL8_UNIT | Char | 5 | Analyte unit |
| 128 | CCL11_UNIT | Char | 5 | Analyte unit |
| 129 | CCL13_UNIT | Char | 5 | Analyte unit |
| 130 | CCL16_UNIT | Char | 6 | Analyte unit |
| 131 | CCL18_UNIT | Char | 6 | Analyte unit |
| 132 | CCL20_UNIT | Char | 5 | Analyte unit |
| 133 | CCL22_UNIT | Char | 5 | Analyte unit |
| 134 | CCL23_UNIT | Char | 6 | Analyte unit |
| 135 | CCL24_UNIT | Char | 5 | Analyte unit |
| 136 | CDH1_UNIT | Char | 5 | Analyte unit |
| 137 | CDH13_UNIT | Char | 5 | Analyte unit |
| 138 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 139 | CHGA_UNIT | Char | 5 | Analyte unit |
| 140 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 141 | CRP_UNIT | Char | 8 | Analyte unit |
| 142 | CSF2_UNIT | Char | 5 | Analyte unit |
| 143 | CSTB_UNIT | Char | 6 | Analyte unit |
| 144 | CXCL1_UNIT | Char | 5 | Analyte unit |
| 145 | CXCL5_UNIT | Char | 6 | Analyte unit |
| 146 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 147 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 148 | DCN_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len |
| :--- | :--- | :--- | :--- |
| 149 | L7_UNIT | Char | 5 |
| 150 | Analyte unit |  |  |
| 151 | FAB__UNIT | Char | 5 |
| Analyte unit |  |  |  |
| 152 | FGA_FGB_FGG_UNIT | Char | 5 |
| 153 | Analyte unit |  |  |
| 154 | GC__UNIT | Char | 8 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 188 | LTA_UNIT | Char | 5 | Analyte unit |
| 189 | LTF_UNIT | Char | 5 | Analyte unit |
| 190 | MB_UNIT | Char | 5 | Analyte unit |
| 191 | MDK_UNIT | Char | 5 | Analyte unit |
| 192 | MMP3_UNIT | Char | 6 | Analyte unit |
| 193 | MMP9_UNIT | Char | 5 | Analyte unit |
| 194 | NGF_UNIT | Char | 6 | Analyte unit |
| 195 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 196 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 197 | OLR1_UNIT | Char | 5 | Analyte unit |
| 198 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 199 | S100A12_UNIT | Char | 6 | Analyte unit |
| 200 | S100B_UNIT | Char | 5 | Analyte unit |
| 201 | SELE_UNIT | Char | 5 | Analyte unit |
| 202 | SERPINA1_UNIT | Char | 8 | Analyte unit |
| 203 | SERPINA7_UNIT | Char | 7 | Analyte unit |
| 204 | SERPINE1_UNIT | Char | 6 | Analyte unit |
| 205 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 206 | SHBG_UNIT | Char | 7 | Analyte unit |
| 207 | SLPI_UNIT | Char | 6 | Analyte unit |
| 208 | SOD1_UNIT | Char | 5 | Analyte unit |
| 209 | SORT1_UNIT | Char | 5 | Analyte unit |
| 210 | SPINK1_UNIT | Char | 7 | Analyte unit |
| 211 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 212 | THBD_UNIT | Char | 5 | Analyte unit |
| 213 | TIMP1_UNIT | Char | 6 | Analyte unit |
| 214 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 215 | TNF_UNIT | Char | 5 | Analyte unit |
| 216 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 217 | TNFRSF11B_UNIT | Char | 5 | Analyte unit |
| 218 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 219 | TNFRSF1B_UNIT | Char | 6 | Analyte unit |
| 220 | VCAM1_UNIT | Char | 6 | Analyte unit |
| 221 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 222 | VTN_UNIT | Char | 5 | Analyte unit |
| 223 | VWF_UNIT | Char | 7 | Analyte unit |
| 224 | ADIPOQ_SF | Char | 5 | scaling factor for Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 225 | SERPINA1_SF | Char | 5 | scaling factor for Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 226 | A2M_SF | Char | 5 | scaling factor for Alpha-2-Macroglobulin (A2M) |
| 227 | ANGPT1_SF | Char | 5 | scaling factor for Angiopoietin 1 (ANGPT1) |
| 228 | SLPI_SF | Char | 5 | scaling factor for Secretory leukocyte peptidase inhibitor (SLPI) |
| 229 | LPA_SF | Char | 5 | scaling factor for Lipoprotein, (Lp(a) (LPA) |
| 230 | AXL_SF | Char | 5 | scaling factor for AXL Receptor Tyrosine Kinase (AXL) |
| 231 | B2M_SF | Char | 5 | scaling factor for Beta-2-microglobulin (B2M) |
| 232 | BDNF_SF | Char | 5 | scaling factor for Brain-derived neurotrophic factor (BDNF) |
| 233 | CRP_SF | Char | 5 | scaling factor for C-reactive protein, pentraxin-related (CRP) |
| 234 | CDH1_SF | Char | 5 | scaling factor for Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 235 | CDH13_SF | Char | 5 | scaling factor for Cadherin 13, H-cadherin (heart) (CDH13) |
| 236 | CA9_SF | Char | 5 | scaling factor for Carbonic anhydrase IX (CA9) |
| 237 | CEACAM1_SF | Char | 5 | scaling factor for Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 238 | CCL16_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 16 (CCL16) |
| 239 | CHGA_SF | Char | 5 | scaling factor for Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 240 | C3_SF | Char | 5 | scaling factor for Complement component C3 (C3) |
| 241 | CKM_CKB_SF | Char | 5 | scaling factor for Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 242 | CSTB_SF | Char | 5 | scaling factor for Cystatin B (stefin B) (CSTB) |
| 243 | DCN_SF | Char | 5 | scaling factor for Decorin (DCN) |
| 244 | SELE_SF | Char | 5 | scaling factor for Selectin E (SELE) |
| 245 | S100A12_SF | Char | 5 | scaling factor for S100 calcium binding protein A12 (ENRAGE) |
| 246 | CCL11_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 247 | CCL24_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 24 (CCL24) |
| 248 | CXCL5_SF | Char | 5 | scaling factor for chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 249 | F7_SF | Char | 5 | scaling factor for Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 250 | FAS_SF | Char | 5 | scaling factor for Fas cell surface death receptor (FAS) |
| 251 | FABP3_SF | Char | 5 | scaling factor for Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 252 | FTL_FTH1_SF | Char | 5 | scaling factor for Ferritin [FT(L/H1)] |
| 253 | FGA_FGB_FGG_SF | Char | 5 | scaling factor for Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 254 | CSF2_SF | Char | 5 | scaling factor for Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 255 | CXCL1_SF | Char | 5 | scaling factor for Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 256 | HP_SF | Char | 5 | scaling factor for Haptoglobin (HP) |
| 257 | HGF_SF | Char | 5 | scaling factor for Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 258 | IGA_SF | Char | 5 | scaling factor for Immunoglobulin A (IgA) |
| 259 | IGE_SF | Char | 4 | scaling factor for Immunoglobulin E (IgE) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 260 | IGM_SF | Char | 5 | scaling factor for Immunoglobulin M |
| 261 | ICAM1_SF | Char | 5 | scaling factor for Intercellular Adhesion Molecule 1 (ICAM1) |
| 262 | IFNG_SF | Char | 5 | scaling factor for Interferon, gamma (IFNG) |
| 263 | CXCL10_SF | Char | 5 | scaling factor for Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 264 | IL1A_SF | Char | 5 | scaling factor for Interleukin 1, alpha (IL1A) |
| 265 | IL1B_SF | Char | 5 | scaling factor for Interleukin 1, beta (IL1B) |
| 266 | IL1RN_SF | Char | 5 | scaling factor for Interleukin 1 receptor antagonist (IL1RN) |
| 267 | IL2_SF | Char | 5 | scaling factor for Interleukin 2 (IL2) |
| 268 | IL2RA_SF | Char | 5 | scaling factor for Interleukin 2 receptor, alpha (IL2RA) |
| 269 | IL3_SF | Char | 5 | scaling factor for Interleukin 3 (IL3) |
| 270 | IL4_SF | Char | 5 | scaling factor for Interleukin 4 (IL4) |
| 271 | IL5_SF | Char | 5 | scaling factor for Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 272 | IL6_SF | Char | 5 | scaling factor for Interleukin 6 (interferon, beta 2) (IL6) |
| 273 | IL6R_SF | Char | 5 | scaling factor for Interleukin-6 receptor (IL6R) |
| 274 | IL7_SF | Char | 5 | scaling factor for Interleukin 7 (IL7) |
| 275 | IL8_SF | Char | 5 | scaling factor for Interleukin 8 (IL8) |
| 276 | IL10_SF | Char | 5 | scaling factor for Interleukin 10 (IL10) |
| 277 | IL12B_SF | Char | 5 | scaling factor for Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 278 | IL12A_IL12B_SF | Char | 5 | scaling factor for Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 279 | IL13_SF | Char | 5 | scaling factor for Interleukin 13 (IL13) |
| 280 | IL15_SF | Char | 5 | scaling factor for Interleukin 15 (IL15) |
| 281 | IL16_SF | Char | 5 | scaling factor for Interleukin 16 (IL16) |
| 282 | IL17A_SF | Char | 5 | scaling factor for Interleukin 17 (IL17A) |
| 283 | IL18_SF | Char | 5 | scaling factor for Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 284 | IL18BP_SF | Char | 5 | scaling factor for Interleukin 18 binding protein (IL18BP) |
| 285 | IL23A_SF | Char | 5 | scaling factor for Interleukin 23, alpha subunit p19 (IL23A) |
| 286 | LTF_SF | Char | 5 | scaling factor for Lactotransferrin |
| 287 | TGFB1_LAP_SF | Char | 5 | scaling factor for Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 288 | OLR1_SF | Char | 5 | scaling factor for Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 289 | CCL22_SF | Char | 5 | scaling factor for chemokine (C-C motif) ligand 22 (CCL22) |
| 290 | CCL3_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 3 (CCL3) |
| 291 | CCL4_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 4 (CCL4) |
| 292 | CCL20_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 20 (CCL20) |
| 293 | KIT_SF | Char | 5 | scaling factor for v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 294 | MMP3_SF | Char | 5 | scaling factor for Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 295 | MMP9_SF | Char | 5 | scaling factor for Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV <br> collagenase) (MMP9) |
| 296 | MDK_SF | Char | 5 | scaling factor for Midkine (neurite growth-promoting factor 2) (MDK) |
| 297 | CCL2_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 2 (CCL2) |
| 298 | CCL8_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 8 (CCL8) |
| 299 | CCL13_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 13 (CCL13) |
| 300 | CXCL9_SF | Char | 5 | scaling factor for Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 301 | CCL23_SF | Char | 5 | scaling factor for Chemokine (C-C motif) ligand 23 (CCL23) |
| 302 | MB_SF | Char | 5 | scaling factor for Myoglobin (MB) |
| 303 | NPPB_PH_SF | Char | 5 | scaling factor for Natriuretic peptide (NPPB; N-terminal prohormone) |
| 304 | NGF_SF | Char | 5 | scaling factor for Nerve growth gactor (beta polypeptide) (NGF) |
| 305 | NRCAM_SF | Char | 5 | Char |
| 306 | TNFRSF11B_SF | 5 | scaling factor for Lymphotoxin alpha (LTA) |  |
| 327 | LTA_SF | Chaling factor for Neuronal Cell Adhesion Molecule (NRCAM) |  |  |
| 323 | TIMP1_SF for TIMP metallopeptidase inhibitor 2 (TIMP2) |  |  |  |
| 325 | TIMP2_SF | TNFRSF10C_SF | Char | 2 | | scaling factor for Tumor necrosis factor receptor superfamily, member 11b |
| :--- |
| (TNFRSF11B) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 328 | TNFRSF1A_SF | Char | 5 | scaling factor for Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 329 | TNFRSF1B_SF | Char | 5 | scaling factor for Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 330 | VCAM1_SF | Char | 5 | scaling factor for Vascular cell adhesion molecule 1 (VCAM1) |
| 331 | VEGFA_SF | Char | 5 | scaling factor for Vascular endothelial growth factor (VEGFA) |
| 332 | GC_SF | Char | 5 | scaling factor for Group-specific component (vitamin D binding protein) (GC) |
| 333 | VTN_SF | Char | 5 | scaling factor for Vitronectin |
| 334 | VWF_SF | Char | 5 | scaling factor for von Willebrand Factor (vWF) |
| 335 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 336 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 337 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 338 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 339 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 340 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 341 | ANGPT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 342 | ANGPT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 343 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 344 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 345 | AXL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 346 | AXL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 347 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 348 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 349 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 350 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 351 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 352 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 353 | CA9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 354 | CA9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 355 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 356 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 357 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 358 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 359 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 360 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 361 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 362 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 363 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 364 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 365 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 366 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 367 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 368 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 369 | CCL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 370 | CCL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 371 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 372 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 373 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 374 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 375 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 376 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 377 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 378 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 379 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 380 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 381 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 382 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 383 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 384 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 385 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 386 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 387 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 388 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 389 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 390 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 391 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 392 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 393 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 394 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 395 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 396 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 397 | CXCL1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 398 | CXCL1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 399 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 400 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 401 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 402 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 403 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 404 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 405 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 406 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 407 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 408 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 409 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 410 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 411 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 412 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 413 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 414 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 415 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 416 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 417 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 418 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 419 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 420 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 421 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 422 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 423 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 424 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 425 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 426 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 427 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 428 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 429 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 430 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 431 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 432 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 433 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 434 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 435 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 436 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 437 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 438 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 439 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 440 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 441 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 442 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 443 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 444 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 445 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 446 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 447 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 448 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 449 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 450 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 451 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 452 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 453 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 454 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 455 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 456 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 457 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 458 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 459 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 460 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 461 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 462 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 463 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 464 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 465 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 466 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 467 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 468 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 469 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 470 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 471 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 472 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 473 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 474 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 475 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 476 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 477 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 478 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 479 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 480 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 481 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 482 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 483 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 484 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 485 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 486 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 487 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 488 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 489 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 490 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 491 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 492 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 493 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 494 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 495 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 496 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 497 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 498 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 499 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 500 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 501 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 502 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 503 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 504 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 505 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 506 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 507 | S100A12_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 508 | S100A12_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 509 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 510 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 511 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 512 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 513 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 514 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 515 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 516 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 517 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 518 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 519 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 520 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 521 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 522 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 523 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 524 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 525 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 526 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 527 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 528 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 529 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 530 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 531 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 532 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 533 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 534 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 535 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 536 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 537 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 538 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 539 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 540 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 541 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 542 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 543 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 544 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 545 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 546 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 547 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 548 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 549 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 550 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 551 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 552 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 553 | VTN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 554 | VTN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 555 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 556 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 557 | A2M_IMPUTED | Num | 8 | Imputed value for A2M |
| 558 | A2M_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 559 | ADIPOQ_IMPUTED | Num | 8 | Imputed value for ADIPOQ |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 560 | ADIPOQ_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 561 | AGER_IMPUTED | Num | 8 | Imputed value for AGER |
| 562 | AGER_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 563 | ANGPT1_IMPUTED | Num | 8 | Imputed value for ANGPT1 |
| 564 | ANGPT1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 565 | APCS_IMPUTED | Num | 8 | Imputed value for APCS |
| 566 | APCS_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 567 | AXL_IMPUTED | Num | 8 | Imputed value for AXL |
| 568 | AXL_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 569 | B2M_IMPUTED | Num | 8 | Imputed value for B2M |
| 570 | B2M_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 571 | BDNF_IMPUTED | Num | 8 | Imputed value for BDNF |
| 572 | BDNF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 573 | C3_IMPUTED | Num | 8 | Imputed value for C3 |
| 574 | C3_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 575 | CA9_IMPUTED | Num | 8 | Imputed value for CA9 |
| 576 | CA9_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 577 | CCL2_IMPUTED | Num | 8 | Imputed value for CCL2 |
| 578 | CCL2_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 579 | CCL3_IMPUTED | Num | 8 | Imputed value for CCL3 |
| 580 | CCL3_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 581 | CCL4_IMPUTED | Num | 8 | Imputed value for CCL4 |
| 582 | CCL4_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 583 | CCL5_IMPUTED | Num | 8 | Imputed value for CCL5 |
| 584 | CCL5_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 585 | CCL8_IMPUTED | Num | 8 | Imputed value for CCL8 |
| 586 | CCL8_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 587 | CCL11_IMPUTED | Num | 8 | Imputed value for CCL11 |
| 588 | CCL11_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 589 | CCL13_IMPUTED | Num | 8 | Imputed value for CCL13 |
| 590 | CCL13_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 591 | CCL16_IMPUTED | Num | 8 | Imputed value for CCL16 |
| 592 | CCL16_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 593 | CCL18_IMPUTED | Num | 8 | Imputed value for CCL18 |
| 594 | CCL18_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 595 | CCL20_IMPUTED | Num | 8 | Imputed value for CCL20 |
| 596 | CCL20_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 597 | CCL22_IMPUTED | Num | 8 | Imputed value for CCL22 |
| 598 | CCL22_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 599 | CCL23_IMPUTED | Num | 8 | Imputed value for CCL23 |
| 600 | CCL23_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 601 | CCL24_IMPUTED | Num | 8 | Imputed value for CCL24 |
| 602 | CCL24_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 603 | CDH1_IMPUTED | Num | 8 | Imputed value for CDH1 |
| 604 | CDH1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 605 | CDH13_IMPUTED | Num | 8 | Imputed value for CDH13 |
| 606 | CDH13_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 607 | CEACAM1_IMPUTED | Num | 8 | Imputed value for CEACAM1 |
| 608 | CEACAM1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 609 | CHGA_IMPUTED | Num | 8 | Imputed value for CHGA |
| 610 | CHGA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 611 | CKM_CKB_IMPUTED | Num | 8 | Imputed value for CKM_CKB |
| 612 | CKM_CKB_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 613 | CRP_IMPUTED | Num | 8 | Imputed value for CRP |
| 614 | CRP_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 615 | CSF2_IMPUTED | Num | 8 | Imputed value for CSF2 |
| 616 | CSF2_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 617 | CSTB_IMPUTED | Num | 8 | Imputed value for CSTB |
| 618 | CSTB_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 619 | CXCL1_IMPUTED | Num | 8 | Imputed value for CXCL1 |
| 620 | CXCL1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 621 | CXCL5_IMPUTED | Num | 8 | Imputed value for CXCL5 |
| 622 | CXCL5_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 623 | CXCL9_IMPUTED | Num | 8 | Imputed value for CXCL9 |
| 624 | CXCL9_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 625 | CXCL10_IMPUTED | Num | 8 | Imputed value for CXCL10 |
| 626 | CXCL10_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 627 | DCN_IMPUTED | Num | 8 | Imputed value for DCN |
| 628 | DCN_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 629 | F7_IMPUTED | Num | 8 | Imputed value for F7 |
| 630 | F7_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 631 | FABP3_IMPUTED | Num | 8 | Imputed value for FABP3 |
| 632 | FABP3_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 633 | FAS_IMPUTED | Num | 8 | Imputed value for FAS |
| 634 | FAS_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 635 | FGA_FGB_FGG_IMPUTED | Num | 8 | Imputed value for FGA_FGB_FGG |
| 636 | FGA_FGB_FGG_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 637 | FTL_FTH1_IMPUTED | Num | 8 | Imputed value for FTL_FTH1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 638 | FTL_FTH1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 639 | GC_IMPUTED | Num | 8 | Imputed value for GC |
| 640 | GC_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 641 | HGF_IMPUTED | Num | 8 | Imputed value for HGF |
| 642 | HGF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 643 | HP_IMPUTED | Num | 8 | Imputed value for HP |
| 644 | HP_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 645 | ICAM1_IMPUTED | Num | 8 | Imputed value for ICAM1 |
| 646 | ICAM1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 647 | IFNG_IMPUTED | Num | 8 | Imputed value for IFNG |
| 648 | IFNG_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 649 | IGA_IMPUTED | Num | 8 | Imputed value for IGA |
| 650 | IGA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 651 | IGE_IMPUTED | Num | 8 | Imputed value for IGE |
| 652 | IGE_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 653 | IGM_IMPUTED | Num | 8 | Imputed value for IGM |
| 654 | IGM_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 655 | IL2_IMPUTED | Num | 8 | Imputed value for IL2 |
| 656 | IL2_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 657 | IL3_IMPUTED | Num | 8 | Imputed value for IL3 |
| 658 | IL3_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 659 | IL4_IMPUTED | Num | 8 | Imputed value for IL4 |
| 660 | IL4_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 661 | IL5_IMPUTED | Num | 8 | Imputed value for IL5 |
| 662 | IL5_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 663 | IL6_IMPUTED | Num | 8 | Imputed value for IL6 |
| 664 | IL6_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 665 | IL7_IMPUTED | Num | 8 | Imputed value for IL7 |
| 666 | IL7_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 667 | IL8_IMPUTED | Num | 8 | Imputed value for IL8 |
| 668 | IL8_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 669 | IL10_IMPUTED | Num | 8 | Imputed value for IL10 |
| 670 | IL10_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 671 | IL13_IMPUTED | Num | 8 | Imputed value for IL13 |
| 672 | IL13_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 673 | IL15_IMPUTED | Num | 8 | Imputed value for IL15 |
| 674 | IL15_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 675 | IL16_IMPUTED | Num | 8 | Imputed value for IL16 |
| 676 | IL16_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 677 | IL18_IMPUTED | Num | 8 | Imputed value for IL18 |
| 678 | IL18_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 679 | IL12A_IL12B_IMPUTED | Num | 8 | Imputed value for IL12A_IL12B |
| 680 | IL12A_IL12B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 681 | IL12B_IMPUTED | Num | 8 | Imputed value for IL12B |
| 682 | IL12B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 683 | IL17A_IMPUTED | Num | 8 | Imputed value for IL17A |
| 684 | IL17A_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 685 | IL18BP_IMPUTED | Num | 8 | Imputed value for IL18BP |
| 686 | IL18BP_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 687 | IL1A_IMPUTED | Num | 8 | Imputed value for IL1A |
| 688 | IL1A_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 689 | IL1B_IMPUTED | Num | 8 | Imputed value for IL1B |
| 690 | IL1B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 691 | IL1RN_IMPUTED | Num | 8 | Imputed value for IL1RN |
| 692 | IL1RN_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 693 | IL23A_IMPUTED | Num | 8 | Imputed value for IL23A |
| 694 | IL23A_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 695 | IL2RA_IMPUTED | Num | 8 | Imputed value for IL2RA |
| 696 | IL2RA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 697 | IL6R_IMPUTED | Num | 8 | Imputed value for IL6R |
| 698 | IL6R_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 699 | KIT_IMPUTED | Num | 8 | Imputed value for KIT |
| 700 | KIT_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 701 | KITLG_IMPUTED | Num | 8 | Imputed value for KITLG |
| 702 | KITLG_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 703 | KLK3_F_IMPUTED | Num | 8 | Imputed value for KLK3_F |
| 704 | KLK3_F_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 705 | LPA_IMPUTED | Num | 8 | Imputed value for LPA |
| 706 | LPA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 707 | LTA_IMPUTED | Num | 8 | Imputed value for LTA |
| 708 | LTA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 709 | LTF_IMPUTED | Num | 8 | Imputed value for LTF |
| 710 | LTF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 711 | MB_IMPUTED | Num | 8 | Imputed value for MB |
| 712 | MB_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 713 | MDK_IMPUTED | Num | 8 | Imputed value for MDK |
| 714 | MDK_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 715 | MMP3_IMPUTED | Num | 8 | Imputed value for MMP3 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 716 | MMP3_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 717 | MMP9_IMPUTED | Num | 8 | Imputed value for MMP9 |
| 718 | MMP9_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 719 | NGF_IMPUTED | Num | 8 | Imputed value for NGF |
| 720 | NGF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 721 | NPPB_PH_IMPUTED | Num | 8 | Imputed value for NPPB_PH |
| 722 | NPPB_PH_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 723 | NRCAM_IMPUTED | Num | 8 | Imputed value for NRCAM |
| 724 | NRCAM_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 725 | OLR1_IMPUTED | Num | 8 | Imputed value for OLR1 |
| 726 | OLR1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 727 | PECAM1_IMPUTED | Num | 8 | Imputed value for PECAM1 |
| 728 | PECAM1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 729 | S100A12_IMPUTED | Num | 8 | Imputed value for S100A12 |
| 730 | S100A12_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 731 | S100B_IMPUTED | Num | 8 | Imputed value for S100B |
| 732 | S100B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 733 | SELE_IMPUTED | Num | 8 | Imputed value for SELE |
| 734 | SELE_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 735 | SERPINA1_IMPUTED | Num | 8 | Imputed value for SERPINA1 |
| 736 | SERPINA1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 737 | SERPINA7_IMPUTED | Num | 8 | Imputed value for SERPINA7 |
| 738 | SERPINA7_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 739 | SERPINE1_IMPUTED | Num | 8 | Imputed value for SERPINE1 |
| 740 | SERPINE1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 741 | SFTPD_IMPUTED | Num | 8 | Imputed value for SFTPD |
| 742 | SFTPD_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 743 | SHBG_IMPUTED | Num | 8 | Imputed value for SHBG |
| 744 | SHBG_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 745 | SLPI_IMPUTED | Num | 8 | Imputed value for SLPI |
| 746 | SLPI_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 747 | SOD1_IMPUTED | Num | 8 | Imputed value for SOD1 |
| 748 | SOD1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 749 | SORT1_IMPUTED | Num | 8 | Imputed value for SORT1 |
| 750 | SORT1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 751 | SPINK1_IMPUTED | Num | 8 | Imputed value for SPINK1 |
| 752 | SPINK1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 753 | TGFB1_LAP_IMPUTED | Num | 8 | Imputed value for TGFB1_LAP |
| 754 | TGFB1_LAP_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 755 | THBD_IMPUTED | Num | 8 | Imputed value for THBD |
| 756 | THBD_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 757 | TIMP1_IMPUTED | Num | 8 | Imputed value for TIMP1 |
| 758 | TIMP1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 759 | TIMP2_IMPUTED | Num | 8 | Imputed value for TIMP2 |
| 760 | TIMP2_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 761 | TNF_IMPUTED | Num | 8 | Imputed value for TNF |
| 762 | TNF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 763 | TNFRSF10C_IMPUTED | Num | 8 | Imputed value for TNFRSF10C |
| 764 | TNFRSF10C_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 765 | TNFRSF11B_IMPUTED | Num | 8 | Imputed value for TNFRSF11B |
| 766 | TNFRSF11B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 767 | TNFRSF1A_IMPUTED | Num | 8 | Imputed value for TNFRSF1A |
| 768 | TNFRSF1A_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 769 | TNFRSF1B_IMPUTED | Num | 8 | Imputed value for TNFRSF1B |
| 770 | TNFRSF1B_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 771 | VCAM1_IMPUTED | Num | 8 | Imputed value for VCAM1 |
| 772 | VCAM1_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 773 | VEGFA_IMPUTED | Num | 8 | Imputed value for VEGFA |
| 774 | VEGFA_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 775 | VTN_IMPUTED | Num | 8 | Imputed value for VTN |
| 776 | VTN_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 777 | VWF_IMPUTED | Num | 8 | Imputed value for VWF |
| 778 | VWF_IMPUTED_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 779 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 780 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 781 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 782 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 783 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 784 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 785 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 786 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 787 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 788 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 789 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 790 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 791 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 792 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 793 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 794 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 795 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 796 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 797 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 798 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 799 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 800 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 801 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 802 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 803 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 804 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 805 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 806 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 807 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 808 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 809 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 810 | CXCL1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 811 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 812 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 813 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 814 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 815 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 816 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 817 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 818 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 819 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 820 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 821 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 822 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 823 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 824 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 825 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 826 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 827 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 828 | IL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 829 | IL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 830 | IL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 831 | IL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 832 | IL6_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 833 | IL7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 834 | IL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 835 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 836 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 837 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 838 | IL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 839 | IL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 840 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 841 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 842 | IL17A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 843 | IL18BP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 844 | IL1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 845 | IL1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 846 | IL1RN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 847 | IL23A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 848 | IL2RA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 849 | IL6R_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 850 | KIT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 851 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 852 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 853 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 854 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 855 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 856 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 857 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 858 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 859 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 860 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 861 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 862 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 863 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 864 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 865 | S100A12_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 866 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 867 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 868 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 869 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 870 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 871 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 872 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 873 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 874 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 875 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 876 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 877 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 878 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 879 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 880 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 881 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 882 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 883 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 884 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 885 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 886 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 887 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 888 | VTN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 889 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 890 | A2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 891 | ADIPOQ_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 892 | AGER_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 893 | ANGPT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 894 | APCS_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 895 | AXL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 896 | B2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 897 | BDNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 898 | C3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 899 | CA9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 900 | CCL2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 901 | CCL3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 902 | CCL4_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 903 | CCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 904 | CCL8_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 905 | CCL11_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 906 | CCL13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 907 | CCL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 908 | CCL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 909 | CCL20_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 910 | CCL22_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 911 | CCL23_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 912 | CCL24_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 913 | CDH1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 914 | CDH13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 915 | CEACAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 916 | CHGA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 917 | CKM_CKB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 918 | CRP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 919 | CSF2_NORM | Num | 8 | Imputed value for CSF2 |
| 920 | CSTB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 921 | CXCL1_NORM | Num | 8 | Imputed value for CXCL1 |
| 922 | CXCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 923 | CXCL9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 924 | CXCL10_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 925 | DCN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 926 | F7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than $99 \%$. |
| 927 | FABP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than $99 \%$. |
| 928 | FAS_NORM | Num | 8 | 8 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 949 | IL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 950 | IL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 951 | IL12A_IL12B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 952 | IL12B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 953 | IL17A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 954 | IL18BP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 955 | IL1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 956 | IL1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 957 | IL1RN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 958 | IL23A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 959 | IL2RA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 960 | IL6R_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 961 | KIT_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 962 | KITLG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 963 | KLK3_F_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 964 | LPA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 965 | LTA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 966 | LTF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 967 | MB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 968 | MDK_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 969 | MMP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 970 | MMP9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 971 | NGF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 972 | NPPB_PH_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 973 | NRCAM_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 974 | OLR1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 975 | PECAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 976 | S100A12_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 977 | S100B_NORM | Num | 8 | Imputed value for S100B |
| 978 | SELE_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 979 | SERPINA1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 980 | SERPINA7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 981 | SERPINE1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 982 | SFTPD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 983 | SHBG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 984 | SLPI_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 985 | SOD1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 986 | SORT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 987 | SPINK1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 988 | TGFB1_LAP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 989 | THBD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 990 | TIMP1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 991 | TIMP2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 992 | TNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 993 | TNFRSF10C_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 994 | TNFRSF11B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 995 | TNFRSF1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 996 | TNFRSF1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than 99\%. |
| 997 | VCAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than 99\%. |
| 998 | VEGFA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than 99\%. |
| 999 | VTN_NORM | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than 99\%. |  |
| 1000 | VWF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent <br> below LLOQ less than 99\%. |
| 1001 | VISIT | Char | 10 | Visit |

Data Set Name: cyto_nhlbiv1_180314.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | CYT_RAW_IL6 | Char | 7 | Raw value of IL6 |
| 3 | CYT_IMPUT_FLAG_IL6 | Num | 8 | Type of Imputation: IL6 |
| 4 | CYT_RAW_CC16 | Char | 12 | Raw value of CC16 |
| 5 | CYT_CC16 | Num | 8 | Imputed CC16 Value |
| 6 | CYT_IMPUT_FLAG_CC16 | Num | 8 | Type of Imputation: CC16 |
| 7 | CYT_RAW_CCL20 | Char | 8 | Raw value of CCL20 |
| 8 | CYT_CCL20 | Num | 8 | Imputed CCL20 Value |
| 9 | CYT_IMPUT_FLAG_CCL20 | Num | 8 | Type of Imputation: CCL20 |
| 10 | CYT_RAW_GDF_15 | Char | 12 | Raw value of GDF-15 |
| 11 | CYT_GDF_15 | Num | 8 | Imputed GDF-15 Value |
| 12 | CYT_IMPUT_FLAG_GDF_15 | Num | 8 | Type of Imputation: GDF-15 |
| 13 | CYTOKINE_BATCH | Char | 7 | Indicates batch number of cytokine analysis |

## Data Set Name: ige_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | TESTCODE | Char | 4 | TestCode |
| 3 | TEST_NAME | Char | 9 | Test Name |
| 4 | IGE_RAW_RESULT | Char | 4 | Raw value of IgE Result |
| 5 | IGE_IMPUT_FLAG_RESULT | Num | 8 | Type of Imputation: IgE Result |
| 6 | IGE_RESULT | Num | 8 | Imputed IgE Result Value |
| 7 | VISIT | Char | 10 | Visit |
| 8 | IGE_BATCH | Num | 8 | Indicates batch number of IgE analysis |
| 9 | COLLECT_DATE_DAYS | Num | 8 | Collect Date - Days from enrollment |
| 10 | RESULT_DATE_DAYS | Num | 8 | Result Date - Days from enrollment |

## Data Set Name: rbm1_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Visit |
| 3 | A2M_UNIT | Char | 5 | Analyte unit |
| 4 | A2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 5 | A2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 6 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 7 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 8 | ADIPOQ_UNIT | Char | 5 | Analyte unit |
| 9 | ADIPOQ_LOW_RANGE | Char | 5 | Low range for analyte |
| 10 | ADIPOQ_HIGH_RANGE | Char | 5 | High range for analyte |
| 11 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 12 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 13 | AGER_UNIT | Char | 5 | Analyte unit |
| 14 | AGER_LOW_RANGE | Char | 5 | Low range for analyte |
| 15 | AGER_HIGH_RANGE | Char | 5 | High range for analyte |
| 16 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 17 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 18 | APCS_UNIT | Char | 5 | Analyte unit |
| 19 | APCS_LOW_RANGE | Char | 5 | Low range for analyte |
| 20 | APCS_HIGH_RANGE | Char | 5 | High range for analyte |
| 21 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 22 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 23 | APOA4_UNIT | Char | 5 | Analyte unit |
| 24 | APOA4_LOW_RANGE | Char | 5 | Low range for analyte |
| 25 | APOA4_HIGH_RANGE | Char | 5 | High range for analyte |
| 26 | APOA4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 27 | APOA4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 28 | B2M_UNIT | Char | 6 | Analyte unit |
| 29 | B2M_LOW_RANGE | Char | 6 | Low range for analyte |
| 30 | B2M_HIGH_RANGE | Char | 6 | High range for analyte |
| 31 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 32 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 33 | BDNF_UNIT | Char | 5 | Analyte unit |
| 34 | BDNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 35 | BDNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 36 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 38 | C3_UNIT | Char | 6 | Analyte unit |
| 39 | C3_LOW_RANGE | Char | 6 | Low range for analyte |
| 40 | C3_HIGH_RANGE | Char | 6 | High range for analyte |
| 41 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 42 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 43 | CCL11_UNIT | Char | 5 | Analyte unit |
| 44 | CCL11_LOW_RANGE | Char | 5 | Low range for analyte |
| 45 | CCL11_HIGH_RANGE | Char | 5 | High range for analyte |
| 46 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 47 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 48 | CCL13_UNIT | Char | 5 | Analyte unit |
| 49 | CCL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 50 | CCL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 51 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 52 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 53 | CCL2_UNIT | Char | 5 | Analyte unit |
| 54 | CCL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 55 | CCL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 56 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 57 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 58 | CCL20_UNIT | Char | 5 | Analyte unit |
| 59 | CCL20_LOW_RANGE | Char | 5 | Low range for analyte |
| 60 | CCL20_HIGH_RANGE | Char | 5 | High range for analyte |
| 61 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 62 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 63 | CCL23_UNIT | Char | 5 | Analyte unit |
| 64 | CCL23_LOW_RANGE | Char | 5 | Low range for analyte |
| 65 | CCL23_HIGH_RANGE | Char | 5 | High range for analyte |
| 66 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 67 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 68 | CCL24_UNIT | Char | 5 | Analyte unit |
| 69 | CCL24_LOW_RANGE | Char | 5 | Low range for analyte |
| 70 | CCL24_HIGH_RANGE | Char | 5 | High range for analyte |
| 71 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 72 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 73 | CCL3_UNIT | Char | 5 | Analyte unit |
| 74 | CCL3_LOW_RANGE | Char | 5 | Low range for analyte |
| 75 | CCL3_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 77 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 78 | CCL4_UNIT | Char | 5 | Analyte unit |
| 79 | CCL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 80 | CCL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 81 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 82 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 83 | CCL5_UNIT | Char | 5 | Analyte unit |
| 84 | CCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 85 | CCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 86 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 87 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 88 | CCL8_UNIT | Char | 5 | Analyte unit |
| 89 | CCL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 90 | CCL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 91 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 92 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 93 | CDH1_UNIT | Char | 5 | Analyte unit |
| 94 | CDH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 95 | CDH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 96 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 97 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 98 | CHGA_UNIT | Char | 5 | Analyte unit |
| 99 | CHGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 100 | CHGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 101 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 102 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 103 | CRP_UNIT | Char | 5 | Analyte unit |
| 104 | CRP_LOW_RANGE | Char | 5 | Low range for analyte |
| 105 | CRP_HIGH_RANGE | Char | 5 | High range for analyte |
| 106 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 107 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 108 | CSF2_UNIT | Char | 5 | Analyte unit |
| 109 | CSF2_LOW_RANGE | Char | 5 | Low range for analyte |
| 110 | CSF2_HIGH_RANGE | Char | 5 | High range for analyte |
| 111 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 112 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 113 | CSTB_UNIT | Char | 5 | Analyte unit |
| 114 | CSTB_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | CSTB_HIGH_RANGE | Char | 5 | High range for analyte |
| 116 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 117 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 118 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 119 | CXCL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 120 | CXCL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 121 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 122 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 123 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 124 | CXCL9_LOW_RANGE | Char | 5 | Low range for analyte |
| 125 | CXCL9_HIGH_RANGE | Char | 5 | High range for analyte |
| 126 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 127 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 128 | F7_UNIT | Char | 5 | Analyte unit |
| 129 | F7_LOW_RANGE | Char | 5 | Low range for analyte |
| 130 | F7_HIGH_RANGE | Char | 5 | High range for analyte |
| 131 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 132 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 133 | FGA_FGB_FGG_UNIT | Char | 5 | Analyte unit |
| 134 | FGA_FGB_FGG_LOW_RANGE | Char | 5 | Low range for analyte |
| 135 | FGA_FGB_FGG_HIGH_RANGE | Char | 5 | High range for analyte |
| 136 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 137 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 138 | FTL_FTH1_UNIT | Char | 5 | Analyte unit |
| 139 | FTL_FTH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 140 | FTL_FTH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 141 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 142 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 143 | GC_UNIT | Char | 5 | Analyte unit |
| 144 | GC_LOW_RANGE | Char | 5 | Low range for analyte |
| 145 | GC_HIGH_RANGE | Char | 5 | High range for analyte |
| 146 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 147 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 148 | HP_UNIT | Char | 6 | Analyte unit |
| 149 | HP_LOW_RANGE | Char | 6 | Low range for analyte |
| 150 | HP_HIGH_RANGE | Char | 6 | High range for analyte |
| 151 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 152 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 153 | HSPD1_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | HSPD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 155 | HSPD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 156 | HSPD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 157 | HSPD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 158 | ICAM1_UNIT | Char | 5 | Analyte unit |
| 159 | ICAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 160 | ICAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 161 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 162 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 163 | IFNG_UNIT | Char | 5 | Analyte unit |
| 164 | IFNG_LOW_RANGE | Char | 5 | Low range for analyte |
| 165 | IFNG_HIGH_RANGE | Char | 5 | High range for analyte |
| 166 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 167 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 168 | IGA_UNIT | Char | 6 | Analyte unit |
| 169 | IGA_LOW_RANGE | Char | 6 | Low range for analyte |
| 170 | IGA_HIGH_RANGE | Char | 6 | High range for analyte |
| 171 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 172 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 173 | IGM_UNIT | Char | 5 | Analyte unit |
| 174 | IGM_LOW_RANGE | Char | 5 | Low range for analyte |
| 175 | IGM_HIGH_RANGE | Char | 5 | High range for analyte |
| 176 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 177 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 178 | IL10_UNIT | Char | 5 | Analyte unit |
| 179 | IL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 180 | IL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 181 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 182 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 183 | IL12A_IL12B_UNIT | Char | 5 | Analyte unit |
| 184 | IL12A_IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 185 | IL12A_IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 186 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 187 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 188 | IL12B_UNIT | Char | 5 | Analyte unit |
| 189 | IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 190 | IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 191 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 192 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 193 | IL15_UNIT | Char | 5 | Analyte unit |
| 194 | IL15_LOW_RANGE | Char | 5 | Low range for analyte |
| 195 | IL15_HIGH_RANGE | Char | 5 | High range for analyte |
| 196 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 197 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 198 | IL17A_UNIT | Char | 5 | Analyte unit |
| 199 | IL17A_LOW_RANGE | Char | 5 | Low range for analyte |
| 200 | IL17A_HIGH_RANGE | Char | 5 | High range for analyte |
| 201 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 202 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 203 | IL18_UNIT | Char | 5 | Analyte unit |
| 204 | IL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 205 | IL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 206 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 207 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 208 | IL1A_UNIT | Char | 7 | Analyte unit |
| 209 | IL1A_LOW_RANGE | Char | 7 | Low range for analyte |
| 210 | IL1A_HIGH_RANGE | Char | 7 | High range for analyte |
| 211 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 212 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 213 | IL1B_UNIT | Char | 5 | Analyte unit |
| 214 | IL1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 215 | IL1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 216 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 217 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 218 | IL1RN_UNIT | Char | 5 | Analyte unit |
| 219 | IL1RN_LOW_RANGE | Char | 5 | Low range for analyte |
| 220 | IL1RN_HIGH_RANGE | Char | 5 | High range for analyte |
| 221 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 222 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 223 | IL2_UNIT | Char | 5 | Analyte unit |
| 224 | IL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 225 | IL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 226 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 227 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 228 | IL23A_UNIT | Char | 5 | Analyte unit |
| 229 | IL23A_LOW_RANGE | Char | 5 | Low range for analyte |
| 230 | IL23A_HIGH_RANGE | Char | 5 | High range for analyte |
| 231 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 233 | IL2RA_UNIT | Char | 5 | Analyte unit |
| 234 | IL2RA_LOW_RANGE | Char | 5 | Low range for analyte |
| 235 | IL2RA_HIGH_RANGE | Char | 5 | High range for analyte |
| 236 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 237 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 238 | IL3_UNIT | Char | 6 | Analyte unit |
| 239 | IL3_LOW_RANGE | Char | 6 | Low range for analyte |
| 240 | IL3_HIGH_RANGE | Char | 6 | High range for analyte |
| 241 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 242 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 243 | IL4_UNIT | Char | 5 | Analyte unit |
| 244 | IL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 245 | IL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 246 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 247 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 248 | IL5_UNIT | Char | 5 | Analyte unit |
| 249 | IL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 250 | IL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 251 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 252 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 253 | IL6_UNIT | Char | 5 | Analyte unit |
| 254 | IL6_LOW_RANGE | Char | 5 | Low range for analyte |
| 255 | IL6_HIGH_RANGE | Char | 5 | High range for analyte |
| 256 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 257 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 258 | IL6R_UNIT | Char | 5 | Analyte unit |
| 259 | IL6R_LOW_RANGE | Char | 5 | Low range for analyte |
| 260 | IL6R_HIGH_RANGE | Char | 5 | High range for analyte |
| 261 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 262 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 263 | IL7_UNIT | Char | 5 | Analyte unit |
| 264 | IL7_LOW_RANGE | Char | 5 | Low range for analyte |
| 265 | IL7_HIGH_RANGE | Char | 5 | High range for analyte |
| 266 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 267 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 268 | IL8_UNIT | Char | 5 | Analyte unit |
| 269 | IL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 270 | IL8_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 271 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 272 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 273 | INS_INTACT_UNIT | Char | 3 | Analyte unit |
| 274 | INS_INTACT_LOW_RANGE | Char | 3 | Low range for analyte |
| 275 | INS_INTACT_HIGH_RANGE | Char | 3 | High range for analyte |
| 276 | INS_INTACT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 277 | INS_INTACT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 278 | INS_TOTAL_UNIT | Char | 3 | Analyte unit |
| 279 | INS_TOTAL_LOW_RANGE | Char | 3 | Low range for analyte |
| 280 | INS_TOTAL_HIGH_RANGE | Char | 3 | High range for analyte |
| 281 | INS_TOTAL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 282 | INS_TOTAL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 283 | KIT_UNIT | Char | 5 | Analyte unit |
| 284 | KIT_LOW_RANGE | Char | 5 | Low range for analyte |
| 285 | KIT_HIGH_RANGE | Char | 5 | High range for analyte |
| 286 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 287 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 288 | KITLG_UNIT | Char | 5 | Analyte unit |
| 289 | KITLG_LOW_RANGE | Char | 5 | Low range for analyte |
| 290 | KITLG_HIGH_RANGE | Char | 5 | High range for analyte |
| 291 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 292 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 293 | LPA_UNIT | Char | 5 | Analyte unit |
| 294 | LPA_LOW_RANGE | Char | 5 | Low range for analyte |
| 295 | LPA_HIGH_RANGE | Char | 5 | High range for analyte |
| 296 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 297 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 298 | LTA_UNIT | Char | 5 | Analyte unit |
| 299 | LTA_LOW_RANGE | Char | 5 | Low range for analyte |
| 300 | LTA_HIGH_RANGE | Char | 5 | High range for analyte |
| 301 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 302 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 303 | LTF_UNIT | Char | 5 | Analyte unit |
| 304 | LTF_LOW_RANGE | Char | 5 | Low range for analyte |
| 305 | LTF_HIGH_RANGE | Char | 5 | High range for analyte |
| 306 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 307 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 308 | MB_UNIT | Char | 5 | Analyte unit |
| 309 | MB_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | MB_HIGH_RANGE | Char | 5 | High range for analyte |
| 311 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 312 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 313 | MICA_UNIT | Char | 5 | Analyte unit |
| 314 | MICA_LOW_RANGE | Char | 5 | Low range for analyte |
| 315 | MICA_HIGH_RANGE | Char | 5 | High range for analyte |
| 316 | MICA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 317 | MICA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 318 | MMP3_UNIT | Char | 5 | Analyte unit |
| 319 | MMP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 320 | MMP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 321 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 322 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 323 | MMP9_UNIT | Char | 5 | Analyte unit |
| 324 | MMP9_LOW_RANGE | Char | 5 | Low range for analyte |
| 325 | MMP9_HIGH_RANGE | Char | 5 | High range for analyte |
| 326 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 327 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 328 | NGF_UNIT | Char | 5 | Analyte unit |
| 329 | NGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 330 | NGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 331 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 332 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 333 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 334 | NRCAM_LOW_RANGE | Char | 5 | Low range for analyte |
| 335 | NRCAM_HIGH_RANGE | Char | 5 | High range for analyte |
| 336 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 337 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 338 | S100B_UNIT | Char | 5 | Analyte unit |
| 339 | S100B_LOW_RANGE | Char | 5 | Low range for analyte |
| 340 | S100B_HIGH_RANGE | Char | 5 | High range for analyte |
| 341 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 342 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 343 | SELE_UNIT | Char | 5 | Analyte unit |
| 344 | SELE_LOW_RANGE | Char | 5 | Low range for analyte |
| 345 | SELE_HIGH_RANGE | Char | 5 | High range for analyte |
| 346 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 347 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 348 | SERPINA1_UNIT | Char | 6 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 349 | SERPINA1_LOW_RANGE | Char | 6 | Low range for analyte |
| 350 | SERPINA1_HIGH_RANGE | Char | 6 | High range for analyte |
| 351 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 352 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 353 | SERPINA3_UNIT | Char | 5 | Analyte unit |
| 354 | SERPINA3_LOW_RANGE | Char | 5 | Low range for analyte |
| 355 | SERPINA3_HIGH_RANGE | Char | 5 | High range for analyte |
| 356 | SERPINA3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 357 | SERPINA3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 358 | SERPINA7_UNIT | Char | 5 | Analyte unit |
| 359 | SERPINA7_LOW_RANGE | Char | 5 | Low range for analyte |
| 360 | SERPINA7_HIGH_RANGE | Char | 5 | High range for analyte |
| 361 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 362 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 363 | SERPINE1_UNIT | Char | 5 | Analyte unit |
| 364 | SERPINE1_LOW_RANGE | Char | 5 | Low range for analyte |
| 365 | SERPINE1_HIGH_RANGE | Char | 5 | High range for analyte |
| 366 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 367 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 368 | SHBG_UNIT | Char | 6 | Analyte unit |
| 369 | SHBG_LOW_RANGE | Char | 6 | Low range for analyte |
| 370 | SHBG_HIGH_RANGE | Char | 6 | High range for analyte |
| 371 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 372 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 373 | SLPI_UNIT | Char | 5 | Analyte unit |
| 374 | SLPI_LOW_RANGE | Char | 5 | Low range for analyte |
| 375 | SLPI_HIGH_RANGE | Char | 5 | High range for analyte |
| 376 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 377 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 378 | SOD1_UNIT | Char | 5 | Analyte unit |
| 379 | SOD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 380 | SOD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 381 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 382 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 383 | SORT1_UNIT | Char | 5 | Analyte unit |
| 384 | SORT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 385 | SORT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 386 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 387 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 388 | SPINK1_UNIT | Char | 5 | Analyte unit |
| 389 | SPINK1_LOW_RANGE | Char | 5 | Low range for analyte |
| 390 | SPINK1_HIGH_RANGE | Char | 5 | High range for analyte |
| 391 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 392 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 393 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 394 | TGFB1_LAP_LOW_RANGE | Char | 5 | Low range for analyte |
| 395 | TGFB1_LAP_HIGH_RANGE | Char | 5 | High range for analyte |
| 396 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 397 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 398 | TIMP1_UNIT | Char | 5 | Analyte unit |
| 399 | TIMP1_LOW_RANGE | Char | 5 | Low range for analyte |
| 400 | TIMP1_HIGH_RANGE | Char | 5 | High range for analyte |
| 401 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 402 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 403 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 404 | TIMP2_LOW_RANGE | Char | 5 | Low range for analyte |
| 405 | TIMP2_HIGH_RANGE | Char | 5 | High range for analyte |
| 406 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 407 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 408 | TNF_UNIT | Char | 5 | Analyte unit |
| 409 | TNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 410 | TNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 411 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 412 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 413 | TNFRSF11B_UNIT | Char | 4 | Analyte unit |
| 414 | TNFRSF11B_LOW_RANGE | Char | 4 | Low range for analyte |
| 415 | TNFRSF11B_HIGH_RANGE | Char | 4 | High range for analyte |
| 416 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 417 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 418 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 419 | TNFRSF1A_LOW_RANGE | Char | 5 | Low range for analyte |
| 420 | TNFRSF1A_HIGH_RANGE | Char | 5 | High range for analyte |
| 421 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 422 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 423 | TNFRSF1B_UNIT | Char | 5 | Analyte unit |
| 424 | TNFRSF1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 425 | TNFRSF1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 426 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 427 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 428 | VCAM1_UNIT | Char | 5 | Analyte unit |
| 429 | VCAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 430 | VCAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 431 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 432 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 433 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 434 | VEGFA_LOW_RANGE | Char | 5 | Low range for analyte |
| 435 | VEGFA_HIGH_RANGE | Char | 5 | High range for analyte |
| 436 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 437 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 438 | VWF_UNIT | Char | 5 | Analyte unit |
| 439 | VWF_LOW_RANGE | Char | 5 | Low range for analyte |
| 440 | VWF_HIGH_RANGE | Char | 5 | High range for analyte |
| 441 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 442 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 443 | A2M | Num | 8 | Alpha-2-Macroglobulin (A2M) |
| 444 | ADIPOQ | Num | 8 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 445 | AGER | Num | 8 | Advanced glycosylation end product-specific receptor (AGER) |
| 446 | APCS | Num | 8 | Amyloid P-component, serum (APCS) |
| 447 | APOA4 | Num | 8 | Apolipoprotein A-IV (APOA4) |
| 448 | B2M | Num | 8 | Beta-2-microglobulin (B2M) |
| 449 | BDNF | Num | 8 | Brain-derived neurotrophic factor (BDNF) |
| 450 | C3 | Num | 8 | Complement component C3 (C3) |
| 451 | CCL11 | Num | 8 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 452 | CCL13 | Num | 8 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 453 | CCL2 | Num | 8 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 454 | CCL20 | Num | 8 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 455 | CCL23 | Num | 8 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 456 | CCL24 | Num | 8 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 457 | CCL3 | Num | 8 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 458 | CCL4 | Num | 8 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 459 | CCL5 | Num | 8 | chemokine (C-C motif) ligand 5 (CCL5) |
| 460 | CCL8 | Num | 8 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 461 | CDH1 | Num | 8 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 462 | CHGA | Num | 8 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 463 | CRP | Num | 8 | C-reactive protein, pentraxin-related (CRP) |
| 464 | CSF2 | Num | 8 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 465 | CSTB | Num | 8 | Cystatin B (stefin B) (CSTB) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 466 | CXCL10 | Num | 8 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 467 | CXCL9 | Num | 8 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 468 | F7 | Num | 8 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 469 | FGA_FGB_FGG | Num | 8 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 470 | FTL_FTH1 | Num | 8 | Ferritin [FT(L/H1)] |
| 471 | GC | Num | 8 | Group-specific component (vitamin D binding protein) (GC) |
| 472 | HP | Num | 8 | Haptoglobin (HP) |
| 473 | HSPD1 | Num | 8 | Heat shock 60kDa protein 1 (chaperonin) (HSPD1) |
| 474 | ICAM1 | Num | 8 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 475 | IFNG | Num | 8 | Interferon, gamma (IFNG) |
| 476 | IGA | Num | 8 | Immunoglobulin A (IgA) |
| 477 | IGM | Num | 8 | Immunoglobulin M |
| 478 | IL10 | Num | 8 | Interleukin 10 (IL10) |
| 479 | IL12A_IL12B | Num | 8 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 480 | IL12B | Num | 8 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 481 | IL15 | Num | 8 | Interleukin 15 (IL15) |
| 482 | IL17A | Num | 8 | Interleukin 17 (IL17A) |
| 483 | IL18 | Num | 8 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 484 | IL1A | Num | 8 | Interleukin 1, alpha (IL1A) |
| 485 | IL1B | Num | 8 | Interleukin 1, beta (IL1B) |
| 486 | IL1RN | Num | 8 | Interleukin 1 receptor antagonist (IL1RN) |
| 487 | IL2 | Num | 8 | Interleukin 2 (IL2) |
| 488 | IL23A | Num | 8 | Interleukin 23, alpha subunit p19 (IL23A) |
| 489 | IL2RA | Num | 8 | Interleukin 2 receptor, alpha (IL2RA) |
| 490 | IL3 | Num | 8 | Interleukin 3 (IL3) |
| 491 | IL4 | Num | 8 | Interleukin 4 (IL4) |
| 492 | IL5 | Num | 8 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 493 | IL6 | Num | 8 | Interleukin 6 (interferon, beta 2) (IL6) |
| 494 | IL6R | Num | 8 | Interleukin-6 receptor (IL6R) |
| 495 | IL7 | Num | 8 | Interleukin 7 (IL7) |
| 496 | IL8 | Num | 8 | Interleukin 8 (IL8) |
| 497 | INS_INTACT | Num | 8 | Proinsulin, Intact (INS_intact) |
| 498 | INS_TOTAL | Num | 8 | Proinsulin, Total (INS_total) |
| 499 | KIT | Num | 8 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 500 | KITLG | Num | 8 | KIT ligand (KITLG) |
| 501 | LPA | Num | 8 | Lipoprotein, (Lp(a) (LPA) |
| 502 | LTA | Num | 8 | Lymphotoxin alpha (LTA) |
| 503 | LTF | Num | 8 | Lactotransferrin |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 504 | MB | Num | 8 | Myoglobin (MB) |
| 505 | MICA | Num | 8 | MHC class I polypeptide-related sequence A (MICA) |
| 506 | MMP3 | Num | 8 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 507 | MMP9 | Num | 8 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 508 | NGF | Num | 8 | Nerve growth gactor (beta polypeptide) (NGF) |
| 509 | NRCAM | Num | 8 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 510 | S100B | Num | 8 | S100 calcium binding protein B (S100B) |
| 511 | SELE | Num | 8 | Selectin E (SELE) |
| 512 | SERPINA1 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 513 | SERPINA3 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3) |
| 514 | SERPINA7 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 515 | SERPINE1 | Num | 8 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 516 | SHBG | Num | 8 | Sex Hormone-Binding Globulin (SHBG) |
| 517 | SLPI | Num | 8 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 518 | SOD1 | Num | 8 | Superoxide Dismutase 1, soluble (SOD1) |
| 519 | SORT1 | Num | 8 | Sortilin 1 (SORT1) |
| 520 | SPINK1 | Num | 8 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 521 | TGFB1_LAP | Num | 8 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 522 | TIMP1 | Num | 8 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 523 | TIMP2 | Num | 8 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 524 | TNF | Num | 8 | Tumor necrosis factor (TNF) |
| 525 | TNFRSF11B | Num | 8 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 526 | TNFRSF1A | Num | 8 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 527 | TNFRSF1B | Num | 8 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 528 | VCAM1 | Num | 8 | Vascular cell adhesion molecule 1 (VCAM1) |
| 529 | VEGFA | Num | 8 | Vascular endothelial growth factor (VEGFA) |
| 530 | VWF | Num | 8 | von Willebrand Factor (vWF) |
| 531 | ANGPT1_UNIT | Char | 5 | Analyte unit |
| 532 | ANGPT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 533 | ANGPT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 534 | ANGPT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 535 | ANGPT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 536 | AXL_UNIT | Char | 5 | Analyte unit |
| 537 | AXL_LOW_RANGE | Char | 5 | Low range for analyte |
| 538 | AXL_HIGH_RANGE | Char | 5 | High range for analyte |
| 539 | AXL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 540 | AXL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 541 | CA9_UNIT | Char | 5 | Analyte unit |
| 542 | CA9_LOW_RANGE | Char | 5 | Low range for analyte |
| 543 | CA9_HIGH_RANGE | Char | 5 | High range for analyte |
| 544 | CA9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 545 | CA9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 546 | CCL16_UNIT | Char | 5 | Analyte unit |
| 547 | CCL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 548 | CCL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 549 | CCL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 550 | CCL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 551 | CCL18_UNIT | Char | 5 | Analyte unit |
| 552 | CCL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 553 | CCL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 554 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 555 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 556 | CCL22_UNIT | Char | 5 | Analyte unit |
| 557 | CCL22_LOW_RANGE | Char | 5 | Low range for analyte |
| 558 | CCL22_HIGH_RANGE | Char | 5 | High range for analyte |
| 559 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 560 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 561 | CDH13_UNIT | Char | 5 | Analyte unit |
| 562 | CDH13_LOW_RANGE | Char | 5 | Low range for analyte |
| 563 | CDH13_HIGH_RANGE | Char | 5 | High range for analyte |
| 564 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 565 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 566 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 567 | CEACAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 568 | CEACAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 569 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 570 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 571 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 572 | CKM_CKB_LOW_RANGE | Char | 5 | Low range for analyte |
| 573 | CKM_CKB_HIGH_RANGE | Char | 5 | High range for analyte |
| 574 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 575 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 576 | CXCL5_UNIT | Char | 5 | Analyte unit |
| 577 | CXCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 578 | CXCL5_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 579 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 580 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 581 | DCN_UNIT | Char | 5 | Analyte unit |
| 582 | DCN_LOW_RANGE | Char | 5 | Low range for analyte |
| 583 | DCN_HIGH_RANGE | Char | 5 | High range for analyte |
| 584 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 585 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 586 | FABP3_UNIT | Char | 5 | Analyte unit |
| 587 | FABP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 588 | FABP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 589 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 590 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 591 | FAS_UNIT | Char | 5 | Analyte unit |
| 592 | FAS_LOW_RANGE | Char | 5 | Low range for analyte |
| 593 | FAS_HIGH_RANGE | Char | 5 | High range for analyte |
| 594 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 595 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 596 | HGF_UNIT | Char | 5 | Analyte unit |
| 597 | HGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 598 | HGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 599 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 600 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 601 | IGE_UNIT | Char | 4 | Analyte unit |
| 602 | IGE_LOW_RANGE | Char | 4 | Low range for analyte |
| 603 | IGE_HIGH_RANGE | Char | 4 | High range for analyte |
| 604 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 605 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 606 | IL13_UNIT | Char | 5 | Analyte unit |
| 607 | IL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 608 | IL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 609 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 610 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 611 | IL16_UNIT | Char | 5 | Analyte unit |
| 612 | IL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 613 | IL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 614 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 615 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 616 | IL18BP_UNIT | Char | 5 | Analyte unit |
| 617 | IL18BP_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 618 | IL18BP_HIGH_RANGE | Char | 5 | High range for analyte |
| 619 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 620 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 621 | KLK3_F_UNIT | Char | 6 | Analyte unit |
| 622 | KLK3_F_LOW_RANGE | Char | 6 | Low range for analyte |
| 623 | KLK3_F_HIGH_RANGE | Char | 6 | High range for analyte |
| 624 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 625 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 626 | MDA_LDL_UNIT | Char | 5 | Analyte unit |
| 627 | MDA_LDL_LOW_RANGE | Char | 5 | Low range for analyte |
| 628 | MDA_LDL_HIGH_RANGE | Char | 5 | High range for analyte |
| 629 | MDA_LDL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 630 | MDA_LDL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 631 | MDK_UNIT | Char | 5 | Analyte unit |
| 632 | MDK_LOW_RANGE | Char | 5 | Low range for analyte |
| 633 | MDK_HIGH_RANGE | Char | 5 | High range for analyte |
| 634 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 635 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 636 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 637 | NPPB_PH_LOW_RANGE | Char | 5 | Low range for analyte |
| 638 | NPPB_PH_HIGH_RANGE | Char | 5 | High range for analyte |
| 639 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 640 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 641 | OLR1_UNIT | Char | 5 | Analyte unit |
| 642 | OLR1_LOW_RANGE | Char | 5 | Low range for analyte |
| 643 | OLR1_HIGH_RANGE | Char | 5 | High range for analyte |
| 644 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 645 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 646 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 647 | PECAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 648 | PECAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 649 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 650 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 651 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 652 | SFTPD_LOW_RANGE | Char | 5 | Low range for analyte |
| 653 | SFTPD_HIGH_RANGE | Char | 5 | High range for analyte |
| 654 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 655 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 656 | THBD_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 657 | THBD_LOW_RANGE | Char | 5 | Low range for analyte |
| 658 | THBD_HIGH_RANGE | Char | 5 | High range for analyte |
| 659 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 660 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 661 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 662 | TNFRSF10C_LOW_RANGE | Char | 5 | Low range for analyte |
| 663 | TNFRSF10C_HIGH_RANGE | Char | 5 | High range for analyte |
| 664 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 665 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 666 | ANGPT1 | Num | 8 | Angiopoietin 1 (ANGPT1) |
| 667 | AXL | Num | 8 | AXL Receptor Tyrosine Kinase (AXL) |
| 668 | CA9 | Num | 8 | Carbonic anhydrase IX (CA9) |
| 669 | CCL16 | Num | 8 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 670 | CCL18 | Num | 8 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |
| 671 | CCL22 | Num | 8 | chemokine (C-C motif) ligand 22 (CCL22) |
| 672 | CDH13 | Num | 8 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 673 | CEACAM1 | Num | 8 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 674 | CKM_CKB | Num | 8 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 675 | CXCL5 | Num | 8 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 676 | DCN | Num | 8 | Decorin (DCN) |
| 677 | FABP3 | Num | 8 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 678 | FAS | Num | 8 | Fas cell surface death receptor (FAS) |
| 679 | HGF | Num | 8 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 680 | IGE | Num | 8 | Immunoglobulin E (IgE) |
| 681 | IL13 | Num | 8 | Interleukin 13 (IL13) |
| 682 | IL16 | Num | 8 | Interleukin 16 (IL16) |
| 683 | IL18BP | Num | 8 | Interleukin 18 binding protein (IL18BP) |
| 684 | KLK3_F | Num | 8 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 685 | MDA_LDL | Num | 8 | Malondialdehyde-Modified Low-Density Lipoprotein (MDA-LDL) |
| 686 | MDK | Num | 8 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 687 | NPPB_PH | Num | 8 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 688 | OLR1 | Num | 8 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 689 | PECAM1 | Num | 8 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 690 | SFTPD | Num | 8 | Surfactant protein D (SFTPD) |
| 691 | THBD | Num | 8 | Thrombomodulin (THBD) |
| 692 | TNFRSF10C | Num | 8 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 693 | ADIPOQ_RAW | Char | 5 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 694 | SERPINA3_RAW | Char | 4 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3) |
| 695 | SERPINA1_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 696 | A2M_RAW | Char | 6 | Alpha-2-Macroglobulin (A2M) |
| 697 | SLPI_RAW | Char | 3 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 698 | LPA_RAW | Char | 5 | Lipoprotein, (Lp(a) (LPA) |
| 699 | APOA4_RAW | Char | 5 | Apolipoprotein A-IV (APOA4) |
| 700 | B2M_RAW | Char | 4 | Beta-2-microglobulin (B2M) |
| 701 | BDNF_RAW | Char | 5 | Brain-derived neurotrophic factor (BDNF) |
| 702 | CRP_RAW | Char | 5 | C-reactive protein, pentraxin-related (CRP) |
| 703 | CDH1_RAW | Char | 5 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 704 | CHGA_RAW | Char | 5 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 705 | C3_RAW | Char | 5 | Complement component C3 (C3) |
| 706 | CSTB_RAW | Char | 3 | Cystatin B (stefin B) (CSTB) |
| 707 | SELE_RAW | Char | 5 | Selectin E (SELE) |
| 708 | CCL11_RAW | Char | 5 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 709 | CCL24_RAW | Char | 5 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 710 | F7_RAW | Char | 4 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 711 | FTL_FTH1_RAW | Char | 5 | Ferritin [FT(L/H1)] |
| 712 | FGA_FGB_FGG_RAW | Char | 5 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 713 | CSF2_RAW | Char | 5 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 714 | HP_RAW | Char | 6 | Haptoglobin (HP) |
| 715 | HSPD1_RAW | Char | 5 | Heat shock 60kDa protein 1 (chaperonin) (HSPD1) |
| 716 | IGA_RAW | Char | 5 | Immunoglobulin A (IgA) |
| 717 | IGM_RAW | Char | 5 | Immunoglobulin M |
| 718 | ICAM1_RAW | Char | 4 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 719 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 720 | CXCL10_RAW | Char | 4 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 721 | IL1A_RAW | Char | 7 | Interleukin 1, alpha (IL1A) |
| 722 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 723 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 724 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 725 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 726 | IL3_RAW | Char | 6 | Interleukin 3 (IL3) |
| 727 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 728 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 729 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |
| 730 | IL6R_RAW | Char | 4 | Interleukin-6 receptor (IL6R) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 731 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 732 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 733 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 734 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 735 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 736 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 737 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 738 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 739 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 740 | LTF_RAW | Char | 3 | Lactotransferrin |
| 741 | TGFB1_LAP_RAW | Char | 4 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 742 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 743 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 744 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 745 | KIT_RAW | Char | 5 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 746 | MMP3_RAW | Char | 4 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 747 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 748 | MICA_RAW | Char | 5 | MHC class I polypeptide-related sequence A (MICA) |
| 749 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 750 | CCL8_RAW | Char | 4 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 751 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 752 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 753 | CCL23_RAW | Char | 5 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 754 | MB_RAW | Char | 5 | Myoglobin (MB) |
| 755 | NGF_RAW | Char | 6 | Nerve growth gactor (beta polypeptide) (NGF) |
| 756 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 757 | TNFRSF11B_RAW | Char | 3 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 758 | SPINK1_RAW | Char | 3 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 759 | SERPINE1_RAW | Char | 5 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 760 | INS_INTACT_RAW | Char | 5 | Proinsulin, Intact (INS_intact) |
| 761 | INS_TOTAL_RAW | Char | 5 | Proinsulin, Total (INS_total) |
| 762 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 763 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 764 | APCS_RAW | Char | 5 | Amyloid P-component, serum (APCS) |
| 765 | SHBG_RAW | Char | 5 | Sex Hormone-Binding Globulin (SHBG) |
| 766 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |
| 767 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 768 | SOD1_RAW | Char | 4 | Superoxide Dismutase 1, soluble (SOD1) |
| 769 | CCL5_RAW | Char | 5 | chemokine (C-C motif) ligand 5 (CCL5) |
| 770 | SERPINA7_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 771 | TIMP1_RAW | Char | 3 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 772 | TIMP2_RAW | Char | 3 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 773 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 774 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 775 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 776 | TNFRSF1B_RAW | Char | 3 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 777 | VCAM1_RAW | Char | 4 | Vascular cell adhesion molecule 1 (VCAM1) |
| 778 | VEGFA_RAW | Char | 4 | Vascular endothelial growth factor (VEGFA) |
| 779 | GC_RAW | Char | 5 | Group-specific component (vitamin D binding protein) (GC) |
| 780 | VWF_RAW | Char | 5 | von Willebrand Factor (vWF) |
| 781 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 782 | AXL_RAW | Char | 3 | AXL Receptor Tyrosine Kinase (AXL) |
| 783 | CDH13_RAW | Char | 4 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 784 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 785 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 786 | CCL16_RAW | Char | 4 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 787 | CKM_CKB_RAW | Char | 4 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 788 | DCN_RAW | Char | 4 | Decorin (DCN) |
| 789 | CXCL5_RAW | Char | 4 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 790 | FAS_RAW | Char | 3 | Fas cell surface death receptor (FAS) |
| 791 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 792 | HGF_RAW | Char | 3 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 793 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |
| 794 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 795 | IL16_RAW | Char | 4 | Interleukin 16 (IL16) |
| 796 | IL18BP_RAW | Char | 3 | Interleukin 18 binding protein (IL18BP) |
| 797 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 798 | CCL22_RAW | Char | 4 | chemokine (C-C motif) ligand 22 (CCL22) |
| 799 | MDA_LDL_RAW | Char | 5 | Malondialdehyde-Modified Low-Density Lipoprotein (MDA-LDL) |
| 800 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 801 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 802 | PECAM1_RAW | Char | 3 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 803 | KLK3_F_RAW | Char | 6 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 804 | CCL18_RAW | Char | 3 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 805 | SFTPD_RAW | Char | 3 | Surfactant protein D (SFTPD) |
| 806 | THBD_RAW | Char | 4 | Thrombomodulin (THBD) |
| 807 | TNFRSF10C_RAW | Char | 4 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 808 | A2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 809 | ADIPOQ_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 810 | AGER_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 811 | ANGPT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 812 | APCS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 813 | APOA4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 814 | AXL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 815 | B2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 816 | BDNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 817 | C3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 818 | CA9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 819 | CCL11_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 820 | CCL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 821 | CCL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 822 | CCL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 823 | CCL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 824 | CCL20_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 825 | CCL22_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 826 | CCL23_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 827 | CCL24_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 828 | CCL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 829 | CCL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 830 | CCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 831 | CCL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 832 | CDH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 833 | CDH13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 834 | CEACAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 835 | CHGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 836 | CKM_CKB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 837 | CRP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 838 | CSF2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 839 | CSTB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 840 | CXCL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 841 | CXCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 842 | CXCL9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 843 | DCN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 844 | F7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 845 | FABP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 846 | FAS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 847 | FGA_FGB_FGG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 848 | FTL_FTH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 849 | GC_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 850 | HGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 851 | HP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 852 | HSPD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 853 | ICAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 854 | IFNG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 855 | IGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 856 | IGE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 857 | IGM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 858 | IL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 859 | IL12A_IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 860 | IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 861 | IL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 862 | IL15_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 863 | IL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 864 | IL17A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 865 | IL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 866 | IL18BP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 867 | IL1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 868 | IL1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 869 | IL1RN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 870 | IL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 871 | IL23A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 872 | IL2RA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 873 | IL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 874 | IL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 875 | IL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 876 | IL6_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 877 | IL6R_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 878 | IL7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 879 | IL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 880 | INS_INTACT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 881 | INS_TOTAL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 882 | KIT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 883 | KITLG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 884 | KLK3_F_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 885 | LPA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 886 | LTA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 887 | LTF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 888 | MB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 889 | MDA_LDL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 890 | MDK_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 891 | MICA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 892 | MMP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 893 | MMP9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 894 | NGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 895 | NPPB_PH_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 896 | NRCAM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 897 | OLR1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 898 | PECAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 899 | S100B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 900 | SELE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 901 | SERPINA1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 902 | SERPINA3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 903 | SERPINA7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 904 | SERPINE1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 905 | SFTPD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 906 | SHBG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 907 | SLPI_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 908 | SOD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 909 | SORT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 910 | SPINK1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 911 | TGFB1_LAP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 912 | THBD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 913 | TIMP1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 914 | TIMP2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 915 | TNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 916 | TNFRSF10C_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 917 | TNFRSF11B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 918 | TNFRSF1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 919 | TNFRSF1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 920 | VCAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 921 | VEGFA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 922 | VWF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 923 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 924 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 925 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 926 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 927 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 928 | APOA4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 929 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 930 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 931 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 932 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 933 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 934 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 935 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 936 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 937 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 938 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 939 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 940 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 941 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 942 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 943 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 944 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 945 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 946 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 947 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 948 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 949 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 950 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 951 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 952 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 953 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 954 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 955 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 956 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 957 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 958 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 959 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 960 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 961 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 962 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 963 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 964 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 965 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 966 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 967 | HSPD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 968 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 969 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 970 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 971 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 972 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 973 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 974 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 975 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 976 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 977 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 978 | IL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 979 | IL17A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 980 | IL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 981 | IL18BP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 982 | IL1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 983 | IL1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 984 | IL1RN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 985 | IL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 986 | IL23A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 987 | IL2RA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 988 | IL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 989 | IL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 990 | IL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 991 | IL6_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 992 | IL6R_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 993 | IL7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 994 | IL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 995 | INS_INTACT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 996 | INS_TOTAL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 997 | KIT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 998 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 999 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1000 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1001 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1002 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1003 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1004 | MDA_LDL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1005 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1006 | MICA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1007 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1008 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1009 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1010 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1011 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1012 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1013 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1014 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1015 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1016 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1017 | SERPINA3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1018 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1019 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1020 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1021 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1022 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1023 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1024 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1025 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1026 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1027 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1028 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1029 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1030 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1031 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1032 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1033 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1034 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1035 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1036 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1037 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1038 | A2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1039 | ADIPOQ_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1040 | AGER_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1041 | ANGPT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1042 | APCS_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1043 | APOA4_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1044 | AXL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1045 | B2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1046 | BDNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1047 | C3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1048 | CA9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1049 | CCL11_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1050 | CCL13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1051 | CCL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1052 | CCL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1053 | CCL2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1054 | CCL20_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1055 | CCL22_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1056 | CCL23_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1057 | CCL24_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1058 | CCL3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1059 | CCL4_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1060 | CCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1061 | CCL8_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1062 | CDH1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1063 | CDH13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1064 | CEACAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1065 | CHGA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1066 | CKM_CKB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1067 | CRP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1068 | CSTB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1069 | CXCL10_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1070 | CXCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1071 | CXCL9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1072 | DCN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1073 | F7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1074 | FABP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1075 | FAS_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1076 | FGA_FGB_FGG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1077 | FTL_FTH1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1078 | GC_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1079 | HGF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1080 | HP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1081 | HSPD1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1082 | ICAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1083 | IFNG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1084 | IGA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1085 | IGE_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1086 | IGM_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1087 | IL10_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1088 | IL12B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1089 | IL15_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1090 | IL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1091 | IL17A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1092 | IL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1093 | IL18BP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1094 | IL1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1095 | IL1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1096 | IL1RN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1097 | IL2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1098 | IL23A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1099 | IL2RA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1100 | IL6_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1101 | IL6R_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1102 | IL7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1103 | IL8_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1104 | INS_INTACT_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1105 | INS_TOTAL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1106 | KIT_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1107 | KITLG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1108 | KLK3_F_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1109 | LPA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1110 | LTF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1111 | MB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1112 | MDA_LDL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1113 | MDK_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1114 | MICA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1115 | MMP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1116 | MMP9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1117 | NPPB_PH_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1118 | NRCAM_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1119 | OLR1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1120 | PECAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1121 | SELE_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1122 | SERPINA1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1123 | SERPINA3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1124 | SERPINA7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1125 | SERPINE1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1126 | SFTPD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1127 | SHBG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1128 | SLPI_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1129 | SOD1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1130 | SORT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1131 | SPINK1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1132 | TGFB1_LAP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1133 | THBD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1134 | TIMP1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1135 | TIMP2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1136 | TNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1137 | TNFRSF10C_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1138 | TNFRSF11B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1139 | TNFRSF1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1140 | TNFRSF1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1141 | VCAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1142 | VEGFA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1143 | VWF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |

## Data Set Name: rbm2_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | VISIT | Char | 10 | Visit |
| 3 | A2M_UNIT | Char | 5 | Analyte unit |
| 4 | A2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 5 | A2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 6 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 7 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 8 | ADIPOQ_UNIT | Char | 5 | Analyte unit |
| 9 | ADIPOQ_LOW_RANGE | Char | 5 | Low range for analyte |
| 10 | ADIPOQ_HIGH_RANGE | Char | 5 | High range for analyte |
| 11 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 12 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 13 | AGER_UNIT | Char | 5 | Analyte unit |
| 14 | AGER_LOW_RANGE | Char | 5 | Low range for analyte |
| 15 | AGER_HIGH_RANGE | Char | 5 | High range for analyte |
| 16 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 17 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 18 | APCS_UNIT | Char | 5 | Analyte unit |
| 19 | APCS_LOW_RANGE | Char | 5 | Low range for analyte |
| 20 | APCS_HIGH_RANGE | Char | 5 | High range for analyte |
| 21 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 22 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 23 | B2M_UNIT | Char | 5 | Analyte unit |
| 24 | B2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 25 | B2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 26 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 27 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 28 | BDNF_UNIT | Char | 5 | Analyte unit |
| 29 | BDNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 30 | BDNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 31 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 32 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 33 | C3_UNIT | Char | 6 | Analyte unit |
| 34 | C3_LOW_RANGE | Char | 6 | Low range for analyte |
| 35 | C3_HIGH_RANGE | Char | 6 | High range for analyte |
| 36 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 38 | CCL11_UNIT | Char | 5 | Analyte unit |
| 39 | CCL11_LOW_RANGE | Char | 5 | Low range for analyte |
| 40 | CCL11_HIGH_RANGE | Char | 5 | High range for analyte |
| 41 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 42 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 43 | CCL13_UNIT | Char | 5 | Analyte unit |
| 44 | CCL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 45 | CCL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 46 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 47 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 48 | CCL18_UNIT | Char | 5 | Analyte unit |
| 49 | CCL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 50 | CCL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 51 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 52 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 53 | CCL2_UNIT | Char | 5 | Analyte unit |
| 54 | CCL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 55 | CCL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 56 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 57 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 58 | CCL20_UNIT | Char | 5 | Analyte unit |
| 59 | CCL20_LOW_RANGE | Char | 5 | Low range for analyte |
| 60 | CCL20_HIGH_RANGE | Char | 5 | High range for analyte |
| 61 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 62 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 63 | CCL23_UNIT | Char | 5 | Analyte unit |
| 64 | CCL23_LOW_RANGE | Char | 5 | Low range for analyte |
| 65 | CCL23_HIGH_RANGE | Char | 5 | High range for analyte |
| 66 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 67 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 68 | CCL24_UNIT | Char | 5 | Analyte unit |
| 69 | CCL24_LOW_RANGE | Char | 5 | Low range for analyte |
| 70 | CCL24_HIGH_RANGE | Char | 5 | High range for analyte |
| 71 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 72 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 73 | CCL3_UNIT | Char | 5 | Analyte unit |
| 74 | CCL3_LOW_RANGE | Char | 5 | Low range for analyte |
| 75 | CCL3_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 77 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 78 | CCL4_UNIT | Char | 5 | Analyte unit |
| 79 | CCL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 80 | CCL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 81 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 82 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 83 | CCL5_UNIT | Char | 5 | Analyte unit |
| 84 | CCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 85 | CCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 86 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 87 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 88 | CCL8_UNIT | Char | 5 | Analyte unit |
| 89 | CCL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 90 | CCL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 91 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 92 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 93 | CDH1_UNIT | Char | 5 | Analyte unit |
| 94 | CDH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 95 | CDH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 96 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 97 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 98 | CHGA_UNIT | Char | 5 | Analyte unit |
| 99 | CHGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 100 | CHGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 101 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 102 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 103 | CRP_UNIT | Char | 5 | Analyte unit |
| 104 | CRP_LOW_RANGE | Char | 5 | Low range for analyte |
| 105 | CRP_HIGH_RANGE | Char | 5 | High range for analyte |
| 106 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 107 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 108 | CSF2_UNIT | Char | 5 | Analyte unit |
| 109 | CSF2_LOW_RANGE | Char | 5 | Low range for analyte |
| 110 | CSF2_HIGH_RANGE | Char | 5 | High range for analyte |
| 111 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 112 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 113 | CSTB_UNIT | Char | 5 | Analyte unit |
| 114 | CSTB_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | CSTB_HIGH_RANGE | Char | 5 | High range for analyte |
| 116 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 117 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 118 | CXCL1_UNIT | Char | 5 | Analyte unit |
| 119 | CXCL1_LOW_RANGE | Char | 5 | Low range for analyte |
| 120 | CXCL1_HIGH_RANGE | Char | 5 | High range for analyte |
| 121 | CXCL1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 122 | CXCL1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 123 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 124 | CXCL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 125 | CXCL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 126 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 127 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 128 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 129 | CXCL9_LOW_RANGE | Char | 5 | Low range for analyte |
| 130 | CXCL9_HIGH_RANGE | Char | 5 | High range for analyte |
| 131 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 132 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 133 | F7_UNIT | Char | 5 | Analyte unit |
| 134 | F7_LOW_RANGE | Char | 5 | Low range for analyte |
| 135 | F7_HIGH_RANGE | Char | 5 | High range for analyte |
| 136 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 137 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 138 | FGA_FGB_FGG_UNIT | Char | 6 | Analyte unit |
| 139 | FGA_FGB_FGG_LOW_RANGE | Char | 6 | Low range for analyte |
| 140 | FGA_FGB_FGG_HIGH_RANGE | Char | 6 | High range for analyte |
| 141 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 142 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 143 | FTL_FTH1_UNIT | Char | 5 | Analyte unit |
| 144 | FTL_FTH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 145 | FTL_FTH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 146 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 147 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 148 | GC_UNIT | Char | 5 | Analyte unit |
| 149 | GC_LOW_RANGE | Char | 5 | Low range for analyte |
| 150 | GC_HIGH_RANGE | Char | 5 | High range for analyte |
| 151 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 152 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 153 | HP_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | HP_LOW_RANGE | Char | 5 | Low range for analyte |
| 155 | HP_HIGH_RANGE | Char | 5 | High range for analyte |
| 156 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 157 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 158 | ICAM1_UNIT | Char | 5 | Analyte unit |
| 159 | ICAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 160 | ICAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 161 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 162 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 163 | IFNG_UNIT | Char | 5 | Analyte unit |
| 164 | IFNG_LOW_RANGE | Char | 5 | Low range for analyte |
| 165 | IFNG_HIGH_RANGE | Char | 5 | High range for analyte |
| 166 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 167 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 168 | IGA_UNIT | Char | 5 | Analyte unit |
| 169 | IGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 170 | IGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 171 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 172 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 173 | IGM_UNIT | Char | 5 | Analyte unit |
| 174 | IGM_LOW_RANGE | Char | 5 | Low range for analyte |
| 175 | IGM_HIGH_RANGE | Char | 5 | High range for analyte |
| 176 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 177 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 178 | IL10_UNIT | Char | 5 | Analyte unit |
| 179 | IL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 180 | IL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 181 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 182 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 183 | IL12A_IL12B_UNIT | Char | 5 | Analyte unit |
| 184 | IL12A_IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 185 | IL12A_IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 186 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 187 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 188 | IL12B_UNIT | Char | 5 | Analyte unit |
| 189 | IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 190 | IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 191 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 192 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 193 | IL15_UNIT | Char | 5 | Analyte unit |
| 194 | IL15_LOW_RANGE | Char | 5 | Low range for analyte |
| 195 | IL15_HIGH_RANGE | Char | 5 | High range for analyte |
| 196 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 197 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 198 | IL17A_UNIT | Char | 5 | Analyte unit |
| 199 | IL17A_LOW_RANGE | Char | 5 | Low range for analyte |
| 200 | IL17A_HIGH_RANGE | Char | 5 | High range for analyte |
| 201 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 202 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 203 | IL18_UNIT | Char | 5 | Analyte unit |
| 204 | IL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 205 | IL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 206 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 207 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 208 | IL1A_UNIT | Char | 6 | Analyte unit |
| 209 | IL1A_LOW_RANGE | Char | 6 | Low range for analyte |
| 210 | IL1A_HIGH_RANGE | Char | 6 | High range for analyte |
| 211 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 212 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 213 | IL1B_UNIT | Char | 5 | Analyte unit |
| 214 | IL1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 215 | IL1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 216 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 217 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 218 | IL1RN_UNIT | Char | 5 | Analyte unit |
| 219 | IL1RN_LOW_RANGE | Char | 5 | Low range for analyte |
| 220 | IL1RN_HIGH_RANGE | Char | 5 | High range for analyte |
| 221 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 222 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 223 | IL2_UNIT | Char | 5 | Analyte unit |
| 224 | IL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 225 | IL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 226 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 227 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 228 | IL23A_UNIT | Char | 5 | Analyte unit |
| 229 | IL23A_LOW_RANGE | Char | 5 | Low range for analyte |
| 230 | IL23A_HIGH_RANGE | Char | 5 | High range for analyte |
| 231 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 233 | IL2RA_UNIT | Char | 5 | Analyte unit |
| 234 | IL2RA_LOW_RANGE | Char | 5 | Low range for analyte |
| 235 | IL2RA_HIGH_RANGE | Char | 5 | High range for analyte |
| 236 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 237 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 238 | IL3_UNIT | Char | 6 | Analyte unit |
| 239 | IL3_LOW_RANGE | Char | 6 | Low range for analyte |
| 240 | IL3_HIGH_RANGE | Char | 6 | High range for analyte |
| 241 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 242 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 243 | IL4_UNIT | Char | 5 | Analyte unit |
| 244 | IL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 245 | IL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 246 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 247 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 248 | IL5_UNIT | Char | 5 | Analyte unit |
| 249 | IL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 250 | IL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 251 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 252 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 253 | IL6_UNIT | Char | 5 | Analyte unit |
| 254 | IL6_LOW_RANGE | Char | 5 | Low range for analyte |
| 255 | IL6_HIGH_RANGE | Char | 5 | High range for analyte |
| 256 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 257 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 258 | IL6R_UNIT | Char | 5 | Analyte unit |
| 259 | IL6R_LOW_RANGE | Char | 5 | Low range for analyte |
| 260 | IL6R_HIGH_RANGE | Char | 5 | High range for analyte |
| 261 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 262 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 263 | IL7_UNIT | Char | 5 | Analyte unit |
| 264 | IL7_LOW_RANGE | Char | 5 | Low range for analyte |
| 265 | IL7_HIGH_RANGE | Char | 5 | High range for analyte |
| 266 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 267 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 268 | IL8_UNIT | Char | 5 | Analyte unit |
| 269 | IL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 270 | IL8_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 271 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 272 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 273 | KIT_UNIT | Char | 5 | Analyte unit |
| 274 | KIT_LOW_RANGE | Char | 5 | Low range for analyte |
| 275 | KIT_HIGH_RANGE | Char | 5 | High range for analyte |
| 276 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 277 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 278 | KITLG_UNIT | Char | 5 | Analyte unit |
| 279 | KITLG_LOW_RANGE | Char | 5 | Low range for analyte |
| 280 | KITLG_HIGH_RANGE | Char | 5 | High range for analyte |
| 281 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 282 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 283 | LPA_UNIT | Char | 5 | Analyte unit |
| 284 | LPA_LOW_RANGE | Char | 5 | Low range for analyte |
| 285 | LPA_HIGH_RANGE | Char | 5 | High range for analyte |
| 286 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 287 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 288 | LTA_UNIT | Char | 5 | Analyte unit |
| 289 | LTA_LOW_RANGE | Char | 5 | Low range for analyte |
| 290 | LTA_HIGH_RANGE | Char | 5 | High range for analyte |
| 291 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 292 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 293 | LTF_UNIT | Char | 5 | Analyte unit |
| 294 | LTF_LOW_RANGE | Char | 5 | Low range for analyte |
| 295 | LTF_HIGH_RANGE | Char | 5 | High range for analyte |
| 296 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 297 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 298 | MB_UNIT | Char | 5 | Analyte unit |
| 299 | MB_LOW_RANGE | Char | 5 | Low range for analyte |
| 300 | MB_HIGH_RANGE | Char | 5 | High range for analyte |
| 301 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 302 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 303 | MMP3_UNIT | Char | 5 | Analyte unit |
| 304 | MMP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 305 | MMP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 306 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 307 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 308 | MMP9_UNIT | Char | 5 | Analyte unit |
| 309 | MMP9_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | MMP9_HIGH_RANGE | Char | 5 | High range for analyte |
| 311 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 312 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 313 | NGF_UNIT | Char | 5 | Analyte unit |
| 314 | NGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 315 | NGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 316 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 317 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 318 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 319 | NRCAM_LOW_RANGE | Char | 5 | Low range for analyte |
| 320 | NRCAM_HIGH_RANGE | Char | 5 | High range for analyte |
| 321 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 322 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 323 | S100A12_UNIT | Char | 5 | Analyte unit |
| 324 | S100A12_LOW_RANGE | Char | 5 | Low range for analyte |
| 325 | S100A12_HIGH_RANGE | Char | 5 | High range for analyte |
| 326 | S100A12_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 327 | S100A12_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 328 | S100B_UNIT | Char | 5 | Analyte unit |
| 329 | S100B_LOW_RANGE | Char | 5 | Low range for analyte |
| 330 | S100B_HIGH_RANGE | Char | 5 | High range for analyte |
| 331 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 332 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 333 | SELE_UNIT | Char | 5 | Analyte unit |
| 334 | SELE_LOW_RANGE | Char | 5 | Low range for analyte |
| 335 | SELE_HIGH_RANGE | Char | 5 | High range for analyte |
| 336 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 337 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 338 | SERPINA1_UNIT | Char | 5 | Analyte unit |
| 339 | SERPINA1_LOW_RANGE | Char | 5 | Low range for analyte |
| 340 | SERPINA1_HIGH_RANGE | Char | 5 | High range for analyte |
| 341 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 342 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 343 | SERPINA7_UNIT | Char | 5 | Analyte unit |
| 344 | SERPINA7_LOW_RANGE | Char | 5 | Low range for analyte |
| 345 | SERPINA7_HIGH_RANGE | Char | 5 | High range for analyte |
| 346 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 347 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 348 | SERPINE1_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 349 | SERPINE1_LOW_RANGE | Char | 5 | Low range for analyte |
| 350 | SERPINE1_HIGH_RANGE | Char | 5 | High range for analyte |
| 351 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 352 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 353 | SHBG_UNIT | Char | 6 | Analyte unit |
| 354 | SHBG_LOW_RANGE | Char | 6 | Low range for analyte |
| 355 | SHBG_HIGH_RANGE | Char | 6 | High range for analyte |
| 356 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 357 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 358 | SLPI_UNIT | Char | 5 | Analyte unit |
| 359 | SLPI_LOW_RANGE | Char | 5 | Low range for analyte |
| 360 | SLPI_HIGH_RANGE | Char | 5 | High range for analyte |
| 361 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 362 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 363 | SOD1_UNIT | Char | 5 | Analyte unit |
| 364 | SOD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 365 | SOD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 366 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 367 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 368 | SORT1_UNIT | Char | 5 | Analyte unit |
| 369 | SORT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 370 | SORT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 371 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 372 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 373 | SPINK1_UNIT | Char | 5 | Analyte unit |
| 374 | SPINK1_LOW_RANGE | Char | 5 | Low range for analyte |
| 375 | SPINK1_HIGH_RANGE | Char | 5 | High range for analyte |
| 376 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 377 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 378 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 379 | TGFB1_LAP_LOW_RANGE | Char | 5 | Low range for analyte |
| 380 | TGFB1_LAP_HIGH_RANGE | Char | 5 | High range for analyte |
| 381 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 382 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 383 | TIMP1_UNIT | Char | 5 | Analyte unit |
| 384 | TIMP1_LOW_RANGE | Char | 5 | Low range for analyte |
| 385 | TIMP1_HIGH_RANGE | Char | 5 | High range for analyte |
| 386 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 387 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 388 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 389 | TIMP2_LOW_RANGE | Char | 5 | Low range for analyte |
| 390 | TIMP2_HIGH_RANGE | Char | 5 | High range for analyte |
| 391 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 392 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 393 | TNF_UNIT | Char | 5 | Analyte unit |
| 394 | TNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 395 | TNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 396 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 397 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 398 | TNFRSF11B_UNIT | Char | 4 | Analyte unit |
| 399 | TNFRSF11B_LOW_RANGE | Char | 4 | Low range for analyte |
| 400 | TNFRSF11B_HIGH_RANGE | Char | 4 | High range for analyte |
| 401 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 402 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 403 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 404 | TNFRSF1A_LOW_RANGE | Char | 5 | Low range for analyte |
| 405 | TNFRSF1A_HIGH_RANGE | Char | 5 | High range for analyte |
| 406 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 407 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 408 | TNFRSF1B_UNIT | Char | 5 | Analyte unit |
| 409 | TNFRSF1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 410 | TNFRSF1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 411 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 412 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 413 | VCAM1_UNIT | Char | 5 | Analyte unit |
| 414 | VCAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 415 | VCAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 416 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 417 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 418 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 419 | VEGFA_LOW_RANGE | Char | 5 | Low range for analyte |
| 420 | VEGFA_HIGH_RANGE | Char | 5 | High range for analyte |
| 421 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 422 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 423 | VTN_UNIT | Char | 5 | Analyte unit |
| 424 | VTN_LOW_RANGE | Char | 5 | Low range for analyte |
| 425 | VTN_HIGH_RANGE | Char | 5 | High range for analyte |
| 426 | VTN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :--- | :--- | :--- | :--- | :--- |
| 427 | VTN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 428 | VWF_UNIT | Char | 5 | Analyte unit |
| 429 | VWF_LOW_RANGE | Char | 5 | Low range for analyte |
| 430 | VWF_HIGH_RANGE | Char | 5 | High range for analyte |
| 431 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 432 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 433 | A2M | Num | 8 | Alpha-2-Macroglobulin (A2M) |
| 434 | ADIPOQ | Num | 8 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 435 | AGER | Num | 8 | Advanced glycosylation end product-specific receptor (AGER) |
| 436 | APCS | Num | 8 | 8 |
| 437 | B2M | Num | 8 | Amyloid P-component, serum (APCS) |
| 438 | BDNF | Num | 8 | Beta-2-microglobulin (B2M) |
| 439 | C3 | Num | Num | Num (HP) |
| 440 | CCL11 | Num Adhesion Molecule 1 (ICAM1) |  |  |
| 465 |  | NPNG | 8 |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 466 | IGA | Num | 8 | Immunoglobulin A (IgA) |
| 467 | IGM | Num | 8 | Immunoglobulin M |
| 468 | IL10 | Num | 8 | Interleukin 10 (IL10) |
| 469 | IL12A_IL12B | Num | 8 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 470 | IL12B | Num | 8 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 471 | IL15 | Num | 8 | Interleukin 15 (IL15) |
| 472 | IL17A | Num | 8 | Interleukin 17 (IL17A) |
| 473 | IL18 | Num | 8 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 474 | IL1A | Num | 8 | Interleukin 1, alpha (IL1A) |
| 475 | IL1B | Num | 8 | Interleukin 1, beta (IL1B) |
| 476 | IL1RN | Num | 8 | Interleukin 1 receptor antagonist (IL1RN) |
| 477 | IL2 | Num | 8 | Interleukin 2 (IL2) |
| 478 | IL23A | Num | 8 | Interleukin 23, alpha subunit p19 (IL23A) |
| 479 | IL2RA | Num | 8 | Interleukin 2 receptor, alpha (IL2RA) |
| 480 | IL3 | Num | 8 | Interleukin 3 (IL3) |
| 481 | IL4 | Num | 8 | Interleukin 4 (IL4) |
| 482 | IL5 | Num | 8 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 483 | IL6 | Num | 8 | Interleukin 6 (interferon, beta 2) (IL6) |
| 484 | IL6R | Num | 8 | Interleukin-6 receptor (IL6R) |
| 485 | IL7 | Num | 8 | Interleukin 7 (IL7) |
| 486 | IL8 | Num | 8 | Interleukin 8 (IL8) |
| 487 | KIT | Num | 8 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 488 | KITLG | Num | 8 | KIT ligand (KITLG) |
| 489 | LPA | Num | 8 | Lipoprotein, (Lp(a) (LPA) |
| 490 | LTA | Num | 8 | Lymphotoxin alpha (LTA) |
| 491 | LTF | Num | 8 | Lactotransferrin |
| 492 | MB | Num | 8 | Myoglobin (MB) |
| 493 | MMP3 | Num | 8 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 494 | MMP9 | Num | 8 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 495 | NGF | Num | 8 | Nerve growth gactor (beta polypeptide) (NGF) |
| 496 | NRCAM | Num | 8 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 497 | S100A12 | Num | 8 | S100 calcium binding protein A12 (ENRAGE) |
| 498 | S100B | Num | 8 | S100 calcium binding protein B (S100B) |
| 499 | SELE | Num | 8 | Selectin E (SELE) |
| 500 | SERPINA1 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 501 | SERPINA7 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 502 | SERPINE1 | Num | 8 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type |
| 1), member 1 (SERPINE1) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 540 | CCL22_LOW_RANGE | Char | 5 | Low range for analyte |
| 541 | CCL22_HIGH_RANGE | Char | 5 | High range for analyte |
| 542 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 543 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 544 | CDH13_UNIT | Char | 5 | Analyte unit |
| 545 | CDH13_LOW_RANGE | Char | 5 | Low range for analyte |
| 546 | CDH13_HIGH_RANGE | Char | 5 | High range for analyte |
| 547 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 548 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 549 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 550 | CEACAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 551 | CEACAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 552 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 553 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 554 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 555 | CKM_CKB_LOW_RANGE | Char | 5 | Low range for analyte |
| 556 | CKM_CKB_HIGH_RANGE | Char | 5 | High range for analyte |
| 557 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 558 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 559 | CXCL5_UNIT | Char | 5 | Analyte unit |
| 560 | CXCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 561 | CXCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 562 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 563 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 564 | DCN_UNIT | Char | 5 | Analyte unit |
| 565 | DCN_LOW_RANGE | Char | 5 | Low range for analyte |
| 566 | DCN_HIGH_RANGE | Char | 5 | High range for analyte |
| 567 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 568 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 569 | FABP3_UNIT | Char | 5 | Analyte unit |
| 570 | FABP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 571 | FABP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 572 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 573 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 574 | FAS_UNIT | Char | 5 | Analyte unit |
| 575 | FAS_LOW_RANGE | Char | 5 | Low range for analyte |
| 576 | FAS_HIGH_RANGE | Char | 5 | High range for analyte |
| 577 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 578 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 579 | HGF_UNIT | Char | 5 | Analyte unit |
| 580 | HGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 581 | HGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 582 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 583 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 584 | IGE_UNIT | Char | 4 | Analyte unit |
| 585 | IGE_LOW_RANGE | Char | 4 | Low range for analyte |
| 586 | IGE_HIGH_RANGE | Char | 4 | High range for analyte |
| 587 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 588 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 589 | IL13_UNIT | Char | 5 | Analyte unit |
| 590 | IL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 591 | IL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 592 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 593 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 594 | IL16_UNIT | Char | 5 | Analyte unit |
| 595 | IL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 596 | IL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 597 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 598 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 599 | IL18BP_UNIT | Char | 5 | Analyte unit |
| 600 | IL18BP_LOW_RANGE | Char | 5 | Low range for analyte |
| 601 | IL18BP_HIGH_RANGE | Char | 5 | High range for analyte |
| 602 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 603 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 604 | KLK3_F_UNIT | Char | 6 | Analyte unit |
| 605 | KLK3_F_LOW_RANGE | Char | 6 | Low range for analyte |
| 606 | KLK3_F_HIGH_RANGE | Char | 6 | High range for analyte |
| 607 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 608 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 609 | MDK_UNIT | Char | 5 | Analyte unit |
| 610 | MDK_LOW_RANGE | Char | 5 | Low range for analyte |
| 611 | MDK_HIGH_RANGE | Char | 5 | High range for analyte |
| 612 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 613 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 614 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 615 | NPPB_PH_LOW_RANGE | Char | 5 | Low range for analyte |
| 616 | NPPB_PH_HIGH_RANGE | Char | 5 | High range for analyte |
| 617 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 618 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 619 | OLR1_UNIT | Char | 5 | Analyte unit |
| 620 | OLR1_LOW_RANGE | Char | 5 | Low range for analyte |
| 621 | OLR1_HIGH_RANGE | Char | 5 | High range for analyte |
| 622 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 623 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 624 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 625 | PECAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 626 | PECAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 627 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 628 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 629 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 630 | SFTPD_LOW_RANGE | Char | 5 | Low range for analyte |
| 631 | SFTPD_HIGH_RANGE | Char | 5 | High range for analyte |
| 632 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 633 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 634 | THBD_UNIT | Char | 5 | Analyte unit |
| 635 | THBD_LOW_RANGE | Char | 5 | Low range for analyte |
| 636 | THBD_HIGH_RANGE | Char | 5 | High range for analyte |
| 637 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 638 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 639 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 640 | TNFRSF10C_LOW_RANGE | Char | 5 | Low range for analyte |
| 641 | TNFRSF10C_HIGH_RANGE | Char | 5 | High range for analyte |
| 642 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 643 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 644 | ANGPT1 | Num | 8 | Angiopoietin 1 (ANGPT1) |
| 645 | AXL | Num | 8 | AXL Receptor Tyrosine Kinase (AXL) |
| 646 | CA9 | Num | 8 | Carbonic anhydrase IX (CA9) |
| 647 | CCL16 | Num | 8 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 648 | CCL22 | Num | 8 | chemokine (C-C motif) ligand 22 (CCL22) |
| 649 | CDH13 | Num | 8 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 650 | CEACAM1 | Num | 8 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 651 | CKM_CKB | Num | 8 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 652 | CXCL5 | Num | 8 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 653 | DCN | Num | 8 | Decorin (DCN) |
| 654 | FABP3 | Num | 8 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 655 | FAS | Num | 8 | Fas cell surface death receptor (FAS) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 656 | HGF | Num | 8 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 657 | IGE | Num | 8 | Immunoglobulin E (IgE) |
| 658 | IL13 | Num | 8 | Interleukin 13 (IL13) |
| 659 | IL16 | Num | 8 | Interleukin 16 (IL16) |
| 660 | IL18BP | Num | 8 | Interleukin 18 binding protein (IL18BP) |
| 661 | KLK3_F | Num | 8 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 662 | MDK | Num | 8 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 663 | NPPB_PH | Num | 8 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 664 | OLR1 | Num | 8 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 665 | PECAM1 | Num | 8 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 666 | SFTPD | Num | 8 | Surfactant protein D (SFTPD) |
| 667 | THBD | Num | 8 | Thrombomodulin (THBD) |
| 668 | TNFRSF10C | Num | 8 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 669 | ADIPOQ_RAW | Char | 5 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 670 | SERPINA1_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 671 | A2M_RAW | Char | 5 | Alpha-2-Macroglobulin (A2M) |
| 672 | SLPI_RAW | Char | 5 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 673 | LPA_RAW | Char | 5 | Lipoprotein, (Lp(a) (LPA) |
| 674 | B2M_RAW | Char | 5 | Beta-2-microglobulin (B2M) |
| 675 | BDNF_RAW | Char | 5 | Brain-derived neurotrophic factor (BDNF) |
| 676 | CRP_RAW | Char | 5 | C-reactive protein, pentraxin-related (CRP) |
| 677 | CDH1_RAW | Char | 5 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 678 | CHGA_RAW | Char | 5 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 679 | C3_RAW | Char | 6 | Complement component C3 (C3) |
| 680 | CSTB_RAW | Char | 5 | Cystatin B (stefin B) (CSTB) |
| 681 | SELE_RAW | Char | 5 | Selectin E (SELE) |
| 682 | S100A12_RAW | Char | 5 | S100 calcium binding protein A12 (ENRAGE) |
| 683 | CCL11_RAW | Char | 5 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 684 | CCL24_RAW | Char | 5 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 685 | F7_RAW | Char | 5 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 686 | FTL_FTH1_RAW | Char | 5 | Ferritin [FT(L/H1)] |
| 687 | FGA_FGB_FGG_RAW | Char | 6 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 688 | CSF2_RAW | Char | 5 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 689 | CXCL1_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 690 | HP_RAW | Char | 5 | Haptoglobin (HP) |
| 691 | IGA_RAW | Char | 5 | Immunoglobulin A (IgA) |
| 692 | IGM_RAW | Char | 5 | Immunoglobulin M |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 693 | ICAM1_RAW | Char | 5 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 694 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 695 | CXCL10_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 696 | IL1A_RAW | Char | 7 | Interleukin 1, alpha (IL1A) |
| 697 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 698 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 699 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 700 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 701 | IL3_RAW | Char | 6 | Interleukin 3 (IL3) |
| 702 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 703 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 704 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |
| 705 | IL6R_RAW | Char | 5 | Interleukin-6 receptor (IL6R) |
| 706 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 707 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 708 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 709 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 710 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 711 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 712 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 713 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 714 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 715 | LTF_RAW | Char | 5 | Lactotransferrin |
| 716 | TGFB1_LAP_RAW | Char | 5 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 717 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 718 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 719 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 720 | KIT_RAW | Char | 5 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 721 | MMP3_RAW | Char | 5 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 722 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 723 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 724 | CCL8_RAW | Char | 5 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 725 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 726 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 727 | CCL23_RAW | Char | 5 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 728 | MB_RAW | Char | 5 | Myoglobin (MB) |
| 729 | NGF_RAW | Char | 5 | Nerve growth gactor (beta polypeptide) (NGF) |
| 730 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 731 | TNFRSF11B_RAW | Char | 4 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 732 | SPINK1_RAW | Char | 5 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 733 | SERPINE1_RAW | Char | 5 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 734 | CCL18_RAW | Char | 5 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) |
| 735 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 736 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 737 | APCS_RAW | Char | 5 | Amyloid P-component, serum (APCS) |
| 738 | SHBG_RAW | Char | 6 | Sex Hormone-Binding Globulin (SHBG) |
| 739 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |
| 740 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |
| 741 | SOD1_RAW | Char | 5 | Superoxide Dismutase 1, soluble (SOD1) |
| 742 | CCL5_RAW | Char | 5 | chemokine (C-C motif) ligand 5 (CCL5) |
| 743 | SERPINA7_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 744 | TIMP1_RAW | Char | 5 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 745 | TIMP2_RAW | Char | 5 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 746 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 747 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 748 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 749 | TNFRSF1B_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 750 | VCAM1_RAW | Char | 5 | Vascular cell adhesion molecule 1 (VCAM1) |
| 751 | VEGFA_RAW | Char | 5 | Vascular endothelial growth factor (VEGFA) |
| 752 | GC_RAW | Char | 5 | Group-specific component (vitamin D binding protein) (GC) |
| 753 | VTN_RAW | Char | 5 | Vitronectin |
| 754 | VWF_RAW | Char | 5 | von Willebrand Factor (vWF) |
| 755 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 756 | AXL_RAW | Char | 5 | AXL Receptor Tyrosine Kinase (AXL) |
| 757 | CDH13_RAW | Char | 5 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 758 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 759 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 760 | CCL16_RAW | Char | 5 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 761 | CKM_CKB_RAW | Char | 5 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 762 | DCN_RAW | Char | 5 | Decorin (DCN) |
| 763 | CXCL5_RAW | Char | 5 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 764 | FAS_RAW | Char | 5 | Fas cell surface death receptor (FAS) |
| 765 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 766 | HGF_RAW | Char | 5 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 767 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 768 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 769 | IL16_RAW | Char | 5 | Interleukin 16 (IL16) |
| 770 | IL18BP_RAW | Char | 5 | Interleukin 18 binding protein (IL18BP) |
| 771 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 772 | CCL22_RAW | Char | 5 | chemokine (C-C motif) ligand 22 (CCL22) |
| 773 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 774 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 775 | PECAM1_RAW | Char | 5 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 776 | KLK3_F_RAW | Char | 6 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 777 | SFTPD_RAW | Char | 5 | Surfactant protein D (SFTPD) |
| 778 | THBD_RAW | Char | 5 | Thrombomodulin (THBD) |
| 779 | TNFRSF10C_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 780 | A2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 781 | ADIPOQ_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 782 | AGER_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 783 | ANGPT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 784 | APCS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 785 | AXL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 786 | B2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 787 | BDNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 788 | C3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 789 | CA9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 790 | CCL11_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 791 | CCL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 792 | CCL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 793 | CCL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 794 | CCL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 795 | CCL20_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 796 | CCL22_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 797 | CCL23_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 798 | CCL24_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 799 | CCL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 800 | CCL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 801 | CCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 802 | CCL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 803 | CDH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 804 | CDH13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 805 | CEACAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 806 | CHGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 807 | CKM_CKB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 808 | CRP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 809 | CSF2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 810 | CSTB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 811 | CXCL1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 812 | CXCL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 813 | CXCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 814 | CXCL9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 815 | DCN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 816 | F7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 817 | FABP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 818 | FAS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 819 | FGA_FGB_FGG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 820 | FTL_FTH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 821 | GC_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 822 | HGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 823 | HP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 824 | ICAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 825 | IFNG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 826 | IGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 827 | IGE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 828 | IGM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 829 | IL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 830 | IL12A_IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 831 | IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 832 | IL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 833 | IL15_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 834 | IL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 835 | IL17A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 836 | IL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 837 | IL18BP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 838 | IL1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 839 | IL1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 840 | IL1RN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 841 | IL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 842 | IL23A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 843 | IL2RA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 844 | IL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 845 | IL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 846 | IL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 847 | IL6_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 848 | IL6R_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 849 | IL7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 850 | IL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 851 | KIT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 852 | KITLG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 853 | KLK3_F_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 854 | LPA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 855 | LTA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 856 | LTF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 857 | MB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 858 | MDK_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 859 | MMP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 860 | MMP9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 861 | NGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 862 | NPPB_PH_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 863 | NRCAM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 864 | OLR1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 865 | PECAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 866 | S100A12_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 867 | S100B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 868 | SELE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 869 | SERPINA1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 870 | SERPINA7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 871 | SERPINE1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 872 | SFTPD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 873 | SHBG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 874 | SLPI_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 875 | SOD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 876 | SORT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 877 | SPINK1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 878 | TGFB1_LAP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 879 | THBD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 880 | TIMP1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 881 | TIMP2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 882 | TNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 883 | TNFRSF10C_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 884 | TNFRSF11B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 885 | TNFRSF1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 886 | TNFRSF1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 887 | VCAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 888 | VEGFA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 889 | VTN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 890 | VWF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 891 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 892 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 893 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 894 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 895 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 896 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 897 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 898 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 899 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 900 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 901 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 902 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 903 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 904 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 905 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 906 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 907 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 908 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 909 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 910 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 911 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 912 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 913 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 914 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 915 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 916 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 917 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 918 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 919 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 920 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 921 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 922 | CXCL1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 923 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 924 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 925 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 926 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 927 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 928 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 929 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 930 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 931 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 932 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 933 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 934 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 935 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 936 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 937 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 938 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 939 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 940 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 941 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 942 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 943 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 944 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 945 | IL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 946 | IL17A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 947 | IL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 948 | IL18BP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 949 | IL1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 950 | IL1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 951 | IL1RN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 952 | IL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 953 | IL23A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 954 | IL2RA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 955 | IL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 956 | IL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 957 | IL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 958 | IL6_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 959 | IL6R_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 960 | IL7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 961 | IL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 962 | KIT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 963 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 964 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 965 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 966 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 967 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 968 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 969 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 970 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 971 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 972 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 973 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 974 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 975 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 976 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 977 | S100A12_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 978 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 979 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 980 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 981 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 982 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 983 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 984 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 985 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 986 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 987 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 988 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 989 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 990 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 991 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 992 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 993 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 994 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 995 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 996 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 997 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 998 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 999 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1000 | VTN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1001 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |

Data Set Name: rbmp_edta_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | SAMPLETYPE | Char | 6 | Specimen type |
| 3 | REPNUM | Char | 6 | Replicate number |
| 4 | ADIP | Char | 3 | Adiponectin |
| 5 | AACT | Char | 4 | Alpha-1-Antichymotrypsin |
| 6 | AAT | Char | 4 | Alpha-1-Antitrypsin |
| 7 | A2MACRO | Char | 3 | Alpha-2-Macroglobulin |
| 8 | ANG_1 | Char | 3 | Angiopoietin-1 |
| 9 | ALP | Char | 2 | Antileukoproteinase (SLPI) |
| 10 | APOA_IV | Char | 3 | Apolipoprotein A-IV |
| 11 | AXL | Char | 4 | AXL Receptor Tyrosine Kinase |
| 12 | B2M | Char | 4 | Beta-2-Microglobulin |
| 13 | BDNF | Char | 4 | Brain-Derived Neurotrophic Factor |
| 14 | CRP | Char | 4 | C-reactive protein |
| 15 | E_CAD | Char | 4 | Cadherin-1 |
| 16 | T_CAD | Char | 3 | Cadherin-13 |
| 17 | CA_9 | Char | 5 | Carbonic anhydrase 9 |
| 18 | CEACAM1 | Char | 3 | Carcinoembryonic antigen-related cell adhesion molecule 1 |
| 19 | HCC_4 | Char | 3 | Chemokine CC-4 |
| 20 | CGA | Char | 5 | Chromogranin-A |
| 21 | C3 | Char | 4 | Complement C3 |
| 22 | CYSB | Char | 3 | Cystatin-B |
| 23 | DEC | Char | 3 | Decorin |
| 24 | ESELECT | Char | 3 | E-Selectin |
| 25 | EOTAX1 | Char | 3 | Eotaxin-1 |
| 26 | EOTAX2 | Char | 4 | Eotaxin-2 |
| 27 | FACTORVII | Char | 3 | Factor VII |
| 28 | FAS | Char | 4 | FASLG Receptor |
| 29 | FABP | Char | 3 | Fatty Acid-Binding Protein, heart |
| 30 | FRTN | Char | 4 | Ferritin |
| 31 | FIBRO | Char | 3 | Fibrinogen |
| 32 | GM_CSF | Char | 3 | Granulocyte-Macrophage Colony-Stimulating Factor |
| 33 | HAPTO | Char | 6 | Haptoglobin |
| 34 | HSP_60 | Char | 3 | Heat Shock Protein 60 |
| 35 | HGF | Char | 3 | Hepatocyte Growth Factor |
| 36 | IGA | Char | 4 | Immunoglobulin A |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | IGM | Char | 5 | Immunoglobulin M |
| 38 | ICAM_1 | Char | 3 | Intercellular Adhesion Molecule 1 |
| 39 | IFN_GAMMA | Char | 3 | Interferon gamma |
| 40 | IP_10 | Char | 3 | Interferon gamma Induced Protein 10 |
| 41 | IL_1ALPHA | Char | 7 | Interleukin-1 alpha |
| 42 | IL_1BETA | Char | 4 | Interleukin-1 beta |
| 43 | IL_1RA | Char | 4 | Interleukin-1 receptor antagonist |
| 44 | IL_2 | Char | 4 | Interleukin-2 |
| 45 | IL_2RECEPTOR_ALPHA | Char | 4 | Interleukin-2 receptor alpha |
| 46 | IL_3 | Char | 7 | Interleukin-3 |
| 47 | IL_4 | Char | 3 | Interleukin-4 |
| 48 | IL_5 | Char | 3 | Interleukin-5 |
| 49 | IL_6 | Char | 4 | Interleukin-6 |
| 50 | IL_6R | Char | 3 | Interleukin-6 receptor |
| 51 | IL_7 | Char | 3 | Interleukin-7 |
| 52 | IL_8 | Char | 3 | Interleukin-8 |
| 53 | IL_10 | Char | 4 | Interleukin-10 |
| 54 | IL_12P40 | Char | 5 | Interleukin-12 Subunit p40 |
| 55 | IL_12P70 | Char | 3 | Interleukin-12 Subunit p70 |
| 56 | IL_15 | Char | 5 | Interleukin-15 |
| 57 | IL_17 | Char | 4 | Interleukin-17 |
| 58 | IL_18 | Char | 4 | Interleukin-18 |
| 59 | IL_18BP | Char | 3 | Interleukin-18-binding protein |
| 60 | IL_23 | Char | 5 | Interleukin-23 |
| 61 | LTF | Char | 3 | Lactoferrin |
| 62 | LAPTGF_B1 | Char | 3 | Latency-Associated Peptide of Transforming Growth Factor beta 1 |
| 63 | LOX_1 | Char | 5 | Lectin-Like Oxidized LDL Receptor 1 |
| 64 | MIP_1ALPHA | Char | 3 | Macrophage Inflammatory Protein-1 alpha |
| 65 | MIP_1BETA | Char | 3 | Macrophage Inflammatory Protein-1 beta |
| 66 | MIP_3ALPHA | Char | 3 | Macrophage Inflammatory Protein-3 alpha |
| 67 | MDA_LDL | Char | 4 | Malondialdehyde-Modified Low-Density Lipoprotein |
| 68 | SCFR | Char | 3 | Mast/stem cell growth factor receptor |
| 69 | MMP_2 | Char | 4 | Matrix Metalloproteinase-2 |
| 70 | MMP_3 | Char | 3 | Matrix Metalloproteinase-3 |
| 71 | MMP_9 | Char | 3 | Matrix Metalloproteinase-9 |
| 72 | MICA | Char | 3 | MHC class I chain-related protein A |
| 73 | MICROALBUMIN | Char | 5 | Microalbumin |
| 74 | MIDKINE | Char | 3 | Midkine |
| 75 | MCP_1 | Char | 3 | Monocyte Chemotactic Protein 1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | MCP_2 | Char | 4 | Monocyte Chemotactic Protein 2 |
| 77 | MCP_4 | Char | 4 | Monocyte Chemotactic Protein 4 |
| 78 | MIG | Char | 4 | Monokine Induced by Gamma Interferon |
| 79 | MPIF_1 | Char | 4 | Myeloid Progenitor Inhibitory Factor 1 |
| 80 | MYOGLOBIN | Char | 3 | Myoglobin |
| 81 | NTPROBNP | Char | 4 | N-terminal prohormone of brain natriuretic peptide |
| 82 | NGF_BETA | Char | 6 | Nerve Growth Factor beta |
| 83 | NR_CAM | Char | 4 | Neuronal Cell Adhesion Molecule |
| 84 | OPG | Char | 3 | Osteoprotegerin |
| 85 | TATI | Char | 3 | Pancreatic secretory trypsin inhibitor |
| 86 | PAI_1 | Char | 3 | Plasminogen Activator Inhibitor 1 |
| 87 | PECAM_1 | Char | 2 | Platelet endothelial cell adhesion molecule |
| 88 | PROINSULIN__INTACT | Char | 4 | Proinsulin, Intact |
| 89 | PROINSULIN__TOT | Char | 3 | Proinsulin, Total |
| 90 | PARC | Char | 3 | Pulmonary and Activation-Regulated Chemokine |
| 91 | SP_D | Char | 3 | Pulmonary surfactant-associated protein D |
| 92 | RAGE | Char | 4 | Receptor for advanced glycosylation end products |
| 93 | S100_B | Char | 5 | S100 calcium-binding protein B |
| 94 | SORTILIN | Char | 3 | Sortilin |
| 95 | SCF | Char | 4 | Stem Cell Factor |
| 96 | SOD_1 | Char | 2 | Superoxide Dismutase 1, soluble |
| 97 | RANTES | Char | 3 | T-Cell-Specific Protein RANTES |
| 98 | TM | Char | 3 | Thrombomodulin |
| 99 | TIMP_1 | Char | 3 | Tissue Inhibitor of Metalloproteinases 1 |
| 100 | TIMP_2 | Char | 2 | Tissue Inhibitor of Metalloproteinases 2 |
| 101 | TRAIL_R3 | Char | 3 | TNF-Related Apoptosis-Inducing Ligand Receptor 3 |
| 102 | TNF_ALPHA | Char | 3 | Tumor Necrosis Factor alpha |
| 103 | TNF_BETA | Char | 4 | Tumor Necrosis Factor beta |
| 104 | TNFR1 | Char | 4 | Tumor Necrosis Factor Receptor 1 |
| 105 | TNFR2 | Char | 3 | Tumor necrosis factor receptor 2 |
| 106 | VCAM_1 | Char | 3 | Vascular Cell Adhesion Molecule-1 |
| 107 | VEGF | Char | 3 | Vascular Endothelial Growth Factor |
| 108 | VDBP | Char | 3 | Vitamin D-Binding Protein |

Data Set Name: rbmp_p100_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | SAMPLETYPE | Char | 7 | Specimen type |
| 3 | REPNUM | Char | 6 | Replicate number |
| 4 | ADIP | Char | 3 | Adiponectin |
| 5 | AACT | Char | 4 | Alpha-1-Antichymotrypsin |
| 6 | AAT | Char | 4 | Alpha-1-Antitrypsin |
| 7 | A2MACRO | Char | 4 | Alpha-2-Macroglobulin |
| 8 | ANG_1 | Char | 4 | Angiopoietin-1 |
| 9 | ALP | Char | 2 | Antileukoproteinase (SLPI) |
| 10 | APOA_IV | Char | 3 | Apolipoprotein A-IV |
| 11 | AXL | Char | 3 | AXL Receptor Tyrosine Kinase |
| 12 | B2M | Char | 4 | Beta-2-Microglobulin |
| 13 | BDNF | Char | 4 | Brain-Derived Neurotrophic Factor |
| 14 | CRP | Char | 4 | C-reactive protein |
| 15 | E_CAD | Char | 4 | Cadherin-1 |
| 16 | T_CAD | Char | 3 | Cadherin-13 |
| 17 | CA_9 | Char | 5 | Carbonic anhydrase 9 |
| 18 | CEACAM1 | Char | 3 | Carcinoembryonic antigen-related cell adhesion molecule 1 |
| 19 | HCC_4 | Char | 3 | Chemokine CC-4 |
| 20 | CGA | Char | 5 | Chromogranin-A |
| 21 | C3 | Char | 4 | Complement C3 |
| 22 | CYSB | Char | 3 | Cystatin-B |
| 23 | DEC | Char | 3 | Decorin |
| 24 | ESELECT | Char | 3 | E-Selectin |
| 25 | EOTAX1 | Char | 3 | Eotaxin-1 |
| 26 | EOTAX2 | Char | 4 | Eotaxin-2 |
| 27 | FACTORVII | Char | 3 | Factor VII |
| 28 | FAS | Char | 4 | FASLG Receptor |
| 29 | FABP | Char | 3 | Fatty Acid-Binding Protein, heart |
| 30 | FRTN | Char | 4 | Ferritin |
| 31 | FIBRO | Char | 3 | Fibrinogen |
| 32 | GM_CSF | Char | 3 | Granulocyte-Macrophage Colony-Stimulating Factor |
| 33 | HAPTO | Char | 4 | Haptoglobin |
| 34 | HSP_60 | Char | 3 | Heat Shock Protein 60 |
| 35 | HGF | Char | 3 | Hepatocyte Growth Factor |
| 36 | IGA | Char | 4 | Immunoglobulin A |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | IGM | Char | 5 | Immunoglobulin M |
| 38 | ICAM_1 | Char | 3 | Intercellular Adhesion Molecule 1 |
| 39 | IFN_GAMMA | Char | 3 | Interferon gamma |
| 40 | IP_10 | Char | 4 | Interferon gamma Induced Protein 10 |
| 41 | IL_1ALPHA | Char | 7 | Interleukin-1 alpha |
| 42 | IL_1BETA | Char | 4 | Interleukin-1 beta |
| 43 | IL_1RA | Char | 4 | Interleukin-1 receptor antagonist |
| 44 | IL_2 | Char | 4 | Interleukin-2 |
| 45 | IL_2RECEPTOR_ALPHA | Char | 4 | Interleukin-2 receptor alpha |
| 46 | IL_3 | Char | 7 | Interleukin-3 |
| 47 | IL_4 | Char | 3 | Interleukin-4 |
| 48 | IL_5 | Char | 3 | Interleukin-5 |
| 49 | IL_6 | Char | 4 | Interleukin-6 |
| 50 | IL_6R | Char | 3 | Interleukin-6 receptor |
| 51 | IL_7 | Char | 3 | Interleukin-7 |
| 52 | IL_8 | Char | 4 | Interleukin-8 |
| 53 | IL_10 | Char | 4 | Interleukin-10 |
| 54 | IL_12P40 | Char | 5 | Interleukin-12 Subunit p40 |
| 55 | IL_12P70 | Char | 3 | Interleukin-12 Subunit p70 |
| 56 | IL_15 | Char | 5 | Interleukin-15 |
| 57 | IL_17 | Char | 4 | Interleukin-17 |
| 58 | IL_18 | Char | 4 | Interleukin-18 |
| 59 | IL_18BP | Char | 3 | Interleukin-18-binding protein |
| 60 | IL_23 | Char | 5 | Interleukin-23 |
| 61 | LTF | Char | 3 | Lactoferrin |
| 62 | LAPTGF_B1 | Char | 4 | Latency-Associated Peptide of Transforming Growth Factor beta 1 |
| 63 | LOX_1 | Char | 5 | Lectin-Like Oxidized LDL Receptor 1 |
| 64 | MIP_1ALPHA | Char | 3 | Macrophage Inflammatory Protein-1 alpha |
| 65 | MIP_1BETA | Char | 3 | Macrophage Inflammatory Protein-1 beta |
| 66 | MIP_3ALPHA | Char | 3 | Macrophage Inflammatory Protein-3 alpha |
| 67 | MDA_LDL | Char | 4 | Malondialdehyde-Modified Low-Density Lipoprotein |
| 68 | SCFR | Char | 3 | Mast/stem cell growth factor receptor |
| 69 | MMP_2 | Char | 4 | Matrix Metalloproteinase-2 |
| 70 | MMP_3 | Char | 3 | Matrix Metalloproteinase-3 |
| 71 | MMP_9 | Char | 3 | Matrix Metalloproteinase-9 |
| 72 | MICA | Char | 3 | MHC class I chain-related protein A |
| 73 | MICROALBUMIN | Char | 5 | Microalbumin |
| 74 | MIDKINE | Char | 4 | Midkine |
| 75 | MCP_1 | Char | 3 | Monocyte Chemotactic Protein 1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | MCP_2 | Char | 4 | Monocyte Chemotactic Protein 2 |
| 77 | MCP_4 | Char | 4 | Monocyte Chemotactic Protein 4 |
| 78 | MIG | Char | 4 | Monokine Induced by Gamma Interferon |
| 79 | MPIF_1 | Char | 4 | Myeloid Progenitor Inhibitory Factor 1 |
| 80 | MYOGLOBIN | Char | 3 | Myoglobin |
| 81 | NTPROBNP | Char | 4 | N-terminal prohormone of brain natriuretic peptide |
| 82 | NGF_BETA | Char | 6 | Nerve Growth Factor beta |
| 83 | NR_CAM | Char | 4 | Neuronal Cell Adhesion Molecule |
| 84 | OPG | Char | 3 | Osteoprotegerin |
| 85 | TATI | Char | 3 | Pancreatic secretory trypsin inhibitor |
| 86 | PAI_1 | Char | 3 | Plasminogen Activator Inhibitor 1 |
| 87 | PECAM_1 | Char | 2 | Platelet endothelial cell adhesion molecule |
| 88 | PROINSULIN__INTACT | Char | 4 | Proinsulin, Intact |
| 89 | PROINSULIN__TOT | Char | 3 | Proinsulin, Total |
| 90 | PARC | Char | 3 | Pulmonary and Activation-Regulated Chemokine |
| 91 | SP_D | Char | 3 | Pulmonary surfactant-associated protein D |
| 92 | RAGE | Char | 4 | Receptor for advanced glycosylation end products |
| 93 | S100_B | Char | 5 | S100 calcium-binding protein B |
| 94 | SORTILIN | Char | 3 | Sortilin |
| 95 | SCF | Char | 4 | Stem Cell Factor |
| 96 | SOD_1 | Char | 2 | Superoxide Dismutase 1, soluble |
| 97 | RANTES | Char | 4 | T-Cell-Specific Protein RANTES |
| 98 | TM | Char | 3 | Thrombomodulin |
| 99 | TIMP_1 | Char | 3 | Tissue Inhibitor of Metalloproteinases 1 |
| 100 | TIMP_2 | Char | 2 | Tissue Inhibitor of Metalloproteinases 2 |
| 101 | TRAIL_R3 | Char | 3 | TNF-Related Apoptosis-Inducing Ligand Receptor 3 |
| 102 | TNF_ALPHA | Char | 3 | Tumor Necrosis Factor alpha |
| 103 | TNF_BETA | Char | 4 | Tumor Necrosis Factor beta |
| 104 | TNFR1 | Char | 4 | Tumor Necrosis Factor Receptor 1 |
| 105 | TNFR2 | Char | 3 | Tumor necrosis factor receptor 2 |
| 106 | VCAM_1 | Char | 3 | Vascular Cell Adhesion Molecule-1 |
| 107 | VEGF | Char | 4 | Vascular Endothelial Growth Factor |
| 108 | VDBP | Char | 3 | Vitamin D-Binding Protein |

Data Set Name: rbmp_ser_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | SAMPLETYPE | Char | 6 | Specimen type |
| 3 | REPNUM | Char | 6 | Replicate number |
| 4 | ADIP | Char | 3 | Adiponectin |
| 5 | AACT | Char | 4 | Alpha-1-Antichymotrypsin |
| 6 | AAT | Char | 4 | Alpha-1-Antitrypsin |
| 7 | A2MACRO | Char | 3 | Alpha-2-Macroglobulin |
| 8 | ANG_1 | Char | 2 | Angiopoietin-1 |
| 9 | ALP | Char | 2 | Antileukoproteinase (SLPI) |
| 10 | APOA_IV | Char | 3 | Apolipoprotein A-IV |
| 11 | AXL | Char | 4 | AXL Receptor Tyrosine Kinase |
| 12 | B2M | Char | 4 | Beta-2-Microglobulin |
| 13 | BDNF | Char | 2 | Brain-Derived Neurotrophic Factor |
| 14 | CRP | Char | 4 | C-reactive protein |
| 15 | E_CAD | Char | 4 | Cadherin-1 |
| 16 | T_CAD | Char | 3 | Cadherin-13 |
| 17 | CA_9 | Char | 5 | Carbonic anhydrase 9 |
| 18 | CEACAM1 | Char | 4 | Carcinoembryonic antigen-related cell adhesion molecule 1 |
| 19 | HCC_4 | Char | 3 | Chemokine CC-4 |
| 20 | CGA | Char | 5 | Chromogranin-A |
| 21 | C3 | Char | 4 | Complement C3 |
| 22 | CYSB | Char | 3 | Cystatin-B |
| 23 | DEC | Char | 4 | Decorin |
| 24 | ESELECT | Char | 3 | E-Selectin |
| 25 | EOTAX1 | Char | 3 | Eotaxin-1 |
| 26 | EOTAX2 | Char | 4 | Eotaxin-2 |
| 27 | FACTORVII | Char | 3 | Factor VII |
| 28 | FAS | Char | 3 | FASLG Receptor |
| 29 | FABP | Char | 3 | Fatty Acid-Binding Protein, heart |
| 30 | FRTN | Char | 4 | Ferritin |
| 31 | FIBRO | Char | 6 | Fibrinogen |
| 32 | GM_CSF | Char | 3 | Granulocyte-Macrophage Colony-Stimulating Factor |
| 33 | НАРТО | Char | 4 | Haptoglobin |
| 34 | HSP_60 | Char | 3 | Heat Shock Protein 60 |
| 35 | HGF | Char | 3 | Hepatocyte Growth Factor |
| 36 | IGA | Char | 4 | Immunoglobulin A |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | IGM | Char | 5 | Immunoglobulin M |
| 38 | ICAM_1 | Char | 3 | Intercellular Adhesion Molecule 1 |
| 39 | IFN_GAMMA | Char | 4 | Interferon gamma |
| 40 | IP_10 | Char | 3 | Interferon gamma Induced Protein 10 |
| 41 | IL_1ALPHA | Char | 7 | Interleukin-1 alpha |
| 42 | IL_1BETA | Char | 4 | Interleukin-1 beta |
| 43 | IL_1RA | Char | 4 | Interleukin-1 receptor antagonist |
| 44 | IL_2 | Char | 4 | Interleukin-2 |
| 45 | IL_2RECEPTOR_ALPHA | Char | 4 | Interleukin-2 receptor alpha |
| 46 | IL_3 | Char | 7 | Interleukin-3 |
| 47 | IL_4 | Char | 3 | Interleukin-4 |
| 48 | IL_5 | Char | 3 | Interleukin-5 |
| 49 | IL_6 | Char | 4 | Interleukin-6 |
| 50 | IL_6R | Char | 3 | Interleukin-6 receptor |
| 51 | IL_7 | Char | 3 | Interleukin-7 |
| 52 | IL_8 | Char | 3 | Interleukin-8 |
| 53 | IL_10 | Char | 4 | Interleukin-10 |
| 54 | IL_12P40 | Char | 5 | Interleukin-12 Subunit p40 |
| 55 | IL_12P70 | Char | 3 | Interleukin-12 Subunit p70 |
| 56 | IL_15 | Char | 5 | Interleukin-15 |
| 57 | IL_17 | Char | 4 | Interleukin-17 |
| 58 | IL_18 | Char | 4 | Interleukin-18 |
| 59 | IL_18BP | Char | 3 | Interleukin-18-binding protein |
| 60 | IL_23 | Char | 5 | Interleukin-23 |
| 61 | LTF | Char | 3 | Lactoferrin |
| 62 | LAPTGF_B1 | Char | 3 | Latency-Associated Peptide of Transforming Growth Factor beta 1 |
| 63 | LOX_1 | Char | 5 | Lectin-Like Oxidized LDL Receptor 1 |
| 64 | MIP_1ALPHA | Char | 3 | Macrophage Inflammatory Protein-1 alpha |
| 65 | MIP_1BETA | Char | 3 | Macrophage Inflammatory Protein-1 beta |
| 66 | MIP_3ALPHA | Char | 3 | Macrophage Inflammatory Protein-3 alpha |
| 67 | MDA_LDL | Char | 4 | Malondialdehyde-Modified Low-Density Lipoprotein |
| 68 | SCFR | Char | 3 | Mast/stem cell growth factor receptor |
| 69 | MMP_2 | Char | 3 | Matrix Metalloproteinase-2 |
| 70 | MMP_3 | Char | 3 | Matrix Metalloproteinase-3 |
| 71 | MMP_9 | Char | 3 | Matrix Metalloproteinase-9 |
| 72 | MICA | Char | 3 | MHC class I chain-related protein A |
| 73 | MICROALBUMIN | Char | 5 | Microalbumin |
| 74 | MIDKINE | Char | 4 | Midkine |
| 75 | MCP_1 | Char | 3 | Monocyte Chemotactic Protein 1 |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | MCP_2 | Char | 2 | Monocyte Chemotactic Protein 2 |
| 77 | MCP_4 | Char | 4 | Monocyte Chemotactic Protein 4 |
| 78 | MIG | Char | 4 | Monokine Induced by Gamma Interferon |
| 79 | MPIF_1 | Char | 4 | Myeloid Progenitor Inhibitory Factor 1 |
| 80 | MYOGLOBIN | Char | 3 | Myoglobin |
| 81 | NTPROBNP | Char | 4 | N-terminal prohormone of brain natriuretic peptide |
| 82 | NGF_BETA | Char | 6 | Nerve Growth Factor beta |
| 83 | NR_CAM | Char | 5 | Neuronal Cell Adhesion Molecule |
| 84 | OPG | Char | 3 | Osteoprotegerin |
| 85 | TATI | Char | 3 | Pancreatic secretory trypsin inhibitor |
| 86 | PAI_1 | Char | 3 | Plasminogen Activator Inhibitor 1 |
| 87 | PECAM_1 | Char | 2 | Platelet endothelial cell adhesion molecule |
| 88 | PROINSULIN__INTACT | Char | 4 | Proinsulin, Intact |
| 89 | PROINSULIN__TOT | Char | 3 | Proinsulin, Total |
| 90 | PARC | Char | 3 | Pulmonary and Activation-Regulated Chemokine |
| 91 | SP_D | Char | 3 | Pulmonary surfactant-associated protein D |
| 92 | RAGE | Char | 4 | Receptor for advanced glycosylation end products |
| 93 | S100_B | Char | 5 | S100 calcium-binding protein B |
| 94 | SORTILIN | Char | 3 | Sortilin |
| 95 | SCF | Char | 4 | Stem Cell Factor |
| 96 | SOD_1 | Char | 4 | Superoxide Dismutase 1, soluble |
| 97 | RANTES | Char | 3 | T-Cell-Specific Protein RANTES |
| 98 | TM | Char | 3 | Thrombomodulin |
| 99 | TIMP_1 | Char | 3 | Tissue Inhibitor of Metalloproteinases 1 |
| 100 | TIMP_2 | Char | 2 | Tissue Inhibitor of Metalloproteinases 2 |
| 101 | TRAIL_R3 | Char | 3 | TNF-Related Apoptosis-Inducing Ligand Receptor 3 |
| 102 | TNF_ALPHA | Char | 3 | Tumor Necrosis Factor alpha |
| 103 | TNF_BETA | Char | 4 | Tumor Necrosis Factor beta |
| 104 | TNFR1 | Char | 4 | Tumor Necrosis Factor Receptor 1 |
| 105 | TNFR2 | Char | 3 | Tumor necrosis factor receptor 2 |
| 106 | VCAM_1 | Char | 3 | Vascular Cell Adhesion Molecule-1 |
| 107 | VEGF | Char | 4 | Vascular Endothelial Growth Factor |
| 108 | VDBP | Char | 3 | Vitamin D-Binding Protein |

## Data Set Name: caf_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | CAF1 | Num | 8 | 1. Was the event: |
| 6 | CAF4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | CAF5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | CAF6 | Num | 8 | 6. Has the patient been diagnosed with a primary cancer? |
| 9 | CAF8 | Num | 8 | 8. Type of cancer |
| 10 | CAF8A | Char | 30 | 8a. Other, specify: |
| 11 | CAF9 | Char | 1 | 9. Tumor behavior: |
| 12 | CAF10 | Char | 1 | 10. Diagnostic confirmation status: |
| 13 | CAF11 | Char | 1 | 11. Laterality: |
| 14 | CAF12 | Char | 1 | 12. Summary stage: |
| 15 | CAF13 | Num | 8 | 13. Is lung cancer the primary diagnosed cancer: (If No, skip to Q17) |
| 16 | CAF14 | Num | 8 | 14. Site of the lung cancer |
| 17 | CAF15 | Char | 2 | 15. Type of lung cancer |
| 18 | CAF15A | Char | 30 | 15a. Other, specify: |
| 19 | CAF16A | Num | 8 | 16a. Surgery |
| 20 | CAF16B | Num | 8 | 16b. Chemotherapy |
| 21 | CAF16B1 | Num | 8 | 16b1. Neoadjuvant |
| 22 | CAF16B2 | Num | 8 | 16b2. Adjuvant |
| 23 | CAF16C | Num | 8 | 16c. Radiation |
| 24 | CAF16D | Num | 8 | 16d. Targeted drug treatment |
| 25 | CAF16D1 | Num | 8 | 16d1. Bevacizumab (Avastin) |
| 26 | CAF16D2 | Num | 8 | 16d2. Crizotinib (Xalkori) |
| 27 | CAF16D3 | Num | 8 | 16d3. Erlotinib (Tarceva) |
| 28 | CAF17A1 | Char | 1 | 17a1. Pack years: |
| 29 | CAF17B | Num | 8 | 17b. Current smoker: |
| 30 | CAF18 | Num | 8 | 18. Did patient receive a lung transplant? |
| 31 | CAF18A | Char | 1 | lung |
| 32 | VERSION | Char | 21 | Version |
| 33 | CAF0A_DAYs | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 34 | CAF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 35 | CAF2_DAYs | Num | 8 | 2. Date of admission: - Days from enrollment |
| 36 | CAF3_DAYS | Num | 8 | 3. Date of discharge: - Days from enrollment |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | CAF7_DAYS | Num | 8 | 7. Date of diagnosis: - Days from enrollment |

## Data Set Name: dcf_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | DCF1 | Char | 1 | 1. Was a death certificate obtained? |
| 6 | DCF3A | Char | 5 | 3a. Time of death |
| 7 | DCF3B | Char | 1 | 3b. AM/PM |
| 8 | DCF4 | Char | 1 | 4. Did the decedent die in a hospital? |
| 9 | DCF5 | Char | 1 | 5. Was the death classified as: |
| 10 | DCF6 | Char | 1 | 6. Was this a coroner's or medical examiner's case? |
| 11 | DCF7 | Char | 1 | 7. Was the name and address of the Coroner or medical examiner recorded? |
| 12 | DCF10 | Char | 1 | 10. Was an autopsy performed? |
| 13 | DCF11 | Char | 1 | 11. Was the underlying cause of death recorded using ICD9 or ICD10 codes? |
| 14 | DCF11A | Char | 5 | 11a. ICD-9 Code for UNDERLYING cause of death: |
| 15 | DCF11B | Char | 5 | 11b. ICD-10 Code for UNDERLYING cause of death: |
| 16 | DCF12 | Char | 1 | 12. Were the additional ICD codes recorded using ICD9 or ICD10 codes? |
| 17 | DCF12A | Char | 7 | 12a. ICD-9: |
| 18 | DCF12A1 | Char | 7 | 12a1. ICD-9: |
| 19 | DCF12A2 | Char | 7 | 12a2. ICD-9: |
| 20 | DCF12A3 | Char | 7 | 12a3. ICD-9: |
| 21 | DCF12A4 | Char | 7 | 12a4. ICD-9: |
| 22 | DCF12A5 | Char | 7 | 12a5. ICD-9: |
| 23 | DCF12A6 | Char | 7 | 12a6. ICD-9: |
| 24 | DCF12A7 | Char | 7 | 12a7. ICD-9: |
| 25 | DCF12A8 | Char | 7 | 12a8. ICD-9: |
| 26 | DCF12A9 | Char | 7 | 12a9. ICD-9: |
| 27 | DCF12B | Char | 7 | 12b. ICD-10: |
| 28 | DCF12B1 | Char | 7 | 12b1. ICD-10: |
| 29 | DCF12B2 | Char | 7 | 12b2. ICD-10: |
| 30 | DCF12B3 | Char | 7 | 12b3. ICD-10: |
| 31 | DCF12B4 | Char | 7 | 12b4. ICD-10: |
| 32 | DCF12B5 | Char | 7 | 12b5. ICD-10: |
| 33 | DCF12B6 | Char | 7 | 12b6. ICD-10: |
| 34 | DCF12B7 | Char | 7 | 12b7. ICD-10: |
| 35 | DCF12B8 | Char | 7 | 12b8. ICD-10: |
| 36 | DCF12B9 | Char | 7 | 12b9. ICD-10: |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | DCF13A | Char | 1 | 13a. Are there causes of death recorded on the death certificate? |
| 38 | DCF13B | Char | 2000 | 13b. Immediate cause |
| 39 | DCF13C | Char | 2000 | 13c. Due to or as a consequence of (1) |
| 40 | DCF13D | Char | 2000 | 13d. Due to or as a consequence of (2) |
| 41 | DCF13E | Char | 2000 | 13e. Due to or as a consequence of (3) |
| 42 | DCF14 | Char | 1 | 14. Are there other significant conditions recorded on the death certificate? |
| 43 | DCF15 | Char | 2000 | 15. Conditions |
| 44 | DCF16 | Char | 1 | 16. Interval between onset and death for immediate cause of death |
| 45 | VERSION | Char | 21 | Version |
| 46 | DCF0A_DAYS | Num | 8 | 0a. Form Date: - Days from enrollment |
| 47 | DCF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 48 | DCF2_DAYS | Num | 8 | 2. Date of death - Days from enrollment |

Data Set Name: derv_endpt_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | PNA | Num | 8 | Pneumonia (ERF4 AND ERF6=yes or HRA69=Yes) |
| 4 | PEX | Char | 60 | Exacerbation (ERF8, ERF9 or HRA68, HRA70) |
| 5 | PEX_PNA_COMBO | Num | 8 | N - COPD exacerbation criteria not met Or Exacerbation (ERF8, ERF9 or HRA68, HRA70) |

## Data Set Name: dmf_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | DMF1 | Num | 8 | 1. Was the event: |
| 6 | DMF4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | DMF5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | DMF6 | Char | 1 | 6. Type of Diabetes Mellitus diagnosed: |
| 9 | DMF7 | Num | 8 | 7. First measured weight available: |
| 10 | DMF7A | Num | 8 | 7a. 1= Lbs 2= Kgs: |
| 11 | DMF8 | Num | 8 | 8. Height: |
| 12 | DMF8A | Num | 8 | 8a. 1= Inches 2= Centimeters: |
| 13 | DMF9 | Num | 8 | 9. BMI: |
| 14 | DMF10 | Char | 1 | 10. Most recent A1c test result: (Mark only one; may use pre-hospitalization value recorded by a physician) |
| 15 | DMF11 | Char | 1 | 11. Most recent fasting glucose test result: (Mark only one; may use pre-hospitalization value recorded by a physician) |
| 16 | DMF12A | Num | 8 | 12a. Pancreatitis |
| 17 | DMF12B | Num | 8 | 12b. Pancreatic carcinoma |
| 18 | DMF12C | Num | 8 | 12c. Pancreatectomy |
| 19 | DMF12D | Num | 8 | 12d. Endocrinopathy (Cushing's disease, pheochromocytoma) |
| 20 | DMF12E | Num | 8 | 12e. None/Not Recorded |
| 21 | DMF12F | Num | 8 | 12f. Other |
| 22 | DMF12F1 | Char | 30 | 12f1. Other, specify: |
| 23 | DMF13A | Num | 8 | 13a. Diabetic nephropathy |
| 24 | DMF13A1 | Num | 8 | 13a1. Diagnosis of renal failure of any severity |
| 25 | DMF13A2 | Num | 8 | 13a2. Patient is on dialysis |
| 26 | DMF13B | Num | 8 | 13b. Peripheral Neuropathy |
| 27 | DMF13B1 | Num | 8 | 13b1. Non-healing ulcers |
| 28 | DMF13B2 | Num | 8 | 13b2. Lower extremity amputation (toe, forefoot, heel, below the knee) |
| 29 | DMF13B3 | Num | 8 | 13b3. Charcot joint |
| 30 | DMF13C | Num | 8 | 13c. Eye complications |
| 31 | DMF13C1 | Num | 8 | 13c1. Retinopathy |
| 32 | DMF13C2 | Num | 8 | 13c2. Glaucoma |
| 33 | DMF13C3 | Num | 8 | 13c3. Cataracts |
| 34 | DMF13C4 | Num | 8 | 13c4. Macular edema |
| 35 | DMF13D | Num | 8 | 13d. Gastrointestinal complications |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 36 | DMF13D1 | Num | 8 | 13d1. Gastroparesis |
| 37 | DMF13D2 | Num | 8 | 13d2. Diabetic diarrhea |
| 38 | DMF13D3 | Num | 8 | 13d3. Candidiasis |
| 39 | DMF13E | Num | 8 | 13e. Cardiovascular / Atherosclerotic complications |
| 40 | DMF13E1 | Num | 8 | 13e1. Cardiovascular disease |
| 41 | DMF13E2 | Num | 8 | 13e2. Peripheral vascular disease |
| 42 | DMF13E3 | Num | 8 | 13e3. Cerebrovascular disease |
| 43 | DMF14A1 | Num | 8 | Oral Sufonylureas - Admission |
| 44 | DMF14A2 | Num | 8 | Oral Sufonylureas - Discharge |
| 45 | DMF14B1 | Num | 8 | Oral Glinides - Admission |
| 46 | DMF14B2 | Num | 8 | Oral Glinides - Discharge |
| 47 | DMF14C1 | Num | 8 | Oral DDP-4 inhibitors - Admission |
| 48 | DMF14C2 | Num | 8 | Oral DDP-4 inhibitors - Discharge |
| 49 | DMF14D1 | Num | 8 | Oral GPL analogs - Admission |
| 50 | DMF14D2 | Num | 8 | Oral GPL analogs - Discharge |
| 51 | DMF14E1 | Num | 8 | Oral Metformin - Admission |
| 52 | DMF14E2 | Num | 8 | Oral Metformin - Discharge |
| 53 | DMF14F1 | Num | 8 | Injectable Insulin - Admission |
| 54 | DMF14F2 | Num | 8 | Injectable Insulin - Discharge |
| 55 | VERSION | Char | 21 | Version |
| 56 | DMF0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 57 | DMF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 58 | DMF2_DAYS | Num | 8 | 2. Date of admission: - Days from enrollment |
| 59 | DMF3_DAYS | Num | 8 | 3. Date of discharge: - Days from enrollment |

## Data Set Name: erf_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | ERF1 | Num | 8 | 1. Type of Review: |
| 6 | ERF2A | Num | 8 | 2a. Dyspnea |
| 7 | ERF2B | Num | 8 | 2b. Sputum purulence |
| 8 | ERF2C | Num | 8 | 2c. Sputum volume |
| 9 | ERF3A | Num | 8 | 3a. Nasal discharge |
| 10 | ERF3B | Num | 8 | 3b. Wheeze |
| 11 | ERF3C | Num | 8 | 3c. Sore throat |
| 12 | ERF3D | Num | 8 | 3d. Cough |
| 13 | ERF3E | Num | Num | 8 |
| 32 | Num | 8 | 8 |  |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | ERF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |

## Data Set Name: hff_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | HFF1 | Num | 8 | 1. Was the event: |
| 6 | HFF4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | HFF5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | HFF6 | Num | 8 | 6. Is a hip fracture confirmed? (if No, skip to Q11) |
| 9 | HFF7 | Char | 1 | 7. What was the fracture site? (Mark the one that applies best) |
| 10 | HFF8 | Char | 1 | 8. Side of the hip fracture? |
| 11 | HFF9A | Num | 8 | 9a. A written radiology report read by a radiologist which identifies the presence of a new, acute, or healing fracture of the proximal femur also documented on the discharge summary. |
| 12 | HFF9B | Num | 8 | 9b. A radiologist's report confirming a proximal femur fracture, but the hospital discharge summary does not confirm the diagnosis or is equivocal or missing. |
| 13 | HFF9C | Num | 8 | 9c. All of the following: |
| 14 | HFF9D | Num | 8 | 9d. A hip fracture diagnosis is documented in the discharge summary or other written report but no radiology report is available or the radiograph is not read by a radiologist. |
| 15 | HFF10 | Num | 8 | 10. Was the hip fracture pathologic: a fracture resulting from bone tumors or cysts, Paget's disease, bone or joint prostheses, or surgical manipulation? Osteoporotic fracture is not considered a pathologic fracture. |
| 16 | HFF11 | Char | 1 | 11. Diagnosis of low bone mass/bone loss in this patient? |
| 17 | HFF12 | Char | 1 | 12. Documentation of DEXA scan testing results? |
| 18 | HFF13A1 | Num | 8 | Oral bisphosphonate-Admit |
| 19 | HFF13A2 | Num | 8 | Oral bisphosphonate-Discharge |
| 20 | HFF13A3 | Num | 8 | Oral bisphosphonate-NR |
| 21 | HFF13B1 | Num | 8 | IV bisphosphonate-Admit |
| 22 | HFF13B2 | Num | 8 | IV bisphosphonate-Discharge |
| 23 | HFF13B3 | Num | 8 | IV bisphosphonate-NR |
| 24 | HFF13C1 | Num | 8 | Denosumab-Admit |
| 25 | HFF13C2 | Num | 8 | Denosumab-Discharge |
| 26 | HFF13C3 | Num | 8 | Denosumab-NR |
| 27 | HFF13D1 | Num | 8 | Raloxifene-Admit |
| 28 | HFF13D2 | Num | 8 | Raloxifene-Discharge |
| 29 | HFF13D3 | Num | 8 | Raloxifene-NR |
| 30 | HFF13E1 | Num | 8 | Other-Admit |
| 31 | HFF13E2 | Num | 8 | Other-Discharge |
| 32 | HFF13E3 | Num | 8 | Other-NR |
| 33 | HFF13F1 | Num | 8 | Calcium supplementation-Admit |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 34 | HFF13F2 | Num | 8 | Calcium supplementation-Discharge |
| 35 | HFF13F3 | Num | 8 | Calcium supplementation-NR |
| 36 | HFF13G1 | Num | 8 | Vitamin D supplementation-Admit |
| 37 | HFF13G2 | Num | 8 | Vitamin D supplementation-Discharge |
| 38 | HFF13G3 | Num | 8 | Vitamin D supplementation-NR |
| 39 | HFF14 | Num | 8 | 14. Did bone loss (osteopenia/osteoporosis) contribute to the confirmed hip fracture? |
| 40 | VERSION | Char | 21 | Version |
| 41 | HFF0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 42 | HFF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 43 | HFF2_DAYS | Num | 8 | 2. Date of admission: - Days from enrollment |
| 44 | HFF3_DAYS | Num | 8 | 3. Date of discharge: - Days from enrollment |

## Data Set Name: hra_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | HRA1 | Char | 1 | 1. Was the event (choose one)? |
| 6 | HRA2 | Char | 1 | 2. Was the hospital stay less than 24 hours? |
| 7 | HRA5 | Char | 9 | 5. What was the primary admitting diagnosis code? |
| 8 | HRA6 | Char | 9 | 6. What was the primary discharge diagnosis code? |
| 9 | HRA7 | Char | 1 | 7. Did an emergency medical service unit transport patient to this hospital? |
| 10 | HRA8 | Char | 1 | 8. Was the patient transferred to this hospital from another hospital? |
| 11 | HRA9 | Char | 1 | 9. Was the patient's code status ever "no-code" or "DNR" (do not resuscitate)? |
| 12 | HRA10 | Char | 1 | 10. Was the patient alive at discharge? |
| 13 | HRA11 | Char | 1 | 11. New onset or increase in dyspnea? |
| 14 | HRA11A | Num | 8 | 11a. Duration of new/increased dyspnea |
| 15 | HRA12 | Char | 1 | 12. New onset or increase in sputum production or volume? |
| 16 | HRA12A | Num | 8 | 12a. Duration of new/increased sputum production or volume |
| 17 | HRA13 | Char | 1 | 13. New onset or increase in sputum purulence? |
| 18 | HRA13A | Num | 8 | 13a. Duration of new/increased sputum purulence |
| 19 | HRA14 | Char | 1 | 14. New onset or increase in wheezing? |
| 20 | HRA14A | Num | 8 | 14a. Duration of new/increased wheezing |
| 21 | HRA15 | Char | 1 | 15. New onset or increase in cough? |
| 22 | HRA15A | Num | 8 | 15a. Duration of new/increased cough |
| 23 | HRA16 | Char | 1 | 16. New onset or increase in sore throat? |
| 24 | HRA16A | Num | 8 | 16a. Duration of new/increased sore throat |
| 25 | HRA17 | Char | 1 | 17. New onset or increase in fever? |
| 26 | HRA17A | Num | 8 | 17a. Duration of new/increased fever |
| 27 | HRA18 | Char | 1 | 18. New onset or increase in use of rescue bronchodilator? |
| 28 | HRA18A | Num | 8 | 18a. Duration of new/increased bronchodilator |
| 29 | HRA19 | Char | 1 | 19. New onset or increase in chest tightness or chest pain? |
| 30 | HRA19A | Num | 8 | 19a. Duration of new/increased chest tightness or pain |
| 31 | HRA20 | Char | 1 | 20. New onset or increase in leg edema (unilateral or bilateral)? |
| 32 | HRA20A | Num | 8 | 20a. Duration of new/increased leg edema |
| 33 | HRA21 | Char | 1 | 21. Was there evidence in the doctor's notes that the reason for this event may be an exacerbation of COPD, chronic bronchitis, or emphysema? |
| 34 | HRA22 | Char | 1 | 22. Was there evidence in the doctor's notes that the reason for this event may be an exacerbation of asthma? |
| 35 | HRA23 | Char | 1 | 23. Was there evidence in the doctor's notes that the reason for this event may be pneumonia? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 36 | HRA24 | Char | 1 | 24. Did the patient have new onset or progressive signs/symptoms of this exacerbation after presentation in ED or hospital? |
| 37 | HRA25A | Char | 1 | 25a. Asthma |
| 38 | HRA25B | Char | 1 | 25b. Chronic Bronchitis |
| 39 | HRA25C | Char | 1 | 25c. Emphysema |
| 40 | HRA25D | Char | 1 | 25d. Chronic Obstructive Pulmonary Disease (COPD) |
| 41 | HRA25E | Char | 1 | 25e. Pulmonary fibrosis |
| 42 | HRA25F | Char | 1 | 25f. Sarcoidosis |
| 43 | HRA25G | Char | 1 | 25g. Lung Cancer |
| 44 | HRA25H | Char | 1 | 25h. Lung resection or lobectomy |
| 45 | HRA25I | Char | 1 | 25i. Lung transplant |
| 46 | HRA25J | Char | 1 | 25j. Home oxygen (do not include CPAP) |
| 47 | HRA25K | Char | 1 | 25k. Pulmonary embolus |
| 48 | HRA25L | Char | 1 | 251. Pulmonary hypertension |
| 49 | HRA25M | Char | 1 | 25m. Cor pulmonale |
| 50 | HRA25N | Char | 1 | 25n. Obstructive Sleep Apnea (OSA) |
| 51 | HRA25O | Char | 1 | 250. Coronary Artery Disease |
| 52 | HRA25P | Char | 1 | 25p. Heart failure |
| 53 | HRA25Q | Char | 1 | 25q. Atrial fibrillation/atrial flutter |
| 54 | HRA25R | Char | 1 | 25r. Diabetes |
| 55 | HRA25S | Char | 1 | 25s. Pulmonary tuberculosis |
| 56 | HRA25T | Char | 1 | 25t. Bronchiectasis |
| 57 | HRA26A | Num | 8 | 26a. Pre-bronchodilator |
| 58 | HRA26B | Num | 8 | 26b. Post-bronchodilator |
| 59 | HRA27A | Num | 8 | 27a. Pre-bronchodilator |
| 60 | HRA27A1 | Char | 1 | 27a1. units |
| 61 | HRA27B | Num | 8 | 27b. Post-bronchodilator |
| 62 | HRA27B1 | Char | 1 | 27b1. units |
| 63 | HRA28A | Char | 1 | 28a. Upper Respiratory Infection (sinusitis, nasopharyngitis, pharyngitis, epiglotitis, laryngitis, laryngotracheitis, acute bronchitis) |
| 64 | HRA28B | Char | 1 | 28b. Pneumonia |
| 65 | HRA28C | Char | 1 | 28c. Pulmonary embolus |
| 66 | HRA28D | Char | 1 | 28d. Myocardial infarction |
| 67 | HRA28E | Char | 1 | 28e. Heart failure exacerbation |
| 68 | HRA28F | Char | 1 | 28f. Atrial fibrillation/atrial flutter |
| 69 | HRA28G | Char | 1 | 28g. Supraventricular Tachycardia (SVT) or multifocal atrial tachycardia (MAT) |
| 70 | HRA28H | Char | 1 | 28h. Cardiac Surgery-- CABG or Valvular Surgery |
| 71 | HRA28I | Char | 1 | 28i. Non-cardiac surgery |
| 72 | HRA28J | Char | 1 | 28j. Acute respiratory failure with no known cause (NOS) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 73 | HRA28K | Char | 1 | 28k. Mechanical ventilation for respiratory failure only |
| 74 | HRA28K1 | Char | 1 | 28 k 1 . Was the mechanical ventilation: |
| 75 | HRA28L | Char | 1 | 281. Lung transplantation |
| 76 | HRA28L1 | Char | 1 | 2811. Was the lung transplant |
| 77 | HRA29A | Num | 8 | 29a. Heart rate |
| 78 | HRA29B | Num | 8 | 29b. Respiration rate |
| 79 | HRA29C | Num | 8 | 29c. Oxygen Saturation (SpO2/pulse oximetry) |
| 80 | HRA29C1 | Char | 1 | 29c1. Oxygen Sats on room air |
| 81 | HRA29C2 | Char | 5 | 29c2. If not on room air, what level oxygen? |
| 82 | HRA29C2A | Char | 1 | 29c2a. L or \% |
| 83 | HRA29D | Num | 8 | 29d. Weight? |
| 84 | HRA29D1 | Char | 1 | 29d1. Lbs or Kg |
| 85 | HRA30A | Char | 1 | 30a. Use of accessory muscles |
| 86 | HRA30B | Char | 1 | 30b. Cyanosis |
| 87 | HRA30C | Char | 1 | 30c. Clubbing |
| 88 | HRA30D | Char | 1 | 30d. Jugular venous distention (JVD) or distended neck veins |
| 89 | HRA30E | Char | 1 | 30e. Crackles/rales |
| 90 | HRA30F | Char | 1 | 30f. Wheezing or rhonchi |
| 91 | HRA30G | Char | 1 | 30g. Decreased unilateral breath sounds |
| 92 | HRA30H | Char | 1 | 30h. Decreased bilateral breath sounds |
| 93 | HRA30I | Char | 1 | 30i. Prolonged expiratory time |
| 94 | HRA30J | Char | 1 | 30j. Egophony |
| 95 | HRA30K | Char | 1 | 30k. Lower extremity edema (unilateral or bilateral) |
| 96 | HRA31 | Char | 1 | 31. Was a chest X-ray performed during this event? |
| 97 | HRA32A | Char | 1 | 32a. Hyperinflation |
| 98 | HRA32B | Char | 1 | 32b. Flattened Diaphragms |
| 99 | HRA32C | Char | 1 | 32c. Consolidation or infiltrate |
| 100 | HRA32D | Char | 1 | 32d. Scarring |
| 101 | HRA32E | Char | 1 | 32e. Nodule(s) greater than 8 mm |
| 102 | HRA32F | Char | 1 | 32f. Mass(es) greater than 3 cm |
| 103 | HRA32G | Char | 1 | 32g. Pulmonary edema, pulmonary vascular congestion (alveolar, interstitial) |
| 104 | HRA32H | Char | 1 | 32h. Bilateral pleural effusion |
| 105 | HRA32I | Char | 1 | 32i. Unilateral pleural effusion |
| 106 | HRA32J | Char | 1 | 32j. Emphysema |
| 107 | HRA32K | Char | 1 | 32k. Cardiomegaly |
| 108 | HRA33 | Char | 1 | 33. Was a chest/lung CT scan or CT angiogram (CTA) performed during this event? |
| 109 | HRA34A | Char | 1 | 34a. Emphysema |
| 110 | HRA34B | Char | 1 | 34b. Nodule(s) greater than 8mm |
| 111 | HRA34C | Char | 1 | 34c. Mass(es) greater than 3cm |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 112 | HRA34D | Char | 1 | 34d. Lymphadenopathy |
| 113 | HRA34E | Char | 1 | 34e. Ground glass changes |
| 114 | HRA34F | Char | 1 | 34f. Pneumonia |
| 115 | HRA34G | Char | 1 | 34g. Fibrosis or honeycombing |
| 116 | HRA34H | Char | 1 | 34h. Filling defect-vascular (PE) |
| 117 | HRA34I | Char | 1 | 34i. Filling defect-- mucus plug |
| 118 | HRA34J | Char | 1 | 34j. Cysts or blebs |
| 119 | HRA34K | Char | 1 | 34k. Atelectasis |
| 120 | HRA34L | Char | 1 | 341. Calcifications |
| 121 | HRA34M | Char | 1 | 34m. Pulmonary embolus |
| 122 | HRA34N | Char | 1 | 34n. Enlarged pulmonary artery |
| 123 | HRA34O | Char | 1 | 34o. Bronchiectasis |
| 124 | HRA34P | Char | 1 | 34p. Pulmonary edema or pulmonary vascular congestion |
| 125 | HRA34Q | Char | 1 | 34q. Cardiomegaly |
| 126 | HRA34R | Char | 1 | 34r. Bilateral Pleural Effusion |
| 127 | HRA34S | Char | 1 | 34s. Unilateral pleural effusion |
| 128 | HRA34T | Char | 1 | 34t. Airway wall thickening |
| 129 | HRA35 | Char | 1 | 35. Was spirometry (lung function testing) performed during this hospitalization? |
| 130 | HRA35A1 | Num | 8 | 35a1. FEV1 |
| 131 | HRA35A2 | Num | 8 | 35a2. FEV1 Percent Predicted |
| 132 | HRA35B1 | Num | 8 | 35b1. FVC |
| 133 | HRA35B2 | Num | 8 | 35b2. FVC Percent Predicted |
| 134 | HRA35C1 | Num | 8 | 35c1. FEV1/FVC ratio |
| 135 | HRA35C2 | Char | 1 | 35c2. units |
| 136 | HRA36 | Char | 1 | 36. Was post-bronchodilator spirometry measured? |
| 137 | HRA36A1 | Num | 8 | 36a1. FEV1 |
| 138 | HRA36A2 | Num | 8 | 36a2. FEV1 Percent Predicted |
| 139 | HRA36B1 | Num | 8 | 36b1. FVC |
| 140 | HRA36B2 | Num | 8 | 36b2. FVC Percent Predicted |
| 141 | HRA36C1 | Num | 8 | 36c1. FEV1/FVC ratio |
| 142 | HRA36C2 | Char | 1 | 36c2. units |
| 143 | HRA37 | Char | 1 | 37. Was peak expiratory flow rate (PEFR or PEF) obtained at the time of event? |
| 144 | HRA37B | Char | 3 | 37b. First PEF recording |
| 145 | HRA37C | Char | 3 | 37c. Worst or lowest PEF recording (anytime during hospitalization) |
| 146 | HRA38 | Char | 1 | 38. Was peak expiratory flow rate (PEFR or PEF) obtained at discharge? |
| 147 | HRA38B | Char | 3 | 38b. Last PEF recording |
| 148 | HRA39 | Char | 1 | 39. Was a ventilation perfusion scan (VQ Scan) done? |
| 149 | HRA39A | Char | 1 | 39a. Ventilation perfusion scan results |
| 150 | HRA40 | Char | 1 | 40. Was an echocardiogram (TTE or TEE) performed? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 151 | HRA40A | Char | 3 | 40a. Ejection fraction |
| 152 | HRA40B | Char | 6 | 40b. RVSP (right ventricular systolic pressure) |
| 153 | HRA40C | Char | 1 | 40c. Right Ventricular Hypertrophy |
| 154 | HRA40D | Char | 1 | 40d. Impaired RV systolic function |
| 155 | HRA40E | Char | 1 | 40e. Pulmonary Hypertenstion |
| 156 | HRA40F | Char | 1 | 40f. Tricuspid Regurgitation |
| 157 | HRA40G | Char | 1 | 40g. Diastolic dysfunction |
| 158 | HRA41 | Num | 8 | 41. White Blood Cell Count (highest) |
| 159 | HRA42 | Num | 8 | 42. Hemoglobin (g/dL) |
| 160 | HRA43 | Num | 8 | 43. Hematocrit (\%) |
| 161 | HRA44 | Num | 8 | 44. Sodium (mEq/L) |
| 162 | HRA45 | Num | 8 | 45. Serum creatinine (mg/dL) |
| 163 | HRA46 | Num | 8 | 46. BUN (mg/dL) |
| 164 | HRA47 | Num | 8 | 47. Bicarbonate (total CO2) |
| 165 | HRA48 | Num | 8 | 48. BNP (pg/mL) |
| 166 | HRA48A | Num | 8 | BNP upper limit nromal |
| 167 | HRA49 | Num | 8 | 49. ProBNP (pg/mL) |
| 168 | HRA49A | Num | 8 | ProBNP upper limit normal |
| 169 | HRA50 | Char | 1 | 50. Were Arterial Blood Gases (ABGs) obtained? |
| 170 | HRA50A1 | Num | 8 | 50a1. pH |
| 171 | HRA50A2 | Num | 8 | 50a2. PaCO2 |
| 172 | HRA50A3 | Num | 8 | 50a3. PaO2 |
| 173 | HRA50A4 | Num | 8 | 50a4. O2 Saturation |
| 174 | HRA50B1 | Num | 8 | 50b1. pH |
| 175 | HRA50B2 | Num | 8 | 50b2. PaCO2 |
| 176 | HRA50B3 | Num | 8 | 50b3. PaO2 |
| 177 | HRA50B4 | Num | 8 | 50b4. O2 Saturation |
| 178 | HRA50C | Char | 1 | 50c. Blood gas on room air? |
| 179 | HRA50C1 | Num | 8 | 50c1. If not on room air, what level oxygen? |
| 180 | HRA50C1A | Char | 1 | 50c1a. L or \% |
| 181 | HRA51 | Char | 1 | 51. Was a sputum culture done? |
| 182 | HRA51A | Char | 1 | 51a. Culture Results |
| 183 | HRA51B1 | Char | 1 | 51b1. Haemophilus Influenzae |
| 184 | HRA51B2 | Char | 1 | 51b2. Moraxella Catarrhalis |
| 185 | HRA51B3 | Char | 1 | 51b3. Streptococcus pneumoniae |
| 186 | HRA51B4 | Char | 1 | 51b4. Methicillin-resistant Staphylococcus Aureus (MRSA) |
| 187 | HRA51B5 | Char | 1 | 51b5. Staphylococcus aureus (not MRSA) |
| 188 | HRA51B6 | Char | 1 | 51b6. Mycoplasma pneumoniae |
| 189 | HRA51B7 | Char | 1 | 51b7. Pseudomonas Aureginosa |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 190 | HRA51B8 | Char | 1 | 51b8. Chlamydophila (or Chlamydia) pneumoniae |
| 191 | HRA51B9 | Char | 1 | 51b9. Oropharyngeal flora |
| 192 | HRA51B10 | Char | 1 | 51b10. Klebsiella pneumoniae |
| 193 | HRA51B11 | Char | 1 | 51b11. Other |
| 194 | HRA51B11A | Char | 30 | 51b11a. Specify |
| 195 | HRA52 | Char | 1 | 52. Was a bronchoscopy culture done? |
| 196 | HRA52A | Char | 1 | 52a. Culture Results |
| 197 | HRA52B1 | Char | 1 | 52b1. Haemophilus Influenzae |
| 198 | HRA52B2 | Char | 1 | 52b2. Moraxella Catarrhalis |
| 199 | HRA52B3 | Char | 1 | 52b3. Streptococcus pneumoniae |
| 200 | HRA52B4 | Char | 1 | 52b4. Methicillin-resistant Staphylococcus Aureus (MRSA) |
| 201 | HRA52B5 | Char | 1 | 52b5. Staphylococcus aureus (not MRSA) |
| 202 | HRA52B6 | Char | 1 | 52b6. Mycoplasma pneumoniae |
| 203 | HRA52B7 | Char | 1 | 52b7. Pseudomonas Aureginosa |
| 204 | HRA52B8 | Char | 1 | 52b8. Chlamydophila (or Chlamydia) pneumoniae |
| 205 | HRA52B9 | Char | 1 | 52b9. Oropharyngeal flora |
| 206 | HRA52B10 | Char | 1 | 52b10. Klebsiella pneumoniae |
| 207 | HRA52B11 | Char | 1 | 52b11. Other |
| 208 | HRA52B11A | Char | 30 | 52b11a. Specify |
| 209 | HRA53 | Char | 1 | 53. Was a blood culture done? |
| 210 | HRA53A | Char | 1 | 53a. Culture Results |
| 211 | HRA53B1 | Char | 1 | 53b1. Haemophilus Influenzae |
| 212 | HRA53B2 | Char | 1 | 53b2. Moraxella Catarrhalis |
| 213 | HRA53B3 | Char | 1 | 53b3. Streptococcus pneumoniae |
| 214 | HRA53B4 | Char | 1 | 53b4. Methicillin-resistant Staphylococcus Aureus (MRSA) |
| 215 | HRA53B5 | Char | 1 | 53b5. Staphylococcus aureus (not MRSA) |
| 216 | HRA53B6 | Char | 1 | 53b6. Other |
| 217 | HRA53B6A | Char | 30 | 53b6a. Specify |
| 218 | HRA54 | Char | 1 | 54. Influenza swab |
| 219 | HRA55 | Char | 1 | 55. CPAP or BiPap (non-invasive mechanical ventilation) |
| 220 | HRA56 | Char | 1 | 56. Invasive Mechanical Ventilation |
| 221 | HRA57 | Char | 1 | 57. Inhaled short-acting beta-agonists (ie,albuterol, xopenex) |
| 222 | HRA58 | Char | 1 | 58. Inhaled short-acting anticholinergics (ie, atrovent, ipratropium) |
| 223 | HRA59 | Char | 1 | 59. Inhaled long-acting anticholinergics (ie, spiriva, tudorza pressair) |
| 224 | HRA60 | Char | 1 | 60. Inhaled long-acting beta-agonists (ie, serevent) |
| 225 | HRA61 | Char | 1 | 61. Inhaled Corticosteroid for respiratory event |
| 226 | HRA62 | Char | 1 | 62. Oxygen (continuous or prn) |
| 227 | HRA63 | Char | 1 | 63. Antibiotics for respiratory event (IV or PO) |
| 228 | HRA64 | Char | 1 | 64. Systemic Corticosteroid for respiratory event (IV or PO) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 229 | HRA65 | Char | 1 | 65. IV Lasix or Furosemide |
| 230 | HRA66 | Char | 1 | 66. Leukotriene antagonist (ie. singulair, accolate) |
| 231 | HRA67 | Char | 1 | 67. Home oxygen |
| 232 | HRA68 | Char | 1 | 68. Did this hospitalization meet the SPIROMICS criteria for an exacerbation? |
| 233 | HRA69 | Char | 1 | 69. Did this hospitalization meet the SPIROMICS criteria for infiltrate pneumonia? |
| 234 | HRA70 | Char | 1 | 70. Do you agree with the SPIROMICS event classification? |
| 235 | HRA71 | Char | 2000 | 71. If no, explain |
| 236 | HRA72 | Char | 1 | 72. Should this event be reviewed by the Mortality and Morbidity Committee? |
| 237 | HRA73A | Char | 1 | 73a. MI / Coronary Artery Disease |
| 238 | HRA73B | Char | 1 | 73b. Venous Thrombosis Disease / Stroke |
| 239 | HRA73C | Char | 1 | 73c. Cancer |
| 240 | HRA73D | Char | 1 | 73d. Hip Fracture / Osteoporosis |
| 241 | HRA73E | Char | 1 | 73e. Diabetes |
| 242 | HRA20B | Char | 1 | 20b. New onset or increase in nasal discharge? |
| 243 | HRA20B1 | Num | 8 | 20b1. Duration of new or increased nasal discharge |
| 244 | VERSION | Char | 21 | Version |
| 245 | HRA0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 246 | HRA0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 247 | HRA3_DAYS | Num | 8 | 3. Date of arrival - Days from enrollment |
| 248 | HRA3A_DAYS | Num | 8 | 3a. Date of admission - Days from enrollment |
| 249 | HRA4_DAYS | Num | 8 | 4. Date of discharge - Days from enrollment |
| 250 | HRA37A_DAYS | Num | 8 | 37a. Date of first PEF(R) taken at time of event: - Days from enrollment |
| 251 | HRA38A_DAYS | Num | 8 | 38a. Date of last PEF(R) taken at discharge: - Days from enrollment |

## Data Set Name: ifi_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | IFI0F | Num | 8 | Of. Age at Death |
| 6 | IFIOI | Char | 1 | 0i. Informant Interview Attempt for the: |
| 7 | IFIOJ | Char | 1 | 0 j . Is now a good time to talk? |
| 8 | IFIOJ1 | Char | 1 | 0j1. No answer |
| 9 | IFIOJ2 | Char | 40 | 0 j 2 . When would be convenient to call back? |
| 10 | IFI1 | Char | 1 | 1. Before we get started could you please tell me what was your relationship with (insert name of decedent)? (Respondent was deceased's...) |
| 11 | IFI1A | Char | 40 | 1a. Specify relationship of other |
| 12 | IFI3 | Char | 1 | 3. How long was it between the time (decedent's name) was last known to be alive and the time (he/she) was found dead? |
| 13 | IFI4A | Char | 1 | 4a. Self |
| 14 | IFI4B | Char | 1 | 4b. Health care person(s) |
| 15 | IFI4C | Char | 1 | 4c. Other person(s) |
| 16 | IFI5 | Char | 1 | 5. When was the last time you saw (decedent's name) prior to his/her death |
| 17 | IFI6 | Char | 1 | 6. Was (he/she) hospitalized within the four weeks prior to death? |
| 18 | IFI7A | Char | 1 | 7a. Unknown |
| 19 | IFI7B | Char | 1 | 7b. Respiratory |
| 20 | IFI7B1 | Char | 1 | 7b1. Emphysema, Chronic Bronchitis, or Chronic Obstructive Pulmonary Disease (COPD) |
| 21 | IFI7B2 | Char | 1 | 7b2. Pneumonia |
| 22 | IFI7B3 | Char | 1 | 7b3. Other respiratory cause |
| 23 | IFI7C | Char | 1 | 7c. Cardiac |
| 24 | IFI7C1 | Char | 1 | 7c1. Heart Attack |
| 25 | IFI7C2 | Char | 1 | 7c2. Heart Failure |
| 26 | IFI7C3 | Char | 1 | 7c3. Other heart problem |
| 27 | IFI7C3A | Char | 40 | 7c3a. Specify |
| 28 | IFI7D | Char | 1 | 7d. Cancer |
| 29 | IFI7D1 | Char | 1 | 7d1. Lung |
| 30 | IFI7D2 | Char | 1 | 7d2. Other cancer |
| 31 | IFI7D2A | Char | 40 | 7d2a. Specify |
| 32 | IFI7E | Char | 1 | 7e. Other condition |
| 33 | IFI7E1 | Char | 40 | 7e1. Specify |
| 34 | IFI10 | Char | 1 | 10. Was (insert decedent's name) seen by a doctor any other time in the last four weeks prior to death? |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 35 | IFI12 | Char | 1 | 12. Did (he/she) experience an increase in shortness of breath? |
| 36 | IFI13 | Char | 1 | 13. Did (he/she) experience increased coughing? |
| 37 | IFI14 | Char | 1 | 14. Did (he/she) experience increased mucus or sputum production? |
| 38 | IFI15 | Char | 1 | 15. Was a physician, ambulance, or other emergency medical team called? |
| 39 | IFI15A | Char | 1 | 15a. How long was it from the time the last episode of symptoms started to the time that medical |
| assistance was called for? |  |  |  |  |

## Data Set Name: mif_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | MIF1 | Num | 8 | 1. Was the event: |
| 6 | MIF4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | MIF5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | MIF6 | Num | 8 | 6. Did an emergency medical service unit transport the patient to this hospital? |
| 9 | MIF7 | Num | 8 | 7. Was the patient transferred to this hospital from another hospital? |
| 10 | MIF8 | Num | 8 | 8. Was the patient's code status ever "no-code" or "DNR" (do not resuscitate)? |
| 11 | MIF9 | Num | 8 | 9. Was the patient alive at discharge? |
| 12 | MIF9A | Num | 8 | 9a. Was the patient dead on arrival? |
| 13 | MIF9B | Num | 8 | 9b. Did the patient die in the Emergency Department? |
| 14 | MIF9C | Num | 8 | 9c. Was an autopsy performed? |
| 15 | MIF10 | Num | 8 | 10. Did the onset of the acute episode occur prior to admission? |
| 16 | MIF10A | Num | 8 | 10a. If Yes, estimate the time from onset of symptoms of acute condition to arrival at the hospital: |
| 17 | MIF11 | Num | 8 | 11. Was there mention of an acute CHD event with onset after arrival at the hospital? |
| 18 | MIF12 | Num | 8 | 12. Was there an acute episode(s) of pain or discomfort (eg: tightness) anywhere in the chest, arm, shoulder throat or jaw, either within 72 hours prior to arrival to the hospital, or in conjunction with the in-hospital CHD event? |
| 19 | MIF12A | Num | 8 | 12a. Did this pain or discomfort specifically involve the chest? |
| 20 | MIF12B | Num | 8 | 12b. Did the pain get worse (crescendo) over time? |
| 21 | MIF12C | Num | 8 | 12c. Was the pain or discomfort diagnosed as having a non-cardiac origin? |
| 22 | MIF13 | Num | 8 | 13. Was there nausea or vomiting associated with this event? |
| 23 | MIF14 | Num | 8 | 14. Was there diaphoresis associated with this event? |
| 24 | MIF15 | Num | 8 | 15. Was there fatigue or malaise associated with this event? |
| 25 | MIF16A | Char | 7 | 16a. Blood pressure |
| 26 | MIF16B | Num | 8 | 16b. Heart rate |
| 27 | MIF17A | Num | 8 | 17a. Myocardial infarction |
| 28 | MIF17A1 | Num | 8 | 17a1. If history of MI, then MI within 4 weeks of this event? |
| 29 | MIF17B | Num | 8 | 17b. Angina |
| 30 | MIF17C | Num | 8 | 17c. Percutaneous coronary intervention (PCI) |
| 31 | MIF17D | Num | 8 | 17d. CABG |
| 32 | MIF17E | Num | 8 | 17e. Coronary artery disease (CAD) |
| 33 | MIF17F | Num | 8 | 17f. Heart failure |
| 34 | MIF17G | Num | 8 | 17g. Arrhythmia |
| 35 | MIF17G1 | Num | 8 | 17g1. Arial Fibrillation/Flutter |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 36 | MIF17G2 | Num | 8 | 17g2. Ventricular Fibrillation/Tachycardia |
| 37 | MIF17G3 | Num | 8 | 17g3. Other arrhythmia |
| 38 | MIF18A | Num | 8 | 18a. Angina |
| 39 | MIF18B | Num | 8 | 18b. Acute myocardial Infarction |
| 40 | MIF18C | Num | 8 | 18c. ST elevation > 1mm with pain that is not present on ECG without pain |
| 41 | MIF18D | Num | 8 | 18d. Congestive heart failure exacerbation or pulmonary edema |
| 42 | MIF18E | Num | 8 | 18e. Shock or cardiogenic shock |
| 43 | MIF18F | Num | 8 | 18f. Ventricular fibrillation, cardiac arrest or asystole |
| 44 | MIF18G | Num | 8 | 18g. Ventricular Tachycardia |
| 45 | MIF18H | Num | 8 | 18h. Atrial fibrillation or atrial flutter |
| 46 | MIF19 | Num | 8 | 19. Were cardiac enzymes reported within days 1-4 after arrival at the hospital or after the in-hospital CHD event? |
| 47 | MIF20A1 | Num | 8 | CPK - Upper limit of normal |
| 48 | MIF20A2 | Num | 8 | CPK - Units |
| 49 | MIF20B1 | Num | 8 | CK-MB - Upper limit of normal |
| 50 | MIF20B2 | Num | 8 | CK-MB - Units |
| 51 | MIF20C1 | Num | 8 | Troponin - Upper limit of normal |
| 52 | MIF20C2 | Num | 8 | Troponin - Units |
| 53 | MIF20C3 | Num | 8 | 20c3. What type of Troponin was this? |
| 54 | MIF21A0 | Num | 8 | Day 1/Set 1 - Total CK/CPK |
| 55 | MIF21A1 | Num | 8 | Day 1/Set 1 - Total CK/CPK - Units |
| 56 | MIF21A2 | Num | 8 | Day 1/Set 1 - Total CK/CPK - Words Code |
| 57 | MIF21B0 | Num | 8 | Day 1/Set 1 - CK-MB |
| 58 | MIF21B1 | Num | 8 | Day 1/Set 1 - CK-MB - Units |
| 59 | MIF21B2 | Num | 8 | Day 1/Set 1 - CK-MB - Words Code |
| 60 | MIF21C | Num | 8 | 21c. Troponin |
| 61 | MIF21C0 | Num | 8 | Day 1/Set 1 - Troponin |
| 62 | MIF21C1 | Num | 8 | Day 1/Set 1 - Troponin - Units |
| 63 | MIF21C2 | Num | 8 | Day 1/Set 1 - Troponin - Words Code |
| 64 | MIF21C3 | Num | 8 | 21c3. What type of Troponin was this? |
| 65 | MIF22A0 | Num | 8 | Day 1/Set 2 - Total CK/CPK |
| 66 | MIF22A1 | Num | 8 | Day 1/Set 2 - Total CK/CPK - Units |
| 67 | MIF22A2 | Num | 8 | Day 1/Set 2 - Total CK/CPK - Words Code |
| 68 | MIF22B0 | Num | 8 | Day 1/Set 2 - CK-MB |
| 69 | MIF22B1 | Num | 8 | Day 1/Set 2 - CK-MB - Units |
| 70 | MIF22B2 | Num | 8 | Day 1/Set 2 - CK-MB - Words Code |
| 71 | MIF22C | Num | 8 | 22c. Troponin |
| 72 | MIF22C0 | Num | 8 | Day 1/Set 2 - Troponin |
| 73 | MIF22C1 | Num | 8 | Day 1/Set 2 - Troponin - Units |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | MIF22C2 | Num | 8 | Day 1/Set 2 - Troponin - Words Code |
| 75 | MIF22C3 | Num | 8 | 22c3. What type of Troponin was this? |
| 76 | MIF23A0 | Num | 8 | Day 2/Set 1 - Total CK/CPK |
| 77 | MIF23A1 | Num | 8 | Day 2/Set 1 - Total CK/CPK - Units |
| 78 | MIF23A2 | Num | 8 | Day 2/Set 1 - Total CK/CPK - Words Code |
| 79 | MIF23B0 | Num | 8 | Day 2/Set 1 - CK-MB |
| 80 | MIF23B1 | Num | 8 | Day 2/Set 1 - CK-MB - Units |
| 81 | MIF23B2 | Num | 8 | Day 2/Set 1 - CK-MB - Words Code |
| 82 | MIF23C | Num | 8 | 23c. Troponin |
| 83 | MIF23C0 | Num | 8 | Day 2/Set 1 - Troponin |
| 84 | MIF23C1 | Num | 8 | Day 2/Set 1 - Troponin - Units |
| 85 | MIF23C2 | Num | 8 | Day 2/Set 1 - Troponin - Words Code |
| 86 | MIF23C3 | Num | 8 | 23c3. What type of Troponin was this? |
| 87 | MIF24A0 | Num | 8 | Day 2/Set 2 - Total CK/CPK |
| 88 | MIF24A1 | Num | 8 | Day 2/Set 2 - Total CK/CPK - Units |
| 89 | MIF24A2 | Num | 8 | Day 2/Set 2 - Total CK/CPK - Words Code |
| 90 | MIF24B0 | Num | 8 | Day 2/Set 2 - CK-MB |
| 91 | MIF24B1 | Num | 8 | Day 2/Set 2 - CK-MB - Units |
| 92 | MIF24B2 | Num | 8 | Day 2/Set 2 - CK-MB - Words Code |
| 93 | MIF24C | Num | 8 | 24c. Troponin |
| 94 | MIF24C0 | Num | 8 | Day 2/Set 2 - Troponin |
| 95 | MIF24C1 | Num | 8 | Day 2/Set 2 - Troponin - Units |
| 96 | MIF24C2 | Num | 8 | Day 2/Set 2 - Troponin - Words Code |
| 97 | MIF24C3 | Num | 8 | 24c3. What type of Troponin was this? |
| 98 | MIF25 | Num | 8 | 25. Is there mention of the patient having had a trauma, a surgical procedure, or rhabdomyolysis within one week prior to measurement of biomarkers? <br> (If No/NR, skip to 26) |
| 99 | MIF25A | Num | 8 | 25a. Cardiac procedure |
| 100 | MIF25B | Num | 8 | 25b. CPR or cardioversion |
| 101 | MIF25C | Num | 8 | 25c. Other cardiac trauma |
| 102 | MIF25C2 | Char | 30 | 25c2. Specify: |
| 103 | MIF25D | Num | 8 | 25d. Rhabdomyolysis |
| 104 | MIF25E | Num | 8 | 25e. Intramuscular Injection |
| 105 | MIF25F | Num | 8 | 25f. Non-cardiac procedure |
| 106 | MIF25F2 | Char | 30 | 25f2. Specify: |
| 107 | MIF25G | Num | 8 | 25g. Non-cardiac trauma |
| 108 | MIF26 | Num | 8 | 26. Enter the item number from the biomarkers section (items 21-24) of this form which corresponds to the first biomarker measurement performed after the trauma, cardiac procedure or rhabdomyolysis: |
| 109 | MIF27 | Num | 8 | 27. Is there evidence of hemolytic disease during the hospitalization? |
| 110 | MIF28 | Num | 8 | 28. Did participant have active liver disease (cirrhosis, hepatitis, liver cancer, etc.)? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 111 | MIF29 | Num | 8 | 29. Were any 12 lead ECGs taken during this admission? |
| 112 | MIF30 | Num | 8 | 30. Transthoracic echocardiogram (TTE) performed? (If No/NR, skip to 31) |
| 113 | MIF30A | Num | 8 | 30a. LV Ejection fraction: |
| 114 | MIF31 | Num | 8 | 31. Was a Nuclear Medicare Scan (MUGA, SPECT or radionuclide ventriculogram (RVG)) performed? (If No/NR, skip to 32) |
| 115 | MIF31A | Num | 8 | 31a. Ejection fraction LV: |
| 116 | MIF31B | Num | 8 | 31b. RV: |
| 117 | MIF31C | Num | 8 | 31c. Stress test positive for ischemia |
| 118 | MIF32 | Num | 8 | 32. Was any stress test (treadmill, pharmacologic, or nuclear medicine) performed during this admission: (If No/NR, skip to 33) |
| 119 | MIF32A | Num | 8 | 32a. Ejection fraction LV: |
| 120 | MIF32B | Num | 8 | 32b. Stress test positive for ischemia |
| 121 | MIF32C | Num | 8 | 32c. Greater than or equal to 1mm ST depression or elevation |
| 122 | MIF32D | Num | 8 | 32d. Ischemic pain or equivalent occurred |
| 123 | MIF33 | Num | 8 | 33. Was a coronary angiography performed? (If No/NR, skip to 34) |
| 124 | MIF33B | Num | 8 | 33b. Ejection fraction LV: |
| 125 | MIF33C | Num | 8 | 33c. $70 \%$ or greater obstruction of any coronary artery |
| 126 | MIF33D | Num | 8 | 33d. Were coronary bypass grafts present? |
| 127 | MIF33D1 | Num | 8 | 33d1. If yes, number of occluded grafts: |
| 128 | MIF34 | Num | 8 | 34. Was coronary reperfusion (CABG, PCI, thrombolysis) attempted? |
| 129 | MIF34A | Num | 8 | 34a. If yes, what was the approximate time from event onset to reperfusion? |
| 130 | MIF35A | Num | 8 | 35a. Coronary artery bypass graft surgery (CABG) |
| 131 | MIF35B | Num | 8 | 35b. Coronary atherectomy |
| 132 | MIF35C | Num | 8 | 35c. Intra-arterial or intravenous thrombolytic |
| 133 | MIF35D | Num | 8 | 35d. Coronary angioplasty without stent |
| 134 | MIF35E | Num | 8 | 35e. Coronary angioplasty with stent placement |
| 135 | MIF35F | Num | 8 | 35f. Valve surgery |
| 136 | MIF35G | Num | 8 | 35g. Non-cardiac surgery |
| 137 | MIF35H | Num | 8 | 35h. Aortic balloon pump |
| 138 | MIF35I | Num | 8 | 35i. Pacemaker placement (temporary or permanent) |
| 139 | MIF35J | Num | 8 | 35j. Cardioversion or defibrillation |
| 140 | MIF35J2A | Num | 8 | 35j2a. Ventricular Fibrillation/Flutter |
| 141 | MIF35J2B | Num | 8 | 35j2b. Ventricular Tachycardia (VT) |
| 142 | MIF35J2C | Num | 8 | 35j2c. Asystole |
| 143 | MIF35J2D | Num | 8 | 35j2d. Complete AV Block (3 HB) |
| 144 | MIF35J2E | Num | 8 | 35j2e. Atrial Fibrillation/Flutter |
| 145 | MIF35J2F | Num | 8 | 35j2f. Pulseless Electrical Activity (PEA) |
| 146 | MIF36A | Num | 8 | Admission Nitroglycerin |
| 147 | MIF36A1 | Num | 8 | Discharge Nitroglycerin |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 148 | MIF36B | Num | 8 | Admission Beta Blockers |
| 149 | MIF36B1 | Num | 8 | Discharge Beta Blockers |
| 150 | MIF36C | Num | 8 | Admission Calcium Channel Blockers |
| 151 | MIF36C1 | Num | 8 | Discharge Calcium Channel Blockers |
| 152 | MIF36D | Num | 8 | Admission ACE Inhibitor or ARB |
| 153 | MIF36D1 | Num | 8 | Discharge ACE Inhibitor or ARB |
| 154 | MIF36E | Num | 8 | Admission Scheduled aspirin (not PRN) |
| 155 | MIF36E1 | Num | 8 | Discharge Scheduled aspirin (not PRN) |
| 156 | MIF36F | Num | 8 | Admission Heparin or Enoxaparin |
| 157 | MIF36F1 | Num | 8 | Discharge Heparin or Enoxaparin |
| 158 | MIF36G | Num | 8 | Admission Coumadin, warafin, dicumarol |
| 159 | MIF36G1 | Num | 8 | Discharge Coumadin, warafin, dicumarol |
| 160 | MIF36H | Num | 8 | Admission Anti-platelet agents (non-aspirin) |
| 161 | MIF36H1 | Num | 8 | Discharge Anti-platelet agents (non-aspirin) |
| 162 | MIF36I | Num | 8 | Admission Statin |
| 163 | MIF36I1 | Num | 8 | Discharge Statin |
| 164 | MIF37A | Num | 8 | 37a. IV pressors |
| 165 | MIF37B | Num | 8 | 37b. IV nitroglycerin |
| 166 | MIF37C | Num | 8 | 37c. IIb / IIIa inhibitors or thrombin inhibitors |
| 167 | VERSION | Char | 21 | Version |
| 168 | MIF0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 169 | MIF0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 170 | MIF2_DAYS | Num | 8 | 2. Date of arrival: - Days from enrollment |
| 171 | MIF2A_DAYS | Num | 8 | 2a. Date of admission: - Days from enrollment |
| 172 | MIF3_DAYS | Num | 8 | 3. Date of discharge: - Days from enrollment |
| 173 | MIF21_DAYS | Num | 8 | Event Day 1/Set 1 Date - Days from enrollment |
| 174 | MIF22_DAYS | Num | 8 | Event Day 1/Set 2 Date - Days from enrollment |
| 175 | MIF23_DAYS | Num | 8 | 23. Event Day 2/Set 1 Date - Days from enrollment |
| 176 | MIF24_DAYS | Num | 8 | Event Day 2/Set 2 Date - Days from enrollment |
| 177 | MIF25A1_DAYS | Num | 8 | 25a1. Date - Days from enrollment |
| 178 | MIF25B1_DAYS | Num | 8 | 25b1. Date - Days from enrollment |
| 179 | MIF25C1_DAYS | Num | 8 | 25c1. Date - Days from enrollment |
| 180 | MIF25D1_DAYS | Num | 8 | 25d1. Date - Days from enrollment |
| 181 | MIF25E1_DAYS | Num | 8 | 25e1. Date - Days from enrollment |
| 182 | MIF25F1_DAYS | Num | 8 | 25f1. Date - Days from enrollment |
| 183 | MIF25G1_DAYS | Num | 8 | 25g1. Date - Days from enrollment |
| 184 | MIF33A_DAYS | Num | 8 | 33a. Date: - Days from enrollment |
| 185 | MIF35A1_DAYS | Num | 8 | 35a1. If yes, Date: - Days from enrollment |
| 186 | MIF35B1_DAYS | Num | 8 | 35b1. If yes, Date: - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 187 | MIF35C1_DAYS | Num | 8 | 35c1. If yes, Date: - Days from enrollment |
| 188 | MIF35D1_DAYS | Num | 8 | 35d1. If yes, Date: - Days from enrollment |
| 189 | MIF35E1_DAYS | Num | 8 | 35e1. If yes, Date: - Days from enrollment |
| 190 | MIF35J1_DAYS | Num | 8 | 35j1. If yes, Date: - Days from enrollment |

## Data Set Name: pqe_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | PQE1 | Char | 1 | 1. Are you familiar with the events surrounding the decedent's death? |
| 6 | PQE2 | Char | 1 | 2. Did you witness the death? |
| 7 | PQE3 | Char | 1 | 3. If you answered <br> information regarding the death? Questions, are you aware of another physician who could provide |
| 8 | PQE4 | Char | 1 | 4. What do you believe to be the underlying cause of death? Please select one of the following <br> categories: Respiratory, Cardiovascular, Cancer, Other Known, or Unknown (Select only one.) |
| 9 | PQE4A | Char | 1 | 4a. Respiratory (select only one) |
| 10 | PQE4A1 | Char | 2000 | 4a1. Specify |
| 11 | PQE4B | Char | 1 | 4b. Cardiovascular (select only one) |
| 12 | PQE4B1 | Char | 2000 | 4b1. Specify |
| 13 | PQE4B2 | Char | 1 | 4b2. Cardiovascular (select only one) |
| 14 | PQE4C | Char | 1 | 4c. Cancer (select only one) |
| 15 | PQE4C1 | Char | 2000 | 4c1. Specify |
| 16 | PQE4D | Char | 2000 | 4d. Other, Known Specify |
| 17 | PQE4E | Char | 1 | 4e. Reason for Unknown cause of death (select only one) |
| 18 | PQE5 | Char | 1 | 5. Do you believe that a diagnosis of COPD contributed to the death of this individual? |
| 19 | PQE6 | Char | 1 | 6. Did you see the participant within one month of death? |
| 20 | PQE7B | Char | 2000 | 7b. Chief Complaint |
| 21 | PQE7C | Char | 2000 | 7c. Primary Diagnosis |
| 22 | PQE7D | Char | 2000 | 7d. Changes in Medical Management |
| 23 | VERSION | Char | 21 | Version |
| 24 | PQE0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 25 | PQE7A_DAYS | Num | 8 | Date of Visit - Days from enrollment |
| 26 | PQE10_DAYS | Num | 8 | Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: str_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | STR1 | Num | 8 | 1. Was the event: |
| 6 | STR4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | STR5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | STR6 | Num | 8 | 6. Is there a history of previous stroke? |
| 9 | STR7 | Num | 8 | 7. Is there a history of previous TIA? |
| 10 | STR8 | Num | 8 | 8. History of myocardial infarction prior to this event? |
| 11 | STR9 | Num | 8 | 9. Does the patient have a history of diabetes? |
| 12 | STR10A | Num | 8 | 10a. myocardial infarction |
| 13 | STR10B | Num | 8 | 10b. intracardiac thrombus or intracardiac tumor |
| 14 | STR10C | Num | 8 | 10c. atrial fibrillation |
| 15 | STR10D | Num | 8 | 10d. rheumatic heart disease |
| 16 | STR10E | Num | 8 | 10e. subacute bacterial endocarditis |
| 17 | STR10F | Num | 8 | 10f. systemic embolus |
| 18 | STR10G | Num | 8 | 10g. hypercoagulative state |
| 19 | STR10H | Num | 8 | 10h. hemorrhagic abnormality |
| 20 | STR10I | Num | 8 | 10i. brain tumor |
| 21 | STR10J | Num | 8 | 10j. major head trauma |
| 22 | STR10K | Num | 8 | 10k. seizure disorder |
| 23 | STR10L | Num | 8 | 10l. migraine headaches |
| 24 | STR11 | Num | 8 | 11. Were new neurological signs/symptoms present upon admission? |
| 25 | STR11A | Num | 8 | 11a. Length of time between onset of new neurological signs/symptoms and presentation: |
| 26 | STR12A | Num | 8 | 12a. Headache |
| 27 | STR12B | Num | 8 | 12b. Vomiting |
| 28 | STR12C | Num | 8 | 12c. Vertigo |
| 29 | STR12D | Num | 8 | 12d. Seizure |
| 30 | STR12E | Num | 8 | 12e. Altered level of consciousness |
| 31 | STR12F | Num | 8 | 12f. Aphasia |
| 32 | STR12G | Num | 8 | 12g. Anesthesia, dysesthesia or paresthesias of the face |
| 33 | STR12H | Num | 8 | 12h. Anesthesia, dysesthesia or paresthesias of the extremities |
| 34 | STR12I | Num | 8 | 12i. Visual field disturbance, diploplia |
| 35 | STR12J | Num | 8 | 12j. Gait disturbance |
| 36 | STR12K | Num | 8 | 12k. Cranial nerve III palsy |
|  |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | STR12L | Num | 8 | 12l. Meningeal signs (ie: Brudinski's sign, Kernig's sign) |
| 38 | STR13 | Num | 8 | 13. Did new neurological symptoms develop during this hospitalization? |
| 39 | STR13A | Num | 8 | 13a. If yes, did the event occur in the setting of a procedure? |
| 40 | STR13B1 | Num | 8 | 13b1. Angiogram |
| 41 | STR13B2 | Num | 8 | 13b2. Cardiac surgery |
| 42 | STR13B3 | Num | 8 | 13b3. Carotid endarterectomy |
| 43 | STR13B4 | Num | 8 | 13b4. Other |
| 44 | STR13B4A | Char | 30 | 13b4a. Specify |
| 45 | STR14 | Char | 7 | 14. Admission Blood pressure |
| 46 | STR15 | Num | 8 | 15. Was cerebrovascular imaging performed? |
| 47 | STR16 | Num | 8 | 16. Was cerebrovascular angiography performed? |
| 48 | STR16A | Num | 8 | 16a. Angiography Diagnosis |
| 49 | STR17 | Num | 8 | 17. Was a CT scan of the head performed during this hospitalization? |
| 50 | STR17A | Num | 8 | 17a. CT Diagnosis |
| 51 | STR18 | Num | 8 | 18. Was magnetic resonance imaging (MRI) of the head performed? |
| 52 | STR18A | Num | 8 | 18a. MRI Diagnosis |
| 53 | STR19 | Num | 8 | 19. Was carotid magnetic resonance angiography (MRA) performed? |
| 54 | STR19A | Num | 8 | 19a. If Yes, what is the greatest degree of carotid stenosis demonstrated: |
| 55 | STR20 | Num | 8 | 20. Was an echocardiography study performed? |
| 56 | STR20A1 | Num | 8 | 20a1. intracardiac thrombus |
| 57 | STR20A2 | Num | 8 | 20a2. valvular heart disease |
| 58 | STR20A3 | Num | 8 | 20a3. dilated ventricle or poor ventricular function |
| 59 | STR20A4 | Num | 8 | 20a4. aortic arch atheroma |
| 60 | STR20A5 | Num | 8 | 20a5. atrioseptal aneurysm |
| 61 | STR20A6 | Num | 8 | 20a6. patent foramen ovale (PFO) |
| 62 | STR20A7 | Num | 8 | 20a7. valve vegetations |
| 63 | STR20A8 | Num | 8 | 20a8. artificial valve |
| 64 | STR21 | Num | 8 | 21. Did the patient receive thrombolytic treatment for stroke? |
| 65 | STR22 | Num | 8 | 22. Was the patient alive at discharge? |
| 66 | STR23 | Num | 8 | 23. At the time of discharge, did the patient have deficits in completing everyday activities compared to status prior to event? |
| 67 | STR24 | Num | 8 | 24. Where was the patient discharged to: |
| 68 | VERSION | Char | 21 | Version |
| 69 | STR0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 70 | STR0D_DAYS | Num | 8 | Od. Event Date - Days from enrollment |
| 71 | STR2_DAYS | Num | 8 | 2. Date of admission: - Days from enrollment |
| 72 | STR3_DAYS | Num | 8 | 3. Date of discharge/or death: - Days from enrollment |

## Data Set Name: vtd_nhlbiv1_161019.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | BLINDEVENTID | Char | 9 | Public Event ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | VTD1 | Num | 8 | 1. Was the event: |
| 6 | VTD4 | Char | 9 | 4. What was the primary admitting diagnosis code? |
| 7 | VTD5 | Char | 9 | 5. What was the primary discharge diagnosis code? |
| 8 | VTD6 | Num | 8 | 6. Was DVT confirmed? |
| 9 | VTD7 | Char | 1 | 7. Diagnosis: |
| 10 | VTD8A | Num | 8 | 8a. Hospital discharge summary with a diagnosis of deep vein thrombosis |
| 11 | VTD8B | Num | 8 | 8b. Positive findings on a venogram |
| 12 | VTD8C | Num | 8 | 8c. Positive findings using impedance plethysmography |
| 13 | VTD8D | Num | 8 | 8d. Positive findings on Doppler duplex, ultrasound, sonogram or other non-invasive test |
| 14 | VTD8E | Num | 8 | 8e. Positive findings on isotope scan |
| 15 | VTD9 | Char | 1 | 9. Diagnosis of deep vein thrombosis reporting source |
| 16 | VTD9A | Char | 30 | 9a. Specify: |
| 17 | VTD10 | Num | 8 | 10. Was a work-up for pulmonary embolism performed? |
| 18 | VTD11 | Char | 1 | 11. Diagnosis: |
| 19 | VTD12A | Num | 8 | 12a. Hospital discharge summary with a diagnosis of pulmonary embolism |
| 20 | VTD12B | Num | 8 | 12b. High probability on ventilation-perfusion lung scan |
| 21 | VTD12C | Num | 8 | 12c. Positive findings on pulmonary angiogram or spiral CT |
| 22 | VTD12D | Num | 8 | 12d. Diagnosis of deep vein thrombosis (DVT) based on at least one DVT criteria on Q7 plus signs |
|  |  | and symptoms suggestive of PE |  |  |
| 23 | VTD12E | Num | 8 | 12e. Other, including autopsy |
| 24 | VTD13A | Num | 8 | 13a. Factor V Leiden deficiency |
| 25 | VTD13B | Num | 8 | 13b. Polycythemia |
| 26 | VTD13C | Num | 8 | 13c. Cancer |
| 27 | VTD13D | Num | 8 | 13d. Smoking |
| 28 | VTD13E | Num | 8 | 13e. Obesity |
| 29 | VTD13F | Num | 8 | 13f. Recent estrogen or birth control pill use |
| 30 | VERSION | Char | 21 | Version |
| 31 | VTD0A_DAYS | Num | 8 | 0a. Completion Date: - Days from enrollment |
| 32 | VTD0D_DAYS | Num | 8 | 0d. Event Date - Days from enrollment |
| 33 | VTD2_DAYS | Num | 8 | 2. Date of admission: - Days from enrollment |
| 34 | VTD3_DAYS | Num | 8 | 3. Date of discharge: - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: r1_arup_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Blind Repeatability ID |
| 3 | REPEATABILITY | Num | 8 | Enrolled in Repeatability and Replicate Substudy |
| 4 | ANAB_URN | Char | 14 | Anabasine level. Anabasine is a minor alkaloid in the tobacco plant and is a biomarker of active tobacco use. However, anabasine is detected in the urine of approximately $5 \%$ of non-tobacco users. |
| 5 | COT_3H_URN | Char | 14 | Cotinine 3OH level. Nicotine is metabolized to cotinine, and 3-OH-cotinine is a metabolite of cotinine. This metabolite may persist beyond 2 weeks of abstinence from nicotine use. |
| 6 | CRT_DL_URINE | Char | 14 | Urine creatinine level |
| 7 | COT_URN | Char | 14 | Cotinine level. Cotinine is the major metabolite of nicotine and has a half-life of approximately 16 hours. |
| 8 | NRNC_URN | Char | 14 | Nornicotine level. Nornicotine may be present in tobacco products or may result from metabolism of nicotine. |
| 9 | NIC_URN | Char | 14 | Nicotine level |
| 10 | ANAB_URN_UNIT | Char | 8 | Anabasine unit |
| 11 | COT_3H_URN_UNIT | Char | 8 | Cotinine 3OH unit |
| 12 | CRT_DL_URINE_UNIT | Char | 8 | Urine creatinine unit |
| 13 | COT_URN_UNIT | Char | 8 | Cotinine unit |
| 14 | NRNC_URN_UNIT | Char | 8 | Nornicotine unit |
| 15 | NIC_URN_UNIT | Char | 8 | Nicotine unit |
| 16 | VISIT | Char | 10 | Visit |
| 17 | NICOTINE_UR | Num | 8 | Indicator if nicotine levels are elevated ( $1-\mathrm{Nic}$ _URN $>2,0-\mathrm{Nic}$ _URN<=2) |
| 18 | COTININE_UR | Num | 8 | Indicator if cotinine levels are elevated ( $1-\mathrm{Cot}$ _URN $>5,0-\mathrm{Cot}$-URN<=5) |
| 19 | COTININE_3OH_UR | Num | 8 | Indicator if cotinine 3 OH levels are elevated ( 1 - Cot_3H_URN>50, 0 Cot_3H_URN<=50) |
| 20 | NORNICOTINE_UR | Num | 8 | Indicator if nornicotine levels are elevated ( 1 - NRNC_URN>2, $0-N R N C \_U R N<=2$ ) |
| 21 | ANABASINE_UR | Num | 8 | Indicator if anabsine levels are elevated (1-ANAB_URN>3, 0 - ANAB_URN<=3) |

## Data Set Name: r1_cyto_nhlbiv1_180314.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Blind Repeatability ID |
| 3 | CYT_RAW_IL6 | Char | 7 | Raw value of IL6 |
| 4 | CYT_IMPUT_FLAG_IL6 | Num | 8 | Type of Imputation: IL6 |
| 5 | CYT_RAW_CC16 | Char | 12 | Raw value of CC16 |
| 6 | CYT_CC16 | Num | 8 | Imputed CC16 Value |
| 7 | CYT_IMPUT_FLAG_CC16 | Num | 8 | Type of Imputation: CC16 |
| 8 | CYT_RAW_CCL20 | Char | 8 | Raw value of CCL20 |
| 9 | CYT_CCL20 | Num | 8 | Imputed CCL20 Value |
| 10 | CYT_IMPUT_FLAG_CCL20 | Num | 8 | Type of Imputation: CCL20 |
| 11 | CYT_RAW_GDF_15 | Char | 12 | Raw value of GDF-15 |
| 12 | CYT_GDF_15 | Num | 8 | Imputed GDF-15 Value |
| 13 | CYT_IMPUT_FLAG_GDF_15 | Num | 8 | Type of Imputation: GDF-15 |
| 14 | REPEATABILITY | Num | 8 | Enrolled in Repeatability and Replicate Substudy |
| 15 | CYTOKINE_BATCH | Char | 7 | Indicates batch number of cytokine analysis |

Data Set Name: r1_ige_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 |  |
| 3 | REPEATABILITY | Num | 8 | Enrolled in Repeatability and Replicate Substudy |
| 4 | TESTCODE | Char | 4 | TestCode |
| 5 | TEST_NAME | Char | 9 | Test Name |
| 6 | IGE_RAW_RESULT | Char | 4 | Raw value of IgE Result |
| 7 | IGE_IMPUT_FLAG_RESULT | Num | 8 | Type of Imputation: IgE Result |
| 8 | IGE_RESULT | Num | 8 | Imputed IgE Result Value |
| 9 | VISIT | Char | 10 | Visit |
| 10 | IGE_BATCH | Num | 8 | Indicates batch number of IgE analysis |
| 11 | COLLECT_DATE_DAYS | Num | 8 | Collect Date - Days from enrollment |
| 12 | RESULT_DATE_DAYS | Num | 8 | Result Date - Days from enrollment |

## Data Set Name: r1_rbm2_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Blind Repeatability ID |
| 3 | REPEATABILITY | Num | 8 | Flag indicating the labid is selected from repeatability substudy |
| 4 | VISIT | Char | 10 | Visit |
| 5 | A2M_UNIT | Char | 5 | Analyte unit |
| 6 | A2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 7 | A2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 8 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 9 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 10 | ADIPOQ_UNIT | Char | 5 | Analyte unit |
| 11 | ADIPOQ_LOW_RANGE | Char | 5 | Low range for analyte |
| 12 | ADIPOQ_HIGH_RANGE | Char | 5 | High range for analyte |
| 13 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 14 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 15 | AGER_UNIT | Char | 5 | Analyte unit |
| 16 | AGER_LOW_RANGE | Char | 5 | Low range for analyte |
| 17 | AGER_HIGH_RANGE | Char | 5 | High range for analyte |
| 18 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 19 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 20 | APCS_UNIT | Char | 5 | Analyte unit |
| 21 | APCS_LOW_RANGE | Char | 5 | Low range for analyte |
| 22 | APCS_HIGH_RANGE | Char | 5 | High range for analyte |
| 23 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 24 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 25 | B2M_UNIT | Char | 5 | Analyte unit |
| 26 | B2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 27 | B2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 28 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 29 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 30 | BDNF_UNIT | Char | 5 | Analyte unit |
| 31 | BDNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 32 | BDNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 33 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 34 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 35 | C3_UNIT | Char | 6 | Analyte unit |
| 36 | C3_LOW_RANGE | Char | 6 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | C3_HIGH_RANGE | Char | 6 | High range for analyte |
| 38 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 39 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 40 | CCL11_UNIT | Char | 5 | Analyte unit |
| 41 | CCL11_LOW_RANGE | Char | 5 | Low range for analyte |
| 42 | CCL11_HIGH_RANGE | Char | 5 | High range for analyte |
| 43 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 44 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 45 | CCL13_UNIT | Char | 5 | Analyte unit |
| 46 | CCL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 47 | CCL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 48 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 49 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 50 | CCL18_UNIT | Char | 5 | Analyte unit |
| 51 | CCL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 52 | CCL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 53 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 54 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 55 | CCL2_UNIT | Char | 5 | Analyte unit |
| 56 | CCL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 57 | CCL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 58 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 59 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 60 | CCL20_UNIT | Char | 5 | Analyte unit |
| 61 | CCL20_LOW_RANGE | Char | 5 | Low range for analyte |
| 62 | CCL20_HIGH_RANGE | Char | 5 | High range for analyte |
| 63 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 64 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 65 | CCL23_UNIT | Char | 5 | Analyte unit |
| 66 | CCL23_LOW_RANGE | Char | 5 | Low range for analyte |
| 67 | CCL23_HIGH_RANGE | Char | 5 | High range for analyte |
| 68 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 69 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 70 | CCL24_UNIT | Char | 5 | Analyte unit |
| 71 | CCL24_LOW_RANGE | Char | 5 | Low range for analyte |
| 72 | CCL24_HIGH_RANGE | Char | 5 | High range for analyte |
| 73 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 74 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 75 | CCL3_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | CCL3_LOW_RANGE | Char | 5 | Low range for analyte |
| 77 | CCL3_HIGH_RANGE | Char | 5 | High range for analyte |
| 78 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 79 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 80 | CCL4_UNIT | Char | 5 | Analyte unit |
| 81 | CCL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 82 | CCL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 83 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 84 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 85 | CCL5_UNIT | Char | 5 | Analyte unit |
| 86 | CCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 87 | CCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 88 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 89 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 90 | CCL8_UNIT | Char | 5 | Analyte unit |
| 91 | CCL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 92 | CCL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 93 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 94 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 95 | CDH1_UNIT | Char | 5 | Analyte unit |
| 96 | CDH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 97 | CDH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 98 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 99 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 100 | CHGA_UNIT | Char | 5 | Analyte unit |
| 101 | CHGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 102 | CHGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 103 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 104 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 105 | CRP_UNIT | Char | 5 | Analyte unit |
| 106 | CRP_LOW_RANGE | Char | 5 | Low range for analyte |
| 107 | CRP_HIGH_RANGE | Char | 5 | High range for analyte |
| 108 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 109 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 110 | CSF2_UNIT | Char | 5 | Analyte unit |
| 111 | CSF2_LOW_RANGE | Char | 5 | Low range for analyte |
| 112 | CSF2_HIGH_RANGE | Char | 5 | High range for analyte |
| 113 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 114 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | CSTB_UNIT | Char | 5 | Analyte unit |
| 116 | CSTB_LOW_RANGE | Char | 5 | Low range for analyte |
| 117 | CSTB_HIGH_RANGE | Char | 5 | High range for analyte |
| 118 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 119 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 120 | CXCL1_UNIT | Char | 5 | Analyte unit |
| 121 | CXCL1_LOW_RANGE | Char | 5 | Low range for analyte |
| 122 | CXCL1_HIGH_RANGE | Char | 5 | High range for analyte |
| 123 | CXCL1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 124 | CXCL1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 125 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 126 | CXCL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 127 | CXCL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 128 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 129 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 130 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 131 | CXCL9_LOW_RANGE | Char | 5 | Low range for analyte |
| 132 | CXCL9_HIGH_RANGE | Char | 5 | High range for analyte |
| 133 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 134 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 135 | F7_UNIT | Char | 5 | Analyte unit |
| 136 | F7_LOW_RANGE | Char | 5 | Low range for analyte |
| 137 | F7_HIGH_RANGE | Char | 5 | High range for analyte |
| 138 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 139 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 140 | FGA_FGB_FGG_UNIT | Char | 6 | Analyte unit |
| 141 | FGA_FGB_FGG_LOW_RANGE | Char | 6 | Low range for analyte |
| 142 | FGA_FGB_FGG_HIGH_RANGE | Char | 6 | High range for analyte |
| 143 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 144 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 145 | FTL_FTH1_UNIT | Char | 5 | Analyte unit |
| 146 | FTL_FTH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 147 | FTL_FTH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 148 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 149 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 150 | GC_UNIT | Char | 5 | Analyte unit |
| 151 | GC_LOW_RANGE | Char | 5 | Low range for analyte |
| 152 | GC_HIGH_RANGE | Char | 5 | High range for analyte |
| 153 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 155 | HP_UNIT | Char | 5 | Analyte unit |
| 156 | HP_LOW_RANGE | Char | 5 | Low range for analyte |
| 157 | HP_HIGH_RANGE | Char | 5 | High range for analyte |
| 158 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 159 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 160 | ICAM1_UNIT | Char | 5 | Analyte unit |
| 161 | ICAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 162 | ICAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 163 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 164 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 165 | IFNG_UNIT | Char | 5 | Analyte unit |
| 166 | IFNG_LOW_RANGE | Char | 5 | Low range for analyte |
| 167 | IFNG_HIGH_RANGE | Char | 5 | High range for analyte |
| 168 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 169 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 170 | IGA_UNIT | Char | 5 | Analyte unit |
| 171 | IGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 172 | IGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 173 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 174 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 175 | IGM_UNIT | Char | 5 | Analyte unit |
| 176 | IGM_LOW_RANGE | Char | 5 | Low range for analyte |
| 177 | IGM_HIGH_RANGE | Char | 5 | High range for analyte |
| 178 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 179 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 180 | IL10_UNIT | Char | 5 | Analyte unit |
| 181 | IL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 182 | IL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 183 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 184 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 185 | IL12A_IL12B_UNIT | Char | 5 | Analyte unit |
| 186 | IL12A_IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 187 | IL12A_IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 188 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 189 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 190 | IL12B_UNIT | Char | 5 | Analyte unit |
| 191 | IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 192 | IL12B_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 193 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 194 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 195 | IL15_UNIT | Char | 5 | Analyte unit |
| 196 | IL15_LOW_RANGE | Char | 5 | Low range for analyte |
| 197 | IL15_HIGH_RANGE | Char | 5 | High range for analyte |
| 198 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 199 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 200 | IL17A_UNIT | Char | 5 | Analyte unit |
| 201 | IL17A_LOW_RANGE | Char | 5 | Low range for analyte |
| 202 | IL17A_HIGH_RANGE | Char | 5 | High range for analyte |
| 203 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 204 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 205 | IL18_UNIT | Char | 5 | Analyte unit |
| 206 | IL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 207 | IL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 208 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 209 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 210 | IL1A_UNIT | Char | 6 | Analyte unit |
| 211 | IL1A_LOW_RANGE | Char | 6 | Low range for analyte |
| 212 | IL1A_HIGH_RANGE | Char | 6 | High range for analyte |
| 213 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 214 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 215 | IL1B_UNIT | Char | 5 | Analyte unit |
| 216 | IL1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 217 | IL1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 218 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 219 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 220 | IL1RN_UNIT | Char | 5 | Analyte unit |
| 221 | IL1RN_LOW_RANGE | Char | 5 | Low range for analyte |
| 222 | IL1RN_HIGH_RANGE | Char | 5 | High range for analyte |
| 223 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 224 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 225 | IL2_UNIT | Char | 5 | Analyte unit |
| 226 | IL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 227 | IL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 228 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 229 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 230 | IL23A_UNIT | Char | 5 | Analyte unit |
| 231 | IL23A_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | IL23A_HIGH_RANGE | Char | 5 | High range for analyte |
| 233 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 234 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 235 | IL2RA_UNIT | Char | 5 | Analyte unit |
| 236 | IL2RA_LOW_RANGE | Char | 5 | Low range for analyte |
| 237 | IL2RA_HIGH_RANGE | Char | 5 | High range for analyte |
| 238 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 239 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 240 | IL3_UNIT | Char | 6 | Analyte unit |
| 241 | IL3_LOW_RANGE | Char | 6 | Low range for analyte |
| 242 | IL3_HIGH_RANGE | Char | 6 | High range for analyte |
| 243 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 244 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 245 | IL4_UNIT | Char | 5 | Analyte unit |
| 246 | IL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 247 | IL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 248 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 249 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 250 | IL5_UNIT | Char | 5 | Analyte unit |
| 251 | IL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 252 | IL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 253 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 254 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 255 | IL6_UNIT | Char | 5 | Analyte unit |
| 256 | IL6_LOW_RANGE | Char | 5 | Low range for analyte |
| 257 | IL6_HIGH_RANGE | Char | 5 | High range for analyte |
| 258 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 259 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 260 | IL6R_UNIT | Char | 5 | Analyte unit |
| 261 | IL6R_LOW_RANGE | Char | 5 | Low range for analyte |
| 262 | IL6R_HIGH_RANGE | Char | 5 | High range for analyte |
| 263 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 264 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 265 | IL7_UNIT | Char | 5 | Analyte unit |
| 266 | IL7_LOW_RANGE | Char | 5 | Low range for analyte |
| 267 | IL7_HIGH_RANGE | Char | 5 | High range for analyte |
| 268 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 269 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 270 | IL8_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 271 | IL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 272 | IL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 273 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 274 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 275 | KIT_UNIT | Char | 5 | Analyte unit |
| 276 | KIT_LOW_RANGE | Char | 5 | Low range for analyte |
| 277 | KIT_HIGH_RANGE | Char | 5 | High range for analyte |
| 278 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 279 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 280 | KITLG_UNIT | Char | 5 | Analyte unit |
| 281 | KITLG_LOW_RANGE | Char | 5 | Low range for analyte |
| 282 | KITLG_HIGH_RANGE | Char | 5 | High range for analyte |
| 283 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 284 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 285 | LPA_UNIT | Char | 5 | Analyte unit |
| 286 | LPA_LOW_RANGE | Char | 5 | Low range for analyte |
| 287 | LPA_HIGH_RANGE | Char | 5 | High range for analyte |
| 288 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 289 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 290 | LTA_UNIT | Char | 5 | Analyte unit |
| 291 | LTA_LOW_RANGE | Char | 5 | Low range for analyte |
| 292 | LTA_HIGH_RANGE | Char | 5 | High range for analyte |
| 293 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 294 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 295 | LTF_UNIT | Char | 5 | Analyte unit |
| 296 | LTF_LOW_RANGE | Char | 5 | Low range for analyte |
| 297 | LTF_HIGH_RANGE | Char | 5 | High range for analyte |
| 298 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 299 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 300 | MB_UNIT | Char | 5 | Analyte unit |
| 301 | MB_LOW_RANGE | Char | 5 | Low range for analyte |
| 302 | MB_HIGH_RANGE | Char | 5 | High range for analyte |
| 303 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 304 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 305 | MMP3_UNIT | Char | 5 | Analyte unit |
| 306 | MMP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 307 | MMP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 308 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 309 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | MMP9_UNIT | Char | 5 | Analyte unit |
| 311 | MMP9_LOW_RANGE | Char | 5 | Low range for analyte |
| 312 | MMP9_HIGH_RANGE | Char | 5 | High range for analyte |
| 313 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 314 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 315 | NGF_UNIT | Char | 5 | Analyte unit |
| 316 | NGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 317 | NGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 318 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 319 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 320 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 321 | NRCAM_LOW_RANGE | Char | 5 | Low range for analyte |
| 322 | NRCAM_HIGH_RANGE | Char | 5 | High range for analyte |
| 323 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 324 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 325 | S100A12_UNIT | Char | 5 | Analyte unit |
| 326 | S100A12_LOW_RANGE | Char | 5 | Low range for analyte |
| 327 | S100A12_HIGH_RANGE | Char | 5 | High range for analyte |
| 328 | S100A12_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 329 | S100A12_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 330 | S100B_UNIT | Char | 5 | Analyte unit |
| 331 | S100B_LOW_RANGE | Char | 5 | Low range for analyte |
| 332 | S100B_HIGH_RANGE | Char | 5 | High range for analyte |
| 333 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 334 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 335 | SELE_UNIT | Char | 5 | Analyte unit |
| 336 | SELE_LOW_RANGE | Char | 5 | Low range for analyte |
| 337 | SELE_HIGH_RANGE | Char | 5 | High range for analyte |
| 338 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 339 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 340 | SERPINA1_UNIT | Char | 5 | Analyte unit |
| 341 | SERPINA1_LOW_RANGE | Char | 5 | Low range for analyte |
| 342 | SERPINA1_HIGH_RANGE | Char | 5 | High range for analyte |
| 343 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 344 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 345 | SERPINA7_UNIT | Char | 5 | Analyte unit |
| 346 | SERPINA7_LOW_RANGE | Char | 5 | Low range for analyte |
| 347 | SERPINA7_HIGH_RANGE | Char | 5 | High range for analyte |
| 348 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 349 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 350 | SERPINE1_UNIT | Char | 5 | Analyte unit |
| 351 | SERPINE1_LOW_RANGE | Char | 5 | Low range for analyte |
| 352 | SERPINE1_HIGH_RANGE | Char | 5 | High range for analyte |
| 353 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 354 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 355 | SHBG_UNIT | Char | 6 | Analyte unit |
| 356 | SHBG_LOW_RANGE | Char | 6 | Low range for analyte |
| 357 | SHBG_HIGH_RANGE | Char | 6 | High range for analyte |
| 358 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 359 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 360 | SLPI_UNIT | Char | 5 | Analyte unit |
| 361 | SLPI_LOW_RANGE | Char | 5 | Low range for analyte |
| 362 | SLPI_HIGH_RANGE | Char | 5 | High range for analyte |
| 363 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 364 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 365 | SOD1_UNIT | Char | 5 | Analyte unit |
| 366 | SOD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 367 | SOD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 368 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 369 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 370 | SORT1_UNIT | Char | 5 | Analyte unit |
| 371 | SORT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 372 | SORT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 373 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 374 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 375 | SPINK1_UNIT | Char | 5 | Analyte unit |
| 376 | SPINK1_LOW_RANGE | Char | 5 | Low range for analyte |
| 377 | SPINK1_HIGH_RANGE | Char | 5 | High range for analyte |
| 378 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 379 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 380 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 381 | TGFB1_LAP_LOW_RANGE | Char | 5 | Low range for analyte |
| 382 | TGFB1_LAP_HIGH_RANGE | Char | 5 | High range for analyte |
| 383 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 384 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 385 | TIMP1_UNIT | Char | 5 | Analyte unit |
| 386 | TIMP1_LOW_RANGE | Char | 5 | Low range for analyte |
| 387 | TIMP1_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 388 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 389 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 390 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 391 | TIMP2_LOW_RANGE | Char | 5 | Low range for analyte |
| 392 | TIMP2_HIGH_RANGE | Char | 5 | High range for analyte |
| 393 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 394 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 395 | TNF_UNIT | Char | 5 | Analyte unit |
| 396 | TNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 397 | TNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 398 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 399 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 400 | TNFRSF11B_UNIT | Char | 4 | Analyte unit |
| 401 | TNFRSF11B_LOW_RANGE | Char | 4 | Low range for analyte |
| 402 | TNFRSF11B_HIGH_RANGE | Char | 4 | High range for analyte |
| 403 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 404 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 405 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 406 | TNFRSF1A_LOW_RANGE | Char | 5 | Low range for analyte |
| 407 | TNFRSF1A_HIGH_RANGE | Char | 5 | High range for analyte |
| 408 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 409 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 410 | TNFRSF1B_UNIT | Char | 5 | Analyte unit |
| 411 | TNFRSF1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 412 | TNFRSF1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 413 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 414 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 415 | VCAM1_UNIT | Char | 5 | Analyte unit |
| 416 | VCAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 417 | VCAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 418 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 419 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 420 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 421 | VEGFA_LOW_RANGE | Char | 5 | Low range for analyte |
| 422 | VEGFA_HIGH_RANGE | Char | 5 | High range for analyte |
| 423 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 424 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 425 | VTN_UNIT | Char | 5 | Analyte unit |
| 426 | VTN_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 427 | VTN_HIGH_RANGE | Char | 5 | High range for analyte |
| 428 | VTN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 429 | VTN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 430 | VWF_UNIT | Char | 5 | Analyte unit |
| 431 | VWF_LOW_RANGE | Char | 5 | Low range for analyte |
| 432 | VWF_HIGH_RANGE | Char | 5 | High range for analyte |
| 433 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 434 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 435 | A2M | Num | 8 | Alpha-2-Macroglobulin (A2M) |
| 436 | ADIPOQ | Num | 8 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 437 | AGER | Num | 8 | Advanced glycosylation end product-specific receptor (AGER) |
| 438 | APCS | Num | 8 | Amyloid P-component, serum (APCS) |
| 439 | B2M | Num | 8 | Beta-2-microglobulin (B2M) |
| 440 | BDNF | Num | 8 | Brain-derived neurotrophic factor (BDNF) |
| 441 | C3 | Num | 8 | Complement component C3 (C3) |
| 442 | CCL11 | Num | 8 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 443 | CCL13 | Num | 8 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 444 | CCL18 | Num | 8 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |
| 445 | CCL2 | Num | 8 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 446 | CCL20 | Num | 8 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 447 | CCL23 | Num | 8 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 448 | CCL24 | Num | 8 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 449 | CCL3 | Num | 8 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 450 | CCL4 | Num | 8 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 451 | CCL5 | Num | 8 | chemokine (C-C motif) ligand 5 (CCL5) |
| 452 | CCL8 | Num | 8 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 453 | CDH1 | Num | 8 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 454 | CHGA | Num | 8 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 455 | CRP | Num | 8 | C-reactive protein, pentraxin-related (CRP) |
| 456 | CSF2 | Num | 8 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 457 | CSTB | Num | 8 | Cystatin B (stefin B) (CSTB) |
| 458 | CXCL1 | Num | 8 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 459 | CXCL10 | Num | 8 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 460 | CXCL9 | Num | 8 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 461 | F7 | Num | 8 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 462 | FGA_FGB_FGG | Num | 8 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 463 | FTL_FTH1 | Num | 8 | Ferritin [FT(L/H1)] |
| 464 | GC | Num | 8 | Group-specific component (vitamin D binding protein) (GC) |
| 465 | HP | Num | 8 | Haptoglobin (HP) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 466 | ICAM1 | Num | 8 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 467 | IFNG | Num | 8 | Interferon, gamma (IFNG) |
| 468 | IGA | Num | 8 | Immunoglobulin A (IgA) |
| 469 | IGM | Num | 8 | Immunoglobulin M |
| 470 | IL10 | Num | 8 | Interleukin 10 (IL10) |
| 471 | IL12A_IL12B | Num | 8 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 472 | IL12B | Num | 8 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 473 | IL15 | Num | 8 | Interleukin 15 (IL15) |
| 474 | IL17A | Num | 8 | Interleukin 17 (IL17A) |
| 475 | IL18 | Num | 8 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 476 | IL1A | Num | 8 | Interleukin 1, alpha (IL1A) |
| 477 | IL1B | Num | 8 | Interleukin 1, beta (IL1B) |
| 478 | IL1RN | Num | 8 | Interleukin 1 receptor antagonist (IL1RN) |
| 479 | IL2 | Num | 8 | Interleukin 2 (IL2) |
| 480 | IL23A | Num | 8 | Interleukin 23, alpha subunit p19 (IL23A) |
| 481 | IL2RA | Num | 8 | Interleukin 2 receptor, alpha (IL2RA) |
| 482 | IL3 | Num | 8 | Interleukin 3 (IL3) |
| 483 | IL4 | Num | 8 | Interleukin 4 (IL4) |
| 484 | IL5 | Num | 8 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 485 | IL6 | Num | 8 | Interleukin 6 (interferon, beta 2) (IL6) |
| 486 | IL6R | Num | 8 | Interleukin-6 receptor (IL6R) |
| 487 | IL7 | Num | 8 | Interleukin 7 (IL7) |
| 488 | IL8 | Num | 8 | Interleukin 8 (IL8) |
| 489 | KIT | Num | 8 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 490 | KITLG | Num | 8 | KIT ligand (KITLG) |
| 491 | LPA | Num | 8 | Lipoprotein, (Lp(a) (LPA) |
| 492 | LTA | Num | 8 | Lymphotoxin alpha (LTA) |
| 493 | LTF | Num | 8 | Lactotransferrin |
| 494 | MB | Num | 8 | Myoglobin (MB) |
| 495 | MMP3 | Num | 8 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 496 | MMP9 | Num | 8 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 497 | NGF | Num | 8 | Nerve growth gactor (beta polypeptide) (NGF) |
| 498 | NRCAM | Num | 8 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 499 | S100A12 | Num | 8 | S100 calcium binding protein A12 (ENRAGE) |
| 500 | S100B | Num | 8 | S100 calcium binding protein B (S100B) |
| 501 | SELE | Num | 8 | Selectin E (SELE) |
| 502 | SERPINA1 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 503 | SERPINA7 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 504 | SERPINE1 | Num | 8 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 505 | SHBG | Num | 8 | Sex Hormone-Binding Globulin (SHBG) |
| 506 | SLPI | Num | 8 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 507 | SOD1 | Num | 8 | Superoxide Dismutase 1, soluble (SOD1) |
| 508 | SORT1 | Num | 8 | Sortilin 1 (SORT1) |
| 509 | SPINK1 | Num | 8 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 510 | TGFB1_LAP | Num | 8 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 511 | TIMP1 | Num | 8 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 512 | TIMP2 | Num | 8 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 513 | TNF | Num | 8 | Tumor necrosis factor (TNF) |
| 514 | TNFRSF11B | Num | 8 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 515 | TNFRSF1A | Num | 8 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 516 | TNFRSF1B | Num | 8 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 517 | VCAM1 | Num | 8 | Vascular cell adhesion molecule 1 (VCAM1) |
| 518 | VEGFA | Num | 8 | Vascular endothelial growth factor (VEGFA) |
| 519 | VTN | Num | 8 | Vitronectin |
| 520 | VWF | Num | 8 | von Willebrand Factor (vWF) |
| 521 | ANGPT1_UNIT | Char | 5 | Analyte unit |
| 522 | ANGPT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 523 | ANGPT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 524 | ANGPT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 525 | ANGPT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 526 | AXL_UNIT | Char | 5 | Analyte unit |
| 527 | AXL_LOW_RANGE | Char | 5 | Low range for analyte |
| 528 | AXL_HIGH_RANGE | Char | 5 | High range for analyte |
| 529 | AXL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 530 | AXL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 531 | CA9_UNIT | Char | 5 | Analyte unit |
| 532 | CA9_LOW_RANGE | Char | 5 | Low range for analyte |
| 533 | CA9_HIGH_RANGE | Char | 5 | High range for analyte |
| 534 | CA9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 535 | CA9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 536 | CCL16_UNIT | Char | 5 | Analyte unit |
| 537 | CCL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 538 | CCL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 539 | CCL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 540 | CCL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 541 | CCL22_UNIT | Char | 5 | Analyte unit |
| 542 | CCL22_LOW_RANGE | Char | 5 | Low range for analyte |
| 543 | CCL22_HIGH_RANGE | Char | 5 | High range for analyte |
| 544 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 545 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 546 | CDH13_UNIT | Char | 5 | Analyte unit |
| 547 | CDH13_LOW_RANGE | Char | 5 | Low range for analyte |
| 548 | CDH13_HIGH_RANGE | Char | 5 | High range for analyte |
| 549 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 550 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 551 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 552 | CEACAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 553 | CEACAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 554 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 555 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 556 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 557 | CKM_CKB_LOW_RANGE | Char | 5 | Low range for analyte |
| 558 | CKM_CKB_HIGH_RANGE | Char | 5 | High range for analyte |
| 559 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 560 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 561 | CXCL5_UNIT | Char | 5 | Analyte unit |
| 562 | CXCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 563 | CXCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 564 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 565 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 566 | DCN_UNIT | Char | 5 | Analyte unit |
| 567 | DCN_LOW_RANGE | Char | 5 | Low range for analyte |
| 568 | DCN_HIGH_RANGE | Char | 5 | High range for analyte |
| 569 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 570 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 571 | FABP3_UNIT | Char | 5 | Analyte unit |
| 572 | FABP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 573 | FABP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 574 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 575 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 576 | FAS_UNIT | Char | 5 | Analyte unit |
| 577 | FAS_LOW_RANGE | Char | 5 | Low range for analyte |
| 578 | FAS_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 579 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 580 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 581 | HGF_UNIT | Char | 5 | Analyte unit |
| 582 | HGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 583 | HGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 584 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 585 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 586 | IGE_UNIT | Char | 4 | Analyte unit |
| 587 | IGE_LOW_RANGE | Char | 4 | Low range for analyte |
| 588 | IGE_HIGH_RANGE | Char | 4 | High range for analyte |
| 589 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 590 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 591 | IL13_UNIT | Char | 5 | Analyte unit |
| 592 | IL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 593 | IL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 594 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 595 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 596 | IL16_UNIT | Char | 5 | Analyte unit |
| 597 | IL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 598 | IL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 599 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 600 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 601 | IL18BP_UNIT | Char | 5 | Analyte unit |
| 602 | IL18BP_LOW_RANGE | Char | 5 | Low range for analyte |
| 603 | IL18BP_HIGH_RANGE | Char | 5 | High range for analyte |
| 604 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 605 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 606 | KLK3_F_UNIT | Char | 6 | Analyte unit |
| 607 | KLK3_F_LOW_RANGE | Char | 6 | Low range for analyte |
| 608 | KLK3_F_HIGH_RANGE | Char | 6 | High range for analyte |
| 609 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 610 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 611 | MDK_UNIT | Char | 5 | Analyte unit |
| 612 | MDK_LOW_RANGE | Char | 5 | Low range for analyte |
| 613 | MDK_HIGH_RANGE | Char | 5 | High range for analyte |
| 614 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 615 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 616 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 617 | NPPB_PH_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 618 | NPPB_PH_HIGH_RANGE | Char | 5 | High range for analyte |
| 619 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 620 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 621 | OLR1_UNIT | Char | 5 | Analyte unit |
| 622 | OLR1_LOW_RANGE | Char | 5 | Low range for analyte |
| 623 | OLR1_HIGH_RANGE | Char | 5 | High range for analyte |
| 624 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 625 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 626 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 627 | PECAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 628 | PECAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 629 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 630 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 631 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 632 | SFTPD_LOW_RANGE | Char | 5 | Low range for analyte |
| 633 | SFTPD_HIGH_RANGE | Char | 5 | High range for analyte |
| 634 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 635 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 636 | THBD_UNIT | Char | 5 | Analyte unit |
| 637 | THBD_LOW_RANGE | Char | 5 | Low range for analyte |
| 638 | THBD_HIGH_RANGE | Char | 5 | High range for analyte |
| 639 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 640 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 641 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 642 | TNFRSF10C_LOW_RANGE | Char | 5 | Low range for analyte |
| 643 | TNFRSF10C_HIGH_RANGE | Char | 5 | High range for analyte |
| 644 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 645 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 646 | ANGPT1 | Num | 8 | Angiopoietin 1 (ANGPT1) |
| 647 | AXL | Num | 8 | AXL Receptor Tyrosine Kinase (AXL) |
| 648 | CA9 | Num | 8 | Carbonic anhydrase IX (CA9) |
| 649 | CCL16 | Num | 8 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 650 | CCL22 | Num | 8 | chemokine (C-C motif) ligand 22 (CCL22) |
| 651 | CDH13 | Num | 8 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 652 | CEACAM1 | Num | 8 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 653 | CKM_CKB | Num | 8 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 654 | CXCL5 | Num | 8 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 655 | DCN | Num | 8 | Decorin (DCN) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 656 | FABP3 | Num | 8 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 657 | FAS | Num | 8 | Fas cell surface death receptor (FAS) |
| 658 | HGF | Num | 8 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 659 | IGE | Num | 8 | Immunoglobulin E (IgE) |
| 660 | IL13 | Num | 8 | Interleukin 13 (IL13) |
| 661 | IL16 | Num | 8 | Interleukin 16 (IL16) |
| 662 | IL18BP | Num | 8 | Interleukin 18 binding protein (IL18BP) |
| 663 | KLK3_F | Num | 8 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 664 | MDK | Num | 8 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 665 | NPPB_PH | Num | 8 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 666 | OLR1 | Num | 8 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 667 | PECAM1 | Num | 8 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 668 | SFTPD | Num | 8 | Surfactant protein D (SFTPD) |
| 669 | THBD | Num | 8 | Thrombomodulin (THBD) |
| 670 | TNFRSF10C | Num | 8 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 671 | ADIPOQ_RAW | Char | 5 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 672 | SERPINA1_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 673 | A2M_RAW | Char | 5 | Alpha-2-Macroglobulin (A2M) |
| 674 | SLPI_RAW | Char | 5 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 675 | LPA_RAW | Char | 5 | Lipoprotein, (Lp(a) (LPA) |
| 676 | B2M_RAW | Char | 5 | Beta-2-microglobulin (B2M) |
| 677 | BDNF_RAW | Char | 5 | Brain-derived neurotrophic factor (BDNF) |
| 678 | CRP_RAW | Char | 5 | C-reactive protein, pentraxin-related (CRP) |
| 679 | CDH1_RAW | Char | 5 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 680 | CHGA_RAW | Char | 5 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 681 | C3_RAW | Char | 6 | Complement component C3 (C3) |
| 682 | CSTB_RAW | Char | 5 | Cystatin B (stefin B) (CSTB) |
| 683 | SELE_RAW | Char | 5 | Selectin E (SELE) |
| 684 | S100A12_RAW | Char | 5 | S100 calcium binding protein A12 (ENRAGE) |
| 685 | CCL11_RAW | Char | 5 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 686 | CCL24_RAW | Char | 5 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 687 | F7_RAW | Char | 5 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 688 | FTL_FTH1_RAW | Char | 5 | Ferritin [FT(L/H1)] |
| 689 | FGA_FGB_FGG_RAW | Char | 6 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 690 | CSF2_RAW | Char | 5 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 691 | CXCL1_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 692 | HP_RAW | Char | 5 | Haptoglobin (HP) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 693 | IGA_RAW | Char | 5 | Immunoglobulin A (IgA) |
| 694 | IGM_RAW | Char | 5 | Immunoglobulin M |
| 695 | ICAM1_RAW | Char | 5 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 696 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 697 | CXCL10_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 698 | IL1A_RAW | Char | 7 | Interleukin 1, alpha (IL1A) |
| 699 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 700 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 701 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 702 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 703 | IL3_RAW | Char | 6 | Interleukin 3 (IL3) |
| 704 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 705 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 706 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |
| 707 | IL6R_RAW | Char | 5 | Interleukin-6 receptor (IL6R) |
| 708 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 709 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 710 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 711 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 712 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 713 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 714 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 715 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 716 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 717 | LTF_RAW | Char | 5 | Lactotransferrin |
| 718 | TGFB1_LAP_RAW | Char | 5 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 719 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 720 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 721 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 722 | KIT_RAW | Char | 5 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 723 | MMP3_RAW | Char | 5 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 724 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 725 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 726 | CCL8_RAW | Char | 5 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 727 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 728 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 729 | CCL23_RAW | Char | 5 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 730 | MB_RAW | Char | 5 | Myoglobin (MB) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 731 | NGF_RAW | Char | 5 | Nerve growth gactor (beta polypeptide) (NGF) |
| 732 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 733 | TNFRSF11B_RAW | Char | 4 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 734 | SPINK1_RAW | Char | 5 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 735 | SERPINE1_RAW | Char | 5 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 736 | CCL18_RAW | Char | 5 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) |
| 737 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 738 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 739 | APCS_RAW | Char | 5 | Amyloid P-component, serum (APCS) |
| 740 | SHBG_RAW | Char | 6 | Sex Hormone-Binding Globulin (SHBG) |
| 741 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |
| 742 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |
| 743 | SOD1_RAW | Char | 5 | Superoxide Dismutase 1, soluble (SOD1) |
| 744 | CCL5_RAW | Char | 5 | chemokine (C-C motif) ligand 5 (CCL5) |
| 745 | SERPINA7_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 746 | TIMP1_RAW | Char | 5 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 747 | TIMP2_RAW | Char | 5 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 748 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 749 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 750 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 751 | TNFRSF1B_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 752 | VCAM1_RAW | Char | 5 | Vascular cell adhesion molecule 1 (VCAM1) |
| 753 | VEGFA_RAW | Char | 5 | Vascular endothelial growth factor (VEGFA) |
| 754 | GC_RAW | Char | 5 | Group-specific component (vitamin D binding protein) (GC) |
| 755 | VTN_RAW | Char | 5 | Vitronectin |
| 756 | VWF_RAW | Char | 5 | von Willebrand Factor (vWF) |
| 757 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 758 | AXL_RAW | Char | 5 | AXL Receptor Tyrosine Kinase (AXL) |
| 759 | CDH13_RAW | Char | 5 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 760 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 761 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 762 | CCL16_RAW | Char | 5 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 763 | CKM_CKB_RAW | Char | 5 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 764 | DCN_RAW | Char | 5 | Decorin (DCN) |
| 765 | CXCL5_RAW | Char | 5 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 766 | FAS_RAW | Char | 5 | Fas cell surface death receptor (FAS) |
| 767 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 768 | HGF_RAW | Char | 5 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 769 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |
| 770 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 771 | IL16_RAW | Char | 5 | Interleukin 16 (IL16) |
| 772 | IL18BP_RAW | Char | 5 | Interleukin 18 binding protein (IL18BP) |
| 773 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 774 | CCL22_RAW | Char | 5 | chemokine (C-C motif) ligand 22 (CCL22) |
| 775 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 776 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 777 | PECAM1_RAW | Char | 5 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 778 | KLK3_F_RAW | Char | 6 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 779 | SFTPD_RAW | Char | 5 | Surfactant protein D (SFTPD) |
| 780 | THBD_RAW | Char | 5 | Thrombomodulin (THBD) |
| 781 | TNFRSF10C_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 782 | A2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 783 | ADIPOQ_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 784 | AGER_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 785 | ANGPT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 786 | APCS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 787 | AXL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 788 | B2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 789 | BDNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 790 | C3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 791 | CA9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 792 | CCL11_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 793 | CCL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 794 | CCL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 795 | CCL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 796 | CCL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 797 | CCL20_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 798 | CCL22_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 799 | CCL23_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 800 | CCL24_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 801 | CCL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 802 | CCL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 803 | CCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 804 | CCL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 805 | CDH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 806 | CDH13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 807 | CEACAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 808 | CHGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 809 | CKM_CKB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 810 | CRP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 811 | CSF2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 812 | CSTB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 813 | CXCL1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 814 | CXCL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 815 | CXCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 816 | CXCL9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 817 | DCN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 818 | F7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 819 | FABP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 820 | FAS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 821 | FGA_FGB_FGG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 822 | FTL_FTH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 823 | GC_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 824 | HGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 825 | HP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 826 | ICAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 827 | IFNG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 828 | IGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 829 | IGE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 830 | IGM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 831 | IL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 832 | IL12A_IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 833 | IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 834 | IL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 835 | IL15_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 836 | IL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 837 | IL17A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 838 | IL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 839 | IL18BP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 840 | IL1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 841 | IL1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 842 | IL1RN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 843 | IL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 844 | IL23A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 845 | IL2RA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 846 | IL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 847 | IL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 848 | IL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 849 | IL6_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 850 | IL6R_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 851 | IL7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 852 | IL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 853 | KIT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 854 | KITLG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 855 | KLK3_F_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 856 | LPA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 857 | LTA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 858 | LTF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 859 | MB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 860 | MDK_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 861 | MMP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 862 | MMP9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 863 | NGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 864 | NPPB_PH_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 865 | NRCAM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 866 | OLR1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 867 | PECAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 868 | S100A12_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 869 | S100B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 870 | SELE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 871 | SERPINA1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 872 | SERPINA7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 873 | SERPINE1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 874 | SFTPD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 875 | SHBG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 876 | SLPI_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 877 | SOD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 878 | SORT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 879 | SPINK1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 880 | TGFB1_LAP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 881 | THBD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 882 | TIMP1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 883 | TIMP2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 884 | TNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 885 | TNFRSF10C_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 886 | TNFRSF11B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 887 | TNFRSF1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 888 | TNFRSF1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 889 | VCAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 890 | VEGFA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 891 | VTN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 892 | VWF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 893 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 894 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 895 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 896 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 897 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 898 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 899 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 900 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 901 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 902 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 903 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 904 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 905 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 906 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 907 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 908 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 909 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 910 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 911 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 912 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 913 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 914 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 915 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 916 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 917 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 918 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 919 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 920 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 921 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 922 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 923 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 924 | CXCL1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 925 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 926 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 927 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 928 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 929 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 930 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 931 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 932 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 933 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 934 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 935 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 936 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 937 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 938 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 939 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 940 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 941 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 942 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 943 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 944 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 945 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 946 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 947 | IL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 948 | IL17A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 949 | IL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 950 | IL18BP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 951 | IL1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 952 | IL1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 953 | IL1RN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 954 | IL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 955 | IL23A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 956 | IL2RA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 957 | IL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 958 | IL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 959 | IL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 960 | IL6_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 961 | IL6R_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 962 | IL7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 963 | IL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 964 | KIT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 965 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 966 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 967 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 968 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 969 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 970 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 971 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 972 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 973 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 974 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 975 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 976 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 977 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 978 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 979 | S100A12_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 980 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 981 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 982 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 983 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 984 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 985 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 986 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 987 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 988 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 989 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 990 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 991 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 992 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 993 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 994 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 995 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 996 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 997 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 998 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 999 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1000 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1001 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1002 | VTN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1003 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |

Data Set Name: r1_ant_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | ANT01 | Char | 1 | ANT01 Assessment of ability to stand |
| 6 | ANT02 | Num | 8 | ANT02 Standing Height (cm) |
| 7 | ANT03 | Num | 8 | ANT03 Weight (kg) |
| 8 | ANT04 | Num | 8 | ANT04 BMI |
| 9 | ANT05 | Num | 8 | ANT05 Arm Span (cm) |
| 10 | ANT06A | Num | 8 | ANT06A Waist (cm) |
| 11 | ANT06B | Num | 8 | ANT06B Hip (cm) |
| 12 | ANT06C | Num | 8 | ANT06C Neck (cm) |
| 13 | VERSION | Char | 21 | Version |
| 14 | ANT0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_beq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | VISIT |
| 5 | BEQ01 | Char | 1 | BEQ01 Breathing Problems last 12 months |
| 6 | BEQ02 | Num | 8 | BEQ02 Number of breathing problem episodes last 12 months |
| 7 | BEQ03A | Char | 1 | BEQ03A First episode: additional antibiotics after contacting healthcare provider |
| 8 | BEQ03B | Char | 1 | BEQ03B First episode: additional oral steroids after contacting healthcare provider |
| 9 | BEQ03C | Char | 1 | BEQ03C First episode: additional antibiotics without contacting healthcare provider |
| 10 | BEQ03D | Char | 1 | BEQ03D First episode: additional oral steroids without contacting healthcare provider |
| 11 | BEQ03E | Char | 1 | BEQ03E First episode: evaluated at physician's office or urgent care |
| 12 | BEQ03E1 | Num | 8 | BEQ03E1 First episode: additional antibiotics after office visit |
| 13 | BEQ03E2 | Num | 8 | BEQ03E2 First episode: additional oral steroids after office visit |
| 14 | BEQ03E3 | Num | 8 | BEQ03E3 First episode: do not know treatment after office visit |
| 15 | BEQ03E4 | Num | 8 | BEQ03E4 First episode: do not remember treatment after office visit |
| 16 | BEQ03F | Char | 1 | BEQ03F First episode: evaluated in an Emergency Department |
| 17 | BEQ03F1 | Num | 8 | BEQ03F1 First episode: additional antibiotics after ED visit |
| 18 | BEQ03F2 | Num | 8 | BEQ03F2 First episode: additional oral steroids after ED visit |
| 19 | BEQ03F3 | Num | 8 | BEQ03F3 First episode: do not know treatment after ED visit |
| 20 | BEQ03F4 | Num | 8 | BEQ03F4 First episode: do not remember treatment after ED visit |
| 21 | BEQ03G | Char | 1 | BEQ03G First episode: admitted to hospital |
| 22 | BEQ04 | Char | 1 | BEQ04 Was there a second episode of breathing problems |
| 23 | BEQ05A | Char | 1 | BEQ05A Second episode: additional antibiotics after contacting healthcare provider |
| 24 | BEQ05B | Char | 1 | BEQ05B Second episode: additional oral steroids after contacting healthcare provider |
| 25 | BEQ05C | Char | 1 | BEQ05C Second episode: additional antibiotics without contacting healthcare provider |
| 26 | BEQ05D | Char | 1 | BEQ05D Second episode: additional oral steroids without contacting healthcare provider |
| 27 | BEQ05E | Char | 1 | BEQ05E Second episode: evaluated at physician's office or urgent care |
| 28 | BEQ05E1 | Num | 8 | BEQ05E1 Second episode: additional antibiotics after office visit |
| 29 | BEQ05E2 | Num | 8 | BEQ05E2 Second episode: additional oral steroids after office visit |
| 30 | BEQ05E3 | Num | 8 | BEQ05E3 Second episode: do not know treatment after office visit |
| 31 | BEQ05E4 | Num | 8 | BEQ05E4 Second episode: do not remember treatment after office visit |
| 32 | BEQ05F | Char | 1 | BEQ05F Second episode: evaluated in an Emergency Department |
| 33 | BEQ05F1 | Num | 8 | BEQ05F1 Second episode: additional antibiotics after ED visit |
| 34 | BEQ05F2 | Num | 8 | BEQ05F2 Second episode: additional oral steroids after ED visit |
| 35 | BEQ05F3 | Num | 8 | BEQ05F3 Second episode: do not know treatment after ED visit |
| 36 | BEQ05F4 | Num | 8 | BEQ05F4 Second episode: do not remember treatment after ED visit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BEQ05G | Char | 1 | BEQ05G Second episode: admitted to hospital |
| 38 | BEQ06 | Char | 1 | BEQ06 Was there a Third episode of breathing problems |
| 39 | BEQ07A | Char | 1 | BEQ07A Third episode: additional antibiotics after contacting healthcare provider |
| 40 | BEQ07B | Char | 1 | BEQ07B Third episode: additional oral steroids after contacting healthcare provider |
| 41 | BEQ07C | Char | 1 | BEQ07C Third episode: additional antibiotics without contacting healthcare provider |
| 42 | BEQ07D | Char | 1 | BEQ07D Third episode: additional oral steroids without contacting healthcare provider |
| 43 | BEQ07E | Char | 1 | BEQ07E Third episode: evaluated at physician's office or urgent care |
| 44 | BEQ07E1 | Num | 8 | BEQ07E1 Third episode: additional antibiotics after office visit |
| 45 | BEQ07E2 | Num | 8 | BEQ07E2 Third episode: additional oral steroids after office visit |
| 46 | BEQ07E3 | Num | 8 | BEQ07E3 Third episode: do not know treatment after office visit |
| 47 | BEQ07E4 | Num | 8 | BEQ07E4 Third episode: do not remember treatment after office visit |
| 48 | BEQ07F | Char | 1 | BEQ07F Third episode: evaluated in an Emergency Department |
| 49 | BEQ07F1 | Num | 8 | BEQ07F1 Third episode: additional antibiotics after ED visit |
| 50 | BEQ07F2 | Num | 8 | BEQ07F2 Third episode: additional oral steroids after ED visit |
| 51 | BEQ07F3 | Num | 8 | BEQ07F3 Third episode: do not know treatment after ED visit |
| 52 | BEQ07F4 | Num | 8 | BEQ07F4 Third episode: do not remember treatment after ED visit |
| 53 | BEQ07G | Char | 1 | BEQ07G Third episode: admitted to hospital |
| 54 | BEQ08 | Char | 1 | BEQ08 Was there a Fourth episode of breathing problems |
| 55 | BEQ09A | Char | 1 | BEQ09A Fourth episode: additional antibiotics after contacting healthcare provider |
| 56 | BEQ09B | Char | 1 | BEQ09B Fourth episode: additional oral steroids after contacting healthcare provider |
| 57 | BEQ09C | Char | 1 | BEQ09C Fourth episode: additional antibiotics without contacting healthcare provider |
| 58 | BEQ09D | Char | 1 | BEQ09D Fourth episode: additional oral steroids without contacting healthcare provider |
| 59 | BEQ09E | Char | 1 | BEQ09E Fourth episode: evaluated at physician's office or urgent care |
| 60 | BEQ09E1 | Num | 8 | BEQ09E1 Fourth episode: additional antibiotics after office visit |
| 61 | BEQ09E2 | Num | 8 | BEQ09E2 Fourth episode: additional oral steroids after office visit |
| 62 | BEQ09E3 | Num | 8 | BEQ09E3 Fourth episode: do not know treatment after office visit |
| 63 | BEQ09E4 | Num | 8 | BEQ09E4 Fourth episode: do not remember treatment after office visit |
| 64 | BEQ09F | Char | 1 | BEQ09F Fourth episode: evaluated in an Emergency Department |
| 65 | BEQ09F1 | Num | 8 | BEQ09F1 Fourth episode: additional antibiotics after ED visit |
| 66 | BEQ09F2 | Num | 8 | BEQ09F2 Fourth episode: additional oral steroids after ED visit |
| 67 | BEQ09F3 | Num | 8 | BEQ09F3 Fourth episode: do not know treatment after ED visit |
| 68 | BEQ09F4 | Num | 8 | BEQ09F4 Fourth episode: do not remember treatment after ED visit |
| 69 | BEQ09G | Char | 1 | BEQ09G Fourth episode: admitted to hospital |
| 70 | BEQ10 | Char | 1 | BEQ10 Was there a Fifth episode of breathing problems |
| 71 | BEQ11A | Char | 1 | BEQ11A Fifth episode: additional antibiotics after contacting healthcare provider |
| 72 | BEQ11B | Char | 1 | BEQ11B Fifth episode: additional oral steroids after contacting healthcare provider |
| 73 | BEQ11C | Char | 1 | BEQ11C Fifth episode: additional antibiotics without contacting healthcare provider |
| 74 | BEQ11D | Char | 1 | BEQ11D Fifth episode: additional oral steroids without contacting healthcare provider |
| 75 | BEQ11E | Char | 1 | BEQ11E Fifth episode: evaluated at physician's office or urgent care |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BEQ11E1 | Num | 8 | BEQ11E1 Fifth episode: additional antibiotics after office visit |
| 77 | BEQ11E2 | Num | 8 | BEQ11E2 Fifth episode: additional oral steroids after office visit |
| 78 | BEQ11E3 | Num | 8 | BEQ11E3 Fifth episode: do not know treatment after office visit |
| 79 | BEQ11E4 | Num | 8 | BEQ11E4 Fifth episode: do not remember treatment after office visit |
| 80 | BEQ11F | Char | 1 | BEQ11F Fifth episode: evaluated in an Emergency Department |
| 81 | BEQ11F1 | Num | 8 | BEQ11F1 Fifth episode: additional antibiotics after ED visit |
| 82 | BEQ11F2 | Num | 8 | BEQ11F2 Fifth episode: additional oral steroids after ED visit |
| 83 | BEQ11F3 | Num | 8 | BEQ11F3 Fifth episode: do not know treatment after ED visit |
| 84 | BEQ11F4 | Num | 8 | BEQ11F4 Fifth episode: do not remember treatment after ED visit |
| 85 | BEQ11G | Char | 1 | BEQ11G Fifth episode: admitted to hospital |
| 86 | BEQ12 | Char | 1 | BEQ12 Was there a Sixth episode of breathing problems |
| 87 | BEQ13A | Char | 1 | BEQ13A Sixth episode: additional antibiotics after contacting healthcare provider |
| 88 | BEQ13B | Char | 1 | BEQ13B Sixth episode: additional oral steroids after contacting healthcare provider |
| 89 | BEQ13C | Char | 1 | BEQ13C Sixth episode: additional antibiotics without contacting healthcare provider |
| 90 | BEQ13D | Char | 1 | BEQ13D Sixth episode: additional oral steroids without contacting healthcare provider |
| 91 | BEQ13E | Char | 1 | BEQ13E Sixth episode: evaluated at physician's office or urgent care |
| 92 | BEQ13E1 | Num | 8 | BEQ13E1 Sixth episode: additional antibiotics after office visit |
| 93 | BEQ13E2 | Num | 8 | BEQ13E2 Sixth episode: additional oral steroids after office visit |
| 94 | BEQ13E3 | Num | 8 | BEQ13E3 Sixth episode: do not know treatment after office visit |
| 95 | BEQ13E4 | Num | 8 | BEQ13E4 Sixth episode: do not remember treatment after office visit |
| 96 | BEQ13F | Char | 1 | BEQ13F Sixth episode: evaluated in an Emergency Department |
| 97 | BEQ13F1 | Num | 8 | BEQ13F1 Sixth episode: additional antibiotics after ED visit |
| 98 | BEQ13F2 | Num | 8 | BEQ13F2 Sixth episode: additional oral steroids after ED visit |
| 99 | BEQ13F3 | Num | 8 | BEQ13F3 Sixth episode: do not know treatment after ED visit |
| 100 | BEQ13F4 | Num | 8 | BEQ13F4 Sixth episode: do not remember treatment after ED visit |
| 101 | BEQ13G | Char | 1 | BEQ13G Sixth episode: admitted to hospital |
| 102 | VERSION | Char | 21 | VERSION |
| 103 | BEQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_bio_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | BIO01 | Char | 1 | BIO01 Fasting before appointment? |
| 6 | BIO02 | Char | 5 | BIO02 Time most recently eaten |
| 7 | BIO02_AMPM | Char | 1 | BIO02_AMPM Recently eaten AM/PM |
| 8 | BIO04 | Char | 5 | BIO04 Collection time |
| 9 | BIO04_AMPM | Char | 1 | BIO04_AMPM Blood collection time AM/PM |
| 10 | BIO05 | Num | 8 | BIO05 Number of venipuncture attempts |
| 11 | BIO06 | Char | 1 | BIO06 Incidents/Problems drawing blood? |
| 12 | BIO07A1 | Num | 8 | BIO07A1 Tube 1 Sample Not Drawn |
| 13 | BIO07A2 | Num | 8 | BIO07A2 Tube 2 Sample Not Drawn |
| 14 | BIO07A3 | Num | 8 | BIO07A3 Tube 3 Sample Not Drawn |
| 15 | BIO07A4 | Num | 8 | BIO07A4 Tube 4 Sample Not Drawn |
| 16 | BIO07A5 | Num | 8 | BIO07A5 Tube 5 Sample Not Drawn |
| 17 | BIO07A6 | Num | 8 | BIO07A6 Tube 6 Sample Not Drawn |
| 18 | BIO07A7 | Num | 8 | BIO07A7 Tube 7 Sample Not Drawn |
| 19 | BIO07A8 | Num | 8 | BIO07A8 Tube 8 Sample Not Drawn |
| 20 | BIO07A9 | Num | 8 | BIO07A9 Tube 9 Sample Not Drawn |
| 21 | BIO07B1 | Num | 8 | BIO07B1 Tube 1 Partial sample drawn |
| 22 | BIO07B2 | Num | 8 | BIO07B2 Tube 2 Partial sample drawn |
| 23 | BIO07B3 | Num | 8 | BIO07B3 Tube 3 Partial sample drawn |
| 24 | BIO07B4 | Num | 8 | BIO07B4 Tube 4 Partial sample drawn |
| 25 | BIO07B5 | Num | 8 | BIO07B5 Tube 5 Partial sample drawn |
| 26 | BIO07B6 | Num | 8 | BIO07B6 Tube 6 Partial sample drawn |
| 27 | BIO07B7 | Num | 8 | BIO07B7 Tube 7 Partial sample drawn |
| 28 | BIO07B8 | Num | 8 | BIO07B8 Tube 8 Partial sample drawn |
| 29 | BIO07B9 | Num | 8 | BIO07B9 Tube 9 Partial sample drawn |
| 30 | BIO07C1 | Num | 8 | BIO07C1 Tube 1 Tourniquet reapplied |
| 31 | BIO07C2 | Num | 8 | BIO07C2 Tube 2 Tourniquet reapplied |
| 32 | BIO07C3 | Num | 8 | BIO07C3 Tube 3 Tourniquet reapplied |
| 33 | BIO07C4 | Num | 8 | BIO07C4 Tube 4 Tourniquet reapplied |
| 34 | BIO07C5 | Num | 8 | BIO07C5 Tube 5 Tourniquet reapplied |
| 35 | BIO07C6 | Num | 8 | BIO07C6 Tube 6 Tourniquet reapplied |
| 36 | BIO07C7 | Num | 8 | BIO07C7 Tube 7 Tourniquet reapplied |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BIO07C8 | Num | 8 | BIO07C8 Tube 8 Tourniquet reapplied |
| 38 | BIO07C9 | Num | 8 | BIO07C9 Tube 9 Tourniquet reapplied |
| 39 | BIO07D1 | Num | 8 | BIO07D1 Tube 1 Fist clenching |
| 40 | BIO07D2 | Num | 8 | BIO07D2 Tube 2 Fist clenching |
| 41 | BIO07D3 | Num | 8 | BIO07D3 Tube 3 Fist clenching |
| 42 | BIO07D4 | Num | 8 | BIO07D4 Tube 4 Fist clenching |
| 43 | BIO07D5 | Num | 8 | BIO07D5 Tube 5 Fist clenching |
| 44 | BIO07D6 | Num | 8 | BIO07D6 Tube 6 Fist clenching |
| 45 | BIO07D7 | Num | 8 | BIO07D7 Tube 7 Fist clenching |
| 46 | BIO07D8 | Num | 8 | BIO07D8 Tube 8 Fist clenching |
| 47 | BIO07D9 | Num | 8 | BIO07D9 Tube 9 Fist clenching |
| 48 | BIO07E1 | Num | 8 | BIO07E1 Tube 1 Needle movement |
| 49 | BIO07E2 | Num | 8 | BIO07E2 Tube 2 Needle movement |
| 50 | BIO07E3 | Num | 8 | BIO07E3 Tube 3 Needle movement |
| 51 | BIO07E4 | Num | 8 | BIO07E4 Tube 4 Needle movement |
| 52 | BIO07E5 | Num | 8 | BIO07E5 Tube 5 Needle movement |
| 53 | BIO07E6 | Num | 8 | BIO07E6 Tube 6 Needle movement |
| 54 | BIO07E7 | Num | 8 | BIO07E7 Tube 7 Needle movement |
| 55 | BIO07E8 | Num | 8 | BIO07E8 Tube 8 Needle movement |
| 56 | BIO07E9 | Num | 8 | BIO07E9 Tube 9 Needle movement |
| 57 | BIO07F1 | Num | 8 | BIO07F1 Tube 1 Participant reclining |
| 58 | BIO07F2 | Num | 8 | BIO07F2 Tube 2 Participant reclining |
| 59 | BIO07F3 | Num | 8 | BIO07F3 Tube 3 Participant reclining |
| 60 | BIO07F4 | Num | 8 | BIO07F4 Tube 4 Participant reclining |
| 61 | BIO07F5 | Num | 8 | BIO07F5 Tube 5 Participant reclining |
| 62 | BIO07F6 | Num | 8 | BIO07F6 Tube 6 Participant reclining |
| 63 | BIO07F7 | Num | 8 | BIO07F7 Tube 7 Participant reclining |
| 64 | BIO07F8 | Num | 8 | BIO07F8 Tube 8 Participant reclining |
| 65 | BIO07F9 | Num | 8 | BIO07F9 Tube 9 Participant reclining |
| 66 | BIO08 | Char | 2000 | BIO08 Other problems drawing blood |
| 67 | BIO10A | Char | 5 | BIO10A Tube 1: Time processed |
| 68 | BIO10A_AMPM | Char | 1 | BIO10A_AMPM Tube 1: Processed AM/PM |
| 69 | BIO10B | Char | 1 | BIO10B Tube 1: Problems Processing? |
| 70 | BIO10B1 | Num | 8 | BIO10B1 Tube 1: Broken tube |
| 71 | BIO10B2 | Num | 8 | BIO10B2 Tube 1: Sample re-centrifuged |
| 72 | BIO10B3 | Num | 8 | BIO10B3 Tube 1: Clotted |
| 73 | BIO10B4 | Num | 8 | BIO10B4 Tube 1: Hemolyzed |
| 74 | BIO10B5 | Num | 8 | BIO10B5 Tube 1: Lipemic |
| 75 | BIO10B6 | Num | 8 | BIO10B6 Tube 1: Other |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BIO10C | Num | 8 | BIO10C Tube 1: Number of aliquots |
| 77 | BIO10D | Num | 8 | BIO10D Tube 1: Volume in last four aliquots |
| 78 | BIO10E | Num | 8 | BIO10E Tube 1: Freezer box number |
| 79 | BIO10F | Char | 5 | BIO10F Tube 1: Time aliquots placed in freezer |
| 80 | BIO10F_AMPM | Char | 1 | BIO10F_AMPM Tube 1: Freezer AM/PM |
| 81 | BIO11A | Char | 5 | BIO11A Tube 2: Time processed |
| 82 | BIO11A_AMPM | Char | 1 | BIO11A_AMPM Tube 2: Processed AM/PM |
| 83 | BIO11B | Char | 1 | BIO11B Tube 2: Problems processing? |
| 84 | BIO11B1 | Num | 8 | BIO11B1 Tube 2: Broken tube |
| 85 | BIO11B2 | Num | 8 | BIO11B2 Tube 2: Sample re-centrifuged |
| 86 | BIO11B3 | Num | 8 | BIO11B3 Tube 2: Clotted |
| 87 | BIO11B4 | Num | 8 | BIO11B4 Tube 2: Hemolyzed |
| 88 | BIO11B5 | Num | 8 | BIO11B5 Tube 2: Lipemic |
| 89 | BIO11B6 | Num | 8 | BIO11B6 Tube 2: Other |
| 90 | BIO11C | Num | 8 | BIO11C Tube 2: Number of aliquots |
| 91 | BIO11D | Num | 8 | BIO11D Tube 2: Volume in last four aliquots |
| 92 | BIO11E | Num | 8 | BIO11E Tube 2: Freezer box number |
| 93 | BIO11F | Char | 5 | BIO11F Tube 2: Time aliquots placed in freezer |
| 94 | BIO11F_AMPM | Char | 1 | BIO11F_AMPM Tube 2: Freezer AM/PM |
| 95 | BIO12A | Char | 5 | BIO12A Tube 3: Time processed |
| 96 | BIO12A_AMPM | Char | 1 | BIO12A_AMPM Tube 3: Processed AM/PM |
| 97 | BIO12B | Char | 1 | BIO12B Tube 3: Problems processing? |
| 98 | BIO12B1 | Num | 8 | BIO12B1 Tube 3: Broken tube |
| 99 | BIO12B2 | Num | 8 | BIO12B2 Tube 3: Sample re-centrifuged |
| 100 | BIO12B3 | Num | 8 | BIO12B3 Tube 3: Clotted |
| 101 | BIO12B4 | Num | 8 | BIO12B4 Tube 3: Hemolyzed |
| 102 | BIO12B5 | Num | 8 | BIO12B5 Tube 3: Lipemic |
| 103 | BIO12B6 | Num | 8 | BIO12B6 Tube 3: Other |
| 104 | BIO12C | Num | 8 | BIO12C Tube 3: Number of aliquots |
| 105 | BIO12D | Num | 8 | BIO12D Tube 3: Volume in last four aliquots |
| 106 | BIO12E | Num | 8 | BIO12E Tube 3: Freezer box number |
| 107 | BIO12F | Char | 5 | BIO12F Tube 3: Time aliquots placed in freezer |
| 108 | BIO12F_AMPM | Char | 1 | BIO12F_AMPM Tube 3: Freezer AM/PM |
| 109 | BIO13A | Char | 5 | BIO13A Tube 4: Time processed |
| 110 | BIO13A_AMPM | Char | 1 | BIO13A_AMPM Tube 4:Processed AM/PM |
| 111 | BIO13B | Char | 1 | BIO13B Tube 4: Problems processing? |
| 112 | BIO13B1 | Num | 8 | BIO13B1 Tube 4: Broken tube |
| 113 | BIO13B2 | Num | 8 | BIO13B2 Tube 4: Sample re-centrifuged |
| 114 | BIO13B3 | Num | 8 | BIO13B3 Tube 4: Clotted |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BIO13B4 | Num | 8 | BIO13B4 Tube 4: Hemolyzed |
| 116 | BIO13B5 | Num | 8 | BIO13B5 Tube 4: Lipemic |
| 117 | BIO13B6 | Num | 8 | BIO13B6 Tube 4: Other |
| 118 | BIO13C | Num | 8 | BIO13C Tube 4: Number of aliquots |
| 119 | BIO13D | Num | 8 | BIO13D Tube 4: Volume in last four aliquots |
| 120 | BIO13E | Num | 8 | BIO13E Tube 4: Freezer box number |
| 121 | BIO13F | Char | 5 | BIO13F Tube 4: Time aliquots placed in freezer |
| 122 | BIO13F_AMPM | Char | 1 | BIO13F_AMPM Tube 4:Freezer AM/PM |
| 123 | BIO14A | Char | 5 | BIO14A Tube 5: Time processed |
| 124 | BIO14A_AMPM | Char | 1 | BIO14A_AMPM Tube 5:Processed AM/PM |
| 125 | BIO14B | Char | 1 | BIO14B Tube 5: Problems processing? |
| 126 | BIO14B1 | Num | 8 | BIO14B1 Tube 5: Broken tube |
| 127 | BIO14B2 | Num | 8 | BIO14B2 Tube 5: Sample re-centrifuged |
| 128 | BIO14B3 | Num | 8 | BIO14B3 Tube 5: Clotted |
| 129 | BIO14B4 | Num | 8 | BIO14B4 Tube 5: Hemolyzed |
| 130 | BIO14B5 | Num | 8 | BIO14B5 Tube 5: Lipemic |
| 131 | BIO14B6 | Num | 8 | BIO14B6 Tube 5: Other |
| 132 | BIO14C | Num | 8 | BIO14C Tube 5: Number of aliquots |
| 133 | BIO14D | Num | 8 | BIO14D Tube 5: Volume in last four aliquots |
| 134 | BIO14E | Num | 8 | BIO14E Tube 5: Freezer box number |
| 135 | BIO14F | Char | 5 | BIO14F Tube 5: Time aliquots placed in freezer |
| 136 | BIO14F_AMPM | Char | 1 | BIO14F_AMPM Tube 5:Freezer AM/PM |
| 137 | BIO15A | Char | 5 | BIO15A Tube 6: Time processed |
| 138 | BIO15A_AMPM | Char | 1 | BIO15A_AMPM Tube 6:Processed AM/PM |
| 139 | BIO15B | Char | 1 | BIO15B Tube 6: Problems processing? |
| 140 | BIO15B1 | Num | 8 | BIO15B1 Tube 6: Broken tube |
| 141 | BIO15B2 | Num | 8 | BIO15B2 Tube 6: Sample re-centrifuged |
| 142 | BIO15B3 | Num | 8 | BIO15B3 Tube 6: Clotted |
| 143 | BIO15B4 | Num | 8 | BIO15B4 Tube 6: Hemolyzed |
| 144 | BIO15B5 | Num | 8 | BIO15B5 Tube 6: Lipemic |
| 145 | BIO15B6 | Num | 8 | BIO15B6 Tube 6: Other |
| 146 | BIO15C | Num | 8 | BIO15C Tube 6: Number of aliquots |
| 147 | BIO15D | Num | 8 | BIO15D Tube 6: Volume in last four aliquots |
| 148 | BIO15E | Num | 8 | BIO15E Tube 6: Freezer box number |
| 149 | BIO15F | Char | 5 | BIO15F Tube 6: Time aliquots placed in freezer |
| 150 | BIO15F_AMPM | Char | 1 | BIO15F_AMPM Tube 6:Freezer AM/PM |
| 151 | BIO16A | Char | 5 | BIO16A Tube 7: Time sent to clinical center lab: |
| 152 | BIO16A_AMPM | Char | 1 | BIO16A_AMPM Tube 7: Sent to clinical lab AM/PM |
| 153 | BIO17A | Char | 5 | BIO17A Tube 8: Time processed |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | BIO17A_AMPM | Char | 1 | BIO17A_AMPM Tube 8:Processed AM/PM |
| 155 | BIO17B | Char | 1 | BIO17B Tube 8: Problems processing? |
| 156 | BIO17B1 | Num | 8 | BIO17B1 Tube 8: Broken tube |
| 157 | BIO17B2 | Num | 8 | BIO17B2 Tube 8: Sample re-centrifuged |
| 158 | BIO17B3 | Num | 8 | BIO17B3 Tube 8: Clotted |
| 159 | BIO17B4 | Num | 8 | BIO17B4 Tube 8: Hemolyzed |
| 160 | BIO17B5 | Num | 8 | BIO17B5 Tube 8: Lipemic |
| 161 | BIO17B6 | Num | 8 | BIO17B6 Tube 8: Other |
| 162 | BIO17C | Num | 8 | BIO17C Tube 8: Number of aliquots |
| 163 | BIO17D | Num | 8 | BIO17D Tube 8: Volume in last four aliquots |
| 164 | BIO17E | Num | 8 | BIO17E Tube 8: Freezer box number |
| 165 | BIO17F | Char | 5 | BIO17F Tube 8: Time aliquots placed in freezer |
| 166 | BIO17F_AMPM | Char | 1 | BIO17F_AMPM Tube 8:Freezer AM/PM |
| 167 | BIO18B | Char | 5 | BIO18B Tube 9: Time placed in freezer |
| 168 | BIO18B_AMPM | Char | 1 | BIO18B_AMPM Tube 9:Freezer AM/PM |
| 169 | BIO18C | Char | 1 | BIO18C Tube 9: Problems processing? |
| 170 | BIO18C1 | Num | 8 | BIO18C1 Tube 9: Broken tube |
| 171 | BIO18C2 | Num | 8 | BIO18C2 Tube 9: Sample re-centrifuged |
| 172 | BIO18C3 | Num | 8 | BIO18C3 Tube 9: Clotted |
| 173 | BIO18C4 | Num | 8 | BIO18C4 Tube 9: Hemolyzed |
| 174 | BIO18C5 | Num | 8 | BIO18C5 Tube 9: Lipemic |
| 175 | BIO18C6 | Num | 8 | BIO18C6 Tube 9: Other |
| 176 | BIO18D | Num | 8 | BIO18D Tube 9: Freezer box number |
| 177 | BIO19 | Char | 1 | BIO19 Urine sample collected |
| 178 | BIO21 | Char | 5 | BIO21 Time urine sample collected |
| 179 | BIO21_AMPM | Char | 1 | BIO21_AMPM urine sample collected AM/PM |
| 180 | BIO22 | Char | 5 | BIO22 Time urine sample processed |
| 181 | BIO22_AMPM | Char | 1 | BIO22 AMPM urine sample processed AM/PM |
| 182 | BIO23 | Num | 8 | BIO23 Number of aliquots with preservative: |
| 183 | BIO24 | Num | 8 | BIO24 Number of aliquots without preservative: |
| 184 | BIO25 | Char | 1 | BIO25 Able to become pregnant? |
| 185 | BIO26 | Char | 1 | BIO26 Pregnancy test requested? |
| 186 | BIO26A | Char | 1 | BIO26A Pregnant? |
| 187 | BIO28 | Char | 2000 | BIO28 Comment on processing/collection |
| 188 | BIO24A | Char | 5 | BIO24A Time urine sample entered freezer |
| 189 | BIO24A_AMPM | Char | 1 | BIO24A_AMPM |
| 190 | VERSION | Char | 21 | Version |
| 191 | BIO0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 192 | BIO03_DAYS | Num | 8 | BIO03 Date of blood collection - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 193 | BIO18A_DAYS | Num | 8 | BIO18A Tube 9: Date placed in freezer - Days from enrollment |
| 194 | BIO20_DAYS | Num | 8 | BIO20 Date of urine sample: - Days from enrollment |

## Data Set Name: r1_bmh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | VISIT |
| 5 | BMH01 | Char | 1 | BMH01 Recent hospitalizations |
| 6 | BMH01A | Char | 2000 | BHM01A Describe Hosp 1 |
| 7 | BMH01B | Char | 2000 | BMH01B Describe Hosp 2 |
| 8 | BMH01C | Char | 2000 | BMH01C Describe Hosp 3 |
| 9 | BMH01D | Char | 2000 | BMH01D Describe Hosp 4 |
| 10 | BMH02 | Char | 1 | BMH02 Recent emergency care visit |
| 11 | BMH02A | Char | 2000 | BMH02A Describe Emergency Visit 1 |
| 12 | BMH02B | Char | 2000 | BMH02B Describe Emergency Visit 2 |
| 13 | BMH02C | Char | 2000 | BMH02C Describe Emergency Visit 3 |
| 14 | BMH03 | Char | 1 | BMH03 Any surgeries? |
| 15 | BMH03A | Char | 2000 | BMH03A Describe surgery 1 |
| 16 | BMH03D | Char | 2000 | BMH03D Describe surgery 4 |
| 17 | BMH03E | Char | 2000 | BMH03E Describe surgery 5 |
| 18 | BMH03F | Char | 2000 | BMH03F Describe surgery 6 |
| 19 | BMH03G | Char | 2000 | BMH03G Describe surgery 7 |
| 20 | BMH03H | Char | 2000 | BMH03H Describe surgery 8 |
| 21 | BMH03I | Char | 2000 | BMH03I Describe surgery 9 |
| 22 | BMH04 | Char | 1 | BMH04 Yearly flu shot |
| 23 | BMH05 | Char | 1 | BMH05 Date of most recent pneumoia vaccine |
| 24 | BMH06 | Char | 1 | BMH06 Alpha-1 anti-trypsin deficiency |
| 25 | BMH07A | Char | 1 | BMH07A Vision problems |
| 26 | BMH07B | Char | 1 | BMH07B Hearing problems |
| 27 | BMH07C | Char | 1 | BMH07C Dizziness |
| 28 | BMH07C1 | Char | 75 | BMH07C1 Explain: Dizziness |
| 29 | BMH07D | Char | 1 | BMH07D Ears ringing |
| 30 | BMH07D1 | Char | 75 | BMH07D1 Explain: Ears ringing |
| 31 | BMH07E | Char | 1 | BMH07E Sinusitis / Rhinitis |
| 32 | BMH07F | Char | 1 | BMH07F Other |
| 33 | BMH07F1 | Char | 75 | BMH07F1 Explain: Other |
| 34 | BMH08A | Char | 1 | BMH08A High blood pressure |
| 35 | BMH08B | Char | 1 | BMH08B Coronary artery disease |
| 36 | BMH08C | Char | 1 | BMH08C Angina |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BMH08D | Char | 1 | BMH08D Heart attack |
| 38 | BMH08E | Char | 1 | BMH08E Murmur |
| 39 | BMH08E1 | Char | 75 | BMH08E1 Explain: Murmur |
| 40 | BMH08F | Char | 1 | BMH08F Palpitations/irregular heartbeat |
| 41 | BMH08G | Char | 1 | BMH08G Valve disease |
| 42 | BMH08G1 | Char | 75 | BMH08G1 Explain: Valve disease |
| 43 | BMH08H | Char | 1 | BMH08H Congestive heart failure |
| 44 | BMH08I | Char | 1 | BMH08I Blood clots |
| 45 | BMH08I1 | Char | 75 | BMH08I1 Explain: Blood clots |
| 46 | BMH08J | Char | 1 | BMH08J Poor circulation/claudication |
| 47 | BMH08J1 | Char | 75 | BMH08J1 Explain: Poor circulation/claudication |
| 48 | BMH08K | Char | 1 | BMH08K Other |
| 49 | BMH09A | Char | 1 | BMH09A Esophageal condition or disease |
| 50 | BMH09B | Char | 1 | BMH09B Ulcers |
| 51 | BMH09C | Char | 1 | BMH09C Hepatitis or jaundice |
| 52 | BMH09D | Char | 1 | BMH09D Crohn's disease or colitis |
| 53 | BMH09E | Char | 1 | BMH09E Gallstones |
| 54 | BMH09F | Char | 1 | BMH09F Cirrhosis |
| 55 | BMH09G | Char | 1 | BMH09G GERD/heart burn |
| 56 | BMH09H | Char | 1 | BMH09H Hiatal hernia |
| 57 | BMH09I | Char | 1 | BMH09I Other |
| 58 | BMH09I1 | Char | 75 | BMH09I1 Explain: Other |
| 59 | BMH10A | Char | 1 | BMH10A Intubation or respirator |
| 60 | BMH10B | Char | 1 | BMH10B Pneumothorax/collapsed lung |
| 61 | BMH10C | Char | 1 | BMH10C Tuberculosis |
| 62 | BMH10D | Char | 1 | BMH10D Pulmonary fibrosis |
| 63 | BMH10E | Char | 1 | BMH10E Lung nodules |
| 64 | BMH10F | Char | 1 | BMH10F Pulmonary embolism |
| 65 | BMH10G | Char | 1 | BMH10G Other |
| 66 | BMH11A | Char | 1 | BMH11A Cancer except basal cell skin cancer |
| 67 | BMH11B | Char | 1 | BMH11B Anemia |
| 68 | BMH11BEXP | Char | 75 | BMH11BEXP Explain: Anemia |
| 69 | BMH11C | Char | 1 | BMH11C Other |
| 70 | BMH12A | Char | 1 | BMH12A Menstrual symptoms |
| 71 | BMH12B | Char | 1 | BMH12B Enlarged prostate or BPH |
| 72 | BMH12C | Char | 1 | BMH12C Bladder or kidney problems/kidney stones |
| 73 | BMH12D | Char | 1 | BMH12D Other |
| 74 | BMH13A | Char | 1 | BMH13A Diabetes |
| 75 | BMH13B | Char | 1 | BMH13B Thyroid |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | BMH13C | Char | 1 | BMH13C Other |
| 77 | BMH14A | Char | 1 | BMH14A Stroke |
| 78 | BMH14B | Char | 1 | BMH14B Headaches |
| 79 | BMH14B1 | Char | 75 | BMH14B1 Explain: Headaches |
| 80 | BMH14C | Char | 1 | BMH14C Seizure |
| 81 | BMH14D | Char | 1 | BMH14D Other |
| 82 | BMH15A | Char | 1 | BMH15A Rheumatoid arthritis |
| 83 | BMH15A1 | Char | 75 | BMH15A1 Explain: Rheumatoid arthritis |
| 84 | BMH15B | Char | 1 | BMH15B Gout |
| 85 | BMH15C | Char | 1 | BMH15C Osteoporosis |
| 86 | BMH15D | Char | 1 | BMH15D Fractures |
| 87 | BMH15E | Char | 1 | BMH15E Joint pain |
| 88 | BMH15F | Char | 1 | BMH15F Osteoarthritis |
| 89 | BMH15G | Char | 1 | BMH15G Other |
| 90 | BMH16A | Char | 1 | BMH16A Rashes/hives/eczema |
| 91 | BMH16A1 | Char | 75 | BMH16A1 Explain: Rashes/hives/eczema |
| 92 | BMH16B | Char | 1 | BMH16B Psoriasis |
| 93 | BMH16C | Char | 1 | BMH16C Shingles |
| 94 | BMH16D | Char | 1 | BMH16D Other |
| 95 | BMH17A | Char | 1 | BMH17A Atypical mycobacteria/MAC/MAI |
| 96 | BMH17B | Char | 1 | BMH17B Fungal disease |
| 97 | BMH17B1 | Char | 75 | BMH17B1 Explain: Fungal disease |
| 98 | BMH17C | Char | 1 | BMH17C Other |
| 99 | BMH18A | Char | 1 | BMH18A Anxiety |
| 100 | BMH18B | Char | 1 | BMH18B Depression |
| 101 | BMH18C | Char | 1 | BMH18C Other |
| 102 | BMH18C1 | Char | 75 | BMH18C1 Explain: Other |
| 103 | BMH19 | Char | 1 | BMH19 Other significant problems |
| 104 | BMH19A | Char | 50 | BMH19A Other Significiant problem 1 |
| 105 | BMH19B | Char | 50 | BMH19B Other Significiant problem 2 |
| 106 | BMH20A | Char | 1 | BMH20A Fever/ cold/flu/ sore throat in the last two weeks |
| 107 | BMH20B | Char | 1 | BMH20B UTI in the last two weeks |
| 108 | BMH20C | Char | 1 | BMH20C Seasonal allergies in the last two weeks |
| 109 | BMH20D | Char | 1 | BMH20D Sinus infection/sinusitis in the last two weeks |
| 110 | BMH20E | Char | 1 | BMH20E Tooth infection in the last two weeks |
| 111 | BMH20F | Char | 1 | BMH20F Flare up of gout in the last two weeks |
| 112 | BMH20G | Char | 1 | BMH20G Flare up of arthritis in the last two weeks |
| 113 | BMH20H | Char | 1 | BMH20H Other illness in the last two weeks |
| 114 | BMH21 | Char | 1 | BMH21 Allergies to medication/substances |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | BMH21A | Char | 50 | BMH21A Allergy 1 |
| 116 | BMH21A1 | Char | 50 | BMH21A1 Reaction 1 |
| 117 | BMH21B | Char | 50 | BMH21B Allergy 2 |
| 118 | BMH21B1 | Char | 50 | BMH21B1 Reaction 2 |
| 119 | BMH21C | Char | 50 | BMH21C Allergy 3 |
| 120 | BMH21C1 | Char | 50 | BMH21C1 Reaction 3 |
| 121 | BMH21D | Char | 50 | BMH21D Allergy 4 |
| 122 | BMH21D1 | Char | 50 | BMH21D1 Reaction 4 |
| 123 | BMH21E | Char | 50 | BMH21D Allergy 5 |
| 124 | BMH21E1 | Char | 50 | BMH21D1 Reaction 5 |
| 125 | BMH22 | Char | 1 | BMH22 Alcoholic beverages frequency |
| 126 | BMH23 | Char | 1 | BMH23 Number of drinks per sitting |
| 127 | BMH24_1 | Num | 8 | BMH24_1 Beer |
| 128 | BMH24_2 | Num | 8 | BMH24_2 Wine |
| 129 | BMH24_3 | Num | 8 | BMH24_3 Drinks containing liquor |
| 130 | BMH25 | Char | 1 | BMH25 Frequency of 8+ drinks |
| 131 | BMH26 | Char | 1 | BMH26 Frequency of memory lapse |
| 132 | BMH27 | Char | 1 | BMH27 Frequency of failing expectations |
| 133 | BMH28 | Char | 1 | BMH28 Concerns about alcohol consumption |
| 134 | BMH29 | Num | 8 | BMH29 Age of starting monthly menstruation |
| 135 | BMH30 | Char | 1 | BMH30 Reached menopause |
| 136 | BMH31 | Num | 8 | BMH31 Age of reaching menopause |
| 137 | BMH32 | Char | 1 | BMH32 Usage of oral contraceptive medications |
| 138 | BMH33 | Num | 8 | BMH33 Years of oral contraceptive usage |
| 139 | BMH34 | Char | 1 | BMH34 Usage of hormone replacement therapy? |
| 140 | BMH35 | Num | 8 | BMH35 Years of hormone replacement therapy usage |
| 141 | BMH36 | Char | 1 | BMH36 Any pregnancies |
| 142 | BMH37 | Num | 8 | BMH37 Age at first pregnancy |
| 143 | BMH38 | Num | 8 | BMH38 Number of pregnancies |
| 144 | BMH39 | Char | 1 | BMH39 Breastfeeding |
| 145 | BMH40 | Num | 8 | BMH40 Total months breastfeeding |
| 146 | BMH41 | Char | 1 | BMH41 Ovary removal |
| 147 | BMH42 | Char | 1 | BMH42 One or both ovaries removed |
| 148 | BMH43 | Num | 8 | BMH43 Age of ovary removal |
| 149 | BMH03D1Y | Num | 8 | Year of Appx date: |
| 150 | BMH03E1Y | Num | 8 | Year of Appx date: |
| 151 | BMH04B | Char | 1 | 4b) Did you get an influenza vaccination (flu shot) in the last 12 months? |
| 152 | BMH10H | Char | 1 | h) Wedge resection |
| 153 | VERSION | Char | 21 | VERSION |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 154 | BMH0A_DAYS | Num | 8 | BMH0A Form Date - Days from enrollment |
| 155 | BMH01A1_DAYS | Num | 8 | BMH01A1 Approximate date Hosp 1 - Days from enrollment |
| 156 | BMH01B1_DAYS | Num | 8 | BMH01B1 Approximate date Hosp 2 - Days from enrollment |
| 157 | BMH02A1_DAYS | Num | 8 | BMH02A1 Approximate date Emergency Visit 1 - Days from enrollment |
| 158 | BMH02B1_DAYS | Num | 8 | BMH02B1 Approximate date Emergency Visit 2 - Days from enrollment |
| 159 | BMH02C1_DAYS | Num | 8 | BMH02C1 Approximate date Emergency Visit 3 - Days from enrollment |
| 160 | BMH03A1_DAYS | Num | 8 | BMH03A1 Approximate date surgery 1 - Days from enrollment |
| 161 | BMH03B1_DAYS | Num | 8 | BMH03B1 Approximate date surgery 2 - Days from enrollment |
| 162 | BMH03C1_DAYS | Num | 8 | BMH03C1 Approximate date surgery 3 - Days from enrollment |
| 163 | BMH03F1_DAYS | Num | 8 | BMH03F1 Approximate date surgery 6 - Days from enrollment |
| 164 | BMH03G1_DAYS | Num | 8 | BMH03G1 Approximate date surgery 7 - Days from enrollment |
| 165 | BMH03D1_MONTHS | Num | 8 | BMH03D1 Approximate date surgery 4 - Months from enrollment |
| 166 | BMH03E1_MONTHS | Num | 8 | BMH03E1 Approximate date surgery 5 - Months from enrollment |

Data Set Name: r1_bpf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | BPF01 | Char | 1 | BPF01 Right arm blood pressure |
| 6 | BPF02 | Num | 8 | BPF02 Arm circumference |
| 7 | BPF03 | Char | 1 | BPF03 Cuff size |
| 8 | BPF04 | Num | 8 | BPF04 Respiration Rate |
| 9 | BPF05 | Char | 5 | BPF05 Time first blood pressure taken |
| 10 | BPF05_AMPM | Char | 1 | BPF05_AMPM first bp measurement AM/PM |
| 11 | BPF05A | Num | 8 | BPF05A First Systolic |
| 12 | BPF05B | Num | 8 | BPF05B First Diastolic |
| 13 | BPF05C | Num | 8 | BPF05C First Heart Rate |
| 14 | BPF06 | Char | 5 | BPF06 Time second blood pressure taken: |
| 15 | BPF06_AMPM | Char | 1 | BPF06_AMPM second BP measurement AM/PM |
| 16 | BPF06A | Num | 8 | BPF05A Second Systolic |
| 17 | BPF06B | Num | 8 | BPF05B Second Diastolic |
| 18 | BPF06C | Num | 8 | BPF05C Second Heart Rate |
| 19 | BPF07 | Char | 5 | BPF07 Time third blood pressure taken: |
| 20 | BPF07_AMPM | Char | 1 | BPF07_AMPM third BP measurement AM/PM |
| 21 | BPF07A | Num | 8 | BPF05A Third Systolic |
| 22 | BPF07B | Num | 8 | BPF05B Third Diastolic |
| 23 | BPF07C | Num | 8 | BPF05C Third Heart Rate |
| 24 | BPF08A | Num | 8 | BPF08A Average Systolic |
| 25 | BPF08B | Num | 8 | BPF08B Average Diastolic |
| 26 | BPF08C | Num | 8 | BPF08C Average Heart Rate |
| 27 | VERSION | Char | 21 | Version |
| 28 | BPF0A_DAYS | Num | 8 | BPF0A Form Date - Days from enrollment |
|  |  |  |  |  |

Data Set Name: r1_bsq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | BSQ01 | Char | 1 | BSQ01 Snore |
| 6 | BSQ02 | Num | 8 | BSQ02 Describe snore |
| 7 | BSQ03 | Num | 8 | BSQ03 Snoring frequency |
| 8 | BSQ04 | Char | 1 | BSQ04 Bothersome snoring |
| 9 | BSQ05 | Num | 8 | BSQ05 Breathing during sleep |
| 10 | BSQ06 | Char | 1 | BSQ06 Fatigue after sleep |
| 11 | BSQ07 | Char | 1 | BSQ07 Fatigue during waking time |
| 12 | BSQ08 | Char | 1 | BSQ08 Fatigue while driving |
| 13 | BSQ09 | Char | 1 | BSQ09 Frequency of fatigue while driving |
| 14 | BSQ10 | Char | 1 | BSQ10 High blood pressure |
| 15 | VERSION | Char | 21 | Version |
| 16 | BSQ_APNEARISK01 | Char | 5 | Baseline Berlin Sleep apnea risk |
| 17 | BSQ0A_DAYS | Num | 8 | BSQ0A Form Date - Days from enrollment |

Data Set Name: r1_cat_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | CAT01 | Char | 1 | CAT01 Never cough |
| 6 | CAT02 | Char | 1 | CAT02 No phlegm |
| 7 | CAT03 | Char | 1 | CAT03 No chest tightness |
| 8 | CAT04 | Char | 1 | CAT04 Not out of breath |
| 9 | CAT05 | Char | 1 | CAT05 Not limited at home |
| 10 | CAT06 | Char | 1 | CAT06 Confidence leaving home |
| 11 | CAT07 | Char | 1 | CAT07 Sound sleeping |
| 12 | CAT08 | Char | 1 | CAT08 Energy level |
| 13 | VERSION | Char | 21 | Version |
| 14 | CAT0A_DAYS | Num | 8 | CAT0A Form Date - Days from enrollment |

## Data Set Name: r1_ct_pi10_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | VISIT | Char | 10 | study visit |
| 4 | STUDY_TIME | Num | 8 | Time of scan - 0008,0030$)$ StudyTime |
| 5 | SERIES_NAME | Char | 26 | Series name - $0008,103 e)$ SeriesDescription |
| 6 | SERIES_TIME | Num | 8 | Time the series was reconstructed - 0008,0031 ) SeriesTime |
| 7 | MANUFACTURER | Char | 18 | Manufacturer of scanner - $(0008,0070)$ Manufacturer |
| 8 | MODEL | Char | 24 | Model of scanner - $(0008,1090)$ ManufacturersModelName |
| 9 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 10 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) |
| 11 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan |
| 12 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan |
| 13 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan |
| 14 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan |
| 15 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan |
| 16 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator of incorrect radiation dose issues in CT scan |
| 17 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan |
| 18 | PI10_LB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB1 path and subtree |
| 19 | PI10_LB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB1 path and subtree |
| 20 | PI10_LB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB10 path and subtree |
| 21 | PI10_LB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB10 path and subtree |
| 22 | PI10_LB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB4 path and subtree |
| 23 | PI10_LB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB4 path and subtree |
| 24 | PI10_RB1_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB1 path and subtree |
| 25 | PI10_RB1_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB1 path and subtree |
| 26 | PI10_RB10_PATH_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB10 path and subtree |
| 27 | PI10_RB10_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB10 path and subtree |
| 28 | PI10_RB4_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB4 path and subtree |
| 29 | PI10_RB4_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB4 path and subtree |
| 30 | PI10_WHOLE_TREE_ALL | Num | 8 | Pi10 value for all airways on whole airway tree |
| 31 | PI10_WHOLE_TREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on whole airway tree |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 32 | PI10_LEFT_LUNG_ALL | Num | 8 | Pi10 value for all airways on left lung |
| 33 | PI10_LEFT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on left lung |
| 34 | PI10_RIGHT_LUNG_ALL | Num | 8 | Pi10 value for all airways on right lung |
| 35 | PI10_RIGHT_LUNG_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on right lung |
| 36 | PI10_LEFT_UPPER_LOBE_ALL | Num | 8 | Pi10 value for all airways on left upper lobe |
| 37 | PI10_LEFT_UPPER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on left upper lobe |
| 38 | PI10_LEFT_LOWER_LOBE_ALL | Num | 8 | Pi10 value for all airways on left lower lobe |
| 39 | PI10_LEFT_LOWER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on left lower lobe |
| 40 | PI10_RIGHT_UPPER_LOBE_ALL | Num | 8 | Pi10 value for all airways on right upper lobe |
| 41 | PI10_RIGHT_UPPER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on right upper lobe |
| 42 | PI10_RIGHT_MIDDLE_LOBE_ALL | Num | 8 | Pi10 value for all airways on right middle lobe |
| 43 | PI10_RIGHT_MIDDLE_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on right middle lobe |
| 44 | PI10_RIGHT_LOWER_LOBE_ALL | Num | 8 | Pi10 value for all airways on right lower lobe |
| 45 | PI10_RIGHT_LOWER_LOBE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on right lower lobe |
| 46 | PI10_LB2_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB2 path and subtree |
| 47 | PI10_LB2_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB2 path and subtree |
| 48 | PI10_LB3_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB3 path and subtree |
| 49 | PI10_LB3_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB3 path and subtree |
| 50 | PI10_LB5_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB5 path and subtree |
| 51 | PI10_LB5_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB5 path and subtree |
| 52 | PI10_LB6_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB6 path and subtree |
| 53 | PI10_LB6_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB6 path and subtree |
| 54 | PI10_LB8_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB8 path and subtree |
| 55 | PI10_LB8_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB8 path and subtree |
| 56 | PI10_LB9_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on LB9 path and subtree |
| 57 | PI10_LB9_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on LB9 path and subtree |
| 58 | PI10_RB2_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB2 path and subtree |
| 59 | PI10_RB2_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB2 path and subtree |
| 60 | PI10_RB3_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB3 path and subtree |
| 61 | PI10_RB3_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter $<=20 \mathrm{~mm}$ on RB3 path and subtree |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 62 | PI10_RB5_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB5 path and subtree |
| 63 | PI10_RB5_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB5 path and <br> subtree |
| 64 | PI10_RB6_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB6 path and subtree |
| 65 | PI10_RB6_PATH_SUBTREE_LEQ20 | Num | 8 | Pi10 value for airways with an inner perimeter <= 20mm on RB6 path and <br> subtree |
| 66 | PI10_RB7_PATH_AND_SUBTREE_ALL | Num | 8 | Pi10 value for all airways on RB7 path and subtree |

## Data Set Name: r1_ct_rv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | VISIT | Char | 10 | Study visit |
| 4 | STUDY_TIME | Char | 8 | Time of scan - 00008,0030 ) StudyTime |
| 5 | SERIES_NAME | Char | 25 | Series name - $(0008,103 \mathrm{e})$ SeriesDescription |
| 6 | SERIES_TIME | Char | 8 | Time the series was reconstructed - 0008,0031 ) SeriesTime |
| 7 | MANUFACTURER | Char | 18 | Manufacturer of scanner - $(0008,0070)$ Manufacturer |
| 8 | MODEL | Char | 24 | Model of scanner - (0008,1090) ManufacturersModelName |
| 9 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 10 | MA | Num | 8 | X-ray tube current |
| 11 | PIXEL_SPACING | Num | 8 | Pixel size |
| 12 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) at Residual Volume (RV) |
| 13 | BOTH_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for both lungs at Residual Volume (RV) |
| 14 | BOTH_PCT_BE_950 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 15 | BOTH_PCT_BE_910 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 16 | BOTH_PCT_BE_856 | Num | 8 | Both lungs: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 17 | BOTH_PCT_AE_0 | Num | 8 | Both lungs: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 18 | BOTH_MEAN | Num | 8 | Both lungs: Mean lung density at Residual Volume (RV) |
| 19 | BOTH_SD | Num | 8 | Both lungs: Standard deviation of mean lung density at Residual Volume (RV) |
| 20 | BOTH_SKEW | Num | 8 | Both lungs: Skewness of lung density histogram at Residual Volume (RV) |
| 21 | BOTH_KURT | Num | 8 | Both lungs: Kurtosis of lung density histogram at Residual Volume (RV) |
| 22 | BOTH_AIR_V | Num | 8 | Both lungs: Total air volume at Residual Volume (RV) |
| 23 | BOTH_TIS_V | Num | 8 | Both lungs: Total tissue volume at Residual Volume (RV) |
| 24 | BOTH_TOT_V | Num | 8 | Both lungs: Total volume at Residual Volume (RV) |
| 25 | BOTH_HU15 | Num | 8 | Both lungs: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 26 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung at Residual Volume (RV) |
| 27 | LEFT_PCT_BE_950 | Num | 8 | Left lung: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 28 | LEFT_PCT_BE_910 | Num | 8 | Left lung: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 29 | LEFT_PCT_BE_856 | Num | 8 | Left lung: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 30 | LEFT_PCT_AE_0 | Num | 8 | Left lung: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 31 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Residual Volume (RV) |
| 32 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 33 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Residual Volume (RV) |
| 34 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 35 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Residual Volume (RV) |
| 36 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Residual Volume (RV) |
| 37 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Residual Volume (RV) |
| 38 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 39 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Residual Volume (RV) |
| 40 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 41 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 42 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 43 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 44 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Residual Volume (RV) |
| 45 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Residual Volume (RV) |
| 46 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Residual Volume (RV) |
| 47 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Residual Volume (RV) |
| 48 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Residual Volume (RV) |
| 49 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Residual Volume (RV) |
| 50 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Residual Volume (RV) |
| 51 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 52 | TLL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLL lung at Residual Volume (RV) |
| 53 | TLL_PCT_BE_950 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 54 | TLL_PCT_BE_910 | Num | 8 | Left lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 55 | TLL_PCT_BE_856 | Num | 8 | Left lower third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 56 | TLL_PCT_AE_0 | Num | 8 | Left lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 57 | TLL_MEAN | Num | 8 | Left lower third: Mean lung density at Residual Volume (RV) |
| 58 | TLL_SD | Num | 8 | Left lower third: Standard deviation of mean lung density at Residual Volume (RV) |
| 59 | TLL_SKEW | Num | 8 | Left lower third: Skewness of lung density histogram at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 60 | TLL_KURT | Num | 8 | Left lower third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 61 | TLL_AIR_V | Num | 8 | Left lower third: Total air volume at Residual Volume (RV) |
| 62 | TLL_TIS_V | Num | 8 | Left lower third: Total tissue volume at Residual Volume (RV) |
| 63 | TLL_TOT_V | Num | 8 | Left lower third: Total volume at Residual Volume (RV) |
| 64 | TLL_HU15 | Num | 8 | Left lower third: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 65 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Residual Volume (RV) |
| 66 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 67 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 68 | TLM_PCT_BE_856 | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 69 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 70 | TLM_MEAN | Num | 8 | Left middle third: Mean lung density at Residual Volume (RV) |
| 71 | TLM_SD | Num | 8 | Left middle third: Standard deviation of mean lung density at Residual Volume (RV) |
| 72 | TLM_SKEW | Num | 8 | Left middle third: Skewness of lung density histogram at Residual Volume (RV) |
| 73 | TLM_KURT | Num | 8 | Left middle third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 74 | TLM_AIR_V | Num | 8 | Left middle third: Total air volume at Residual Volume (RV) |
| 75 | TLM_TIS_V | Num | 8 | Left middle third: Total tissue volume at Residual Volume (RV) |
| 76 | TLM_TOT_V | Num | 8 | Left middle third: Total volume at Residual Volume (RV) |
| 77 | TLM_HU15 | Num | 8 | Left middle third: Location of the lowest $15 \%$ Hounsfield unit at Residual Volume (RV) |
| 78 | TLU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLU lung at Residual Volume (RV) |
| 79 | TLU_PCT_BE_950 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 80 | TLU_PCT_BE_910 | Num | 8 | Left upper third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 81 | TLU_PCT_BE_856 | Num | 8 | Left upper third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 82 | TLU_PCT_AE_0 | Num | 8 | Left upper third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 83 | TLU_MEAN | Num | 8 | Left upper third: Mean lung density at Residual Volume (RV) |
| 84 | TLU_SD | Num | 8 | Left upper third: Standard deviation of mean lung density at Residual Volume (RV) |
| 85 | TLU_SKEW | Num | 8 | Left upper third: Skewness of lung density histogram at Residual Volume (RV) |
| 86 | TLU_KURT | Num | 8 | Left upper third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 87 | TLU_AIR_V | Num | 8 | Left upper third: Total air volume at Residual Volume (RV) |
| 88 | TLU_TIS_V | Num | 8 | Left upper third: Total tissue volume at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 89 | TLU_TOT_V | Num | 8 | Left upper third: Total volume at Residual Volume (RV) |
| 90 | TLU_HU15 | Num | 8 | Left upper third: Location of the lowest 15\% Hounsfield unit at Residual Volume (RV) |
| 91 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Residual Volume (RV) |
| 92 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 93 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 94 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 95 | TRL_PCT_AE_0 | Num | 8 | Right lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 96 | TRL_MEAN | Num | 8 | Right lower third: Mean lung density at Residual Volume (RV) |
| 97 | TRL_SD | Num | 8 | Right lower third: Standard deviation of mean lung density at Residual Volume (RV) |
| 98 | TRL_SKEW | Num | 8 | Right lower third: Skewness of lung density histogram at Residual Volume (RV) |
| 99 | TRL_KURT | Num | 8 | Right lower third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 100 | TRL_AIR_V | Num | 8 | Right lower third: Total air volume at Residual Volume (RV) |
| 101 | TRL_TIS_V | Num | 8 | Right lower third: Total tissue volume at Residual Volume (RV) |
| 102 | TRL_TOT_V | Num | 8 | Right lower third: Total volume at Residual Volume (RV) |
| 103 | TRL_HU15 | Num | 8 | Right lower third: Location of the lowest $15 \%$ Hounsfield unit at Residual Volume (RV) |
| 104 | TRM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRM lung at Residual Volume (RV) |
| 105 | TRM_PCT_BE_950 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Residual Volume (RV) |
| 106 | TRM_PCT_BE_910 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Residual Volume (RV) |
| 107 | TRM_PCT_BE_856 | Num | 8 | Right middle third: Percentage of low attenuation area below and -856 Hounsfield units at Residual Volume (RV) |
| 108 | TRM_PCT_AE_0 | Num | 8 | Right middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Residual Volume (RV) |
| 109 | TRM_MEAN | Num | 8 | Right middle third: Mean lung density at Residual Volume (RV) |
| 110 | TRM_SD | Num | 8 | Right middle third: Standard deviation of mean lung density at Residual Volume (RV) |
| 111 | TRM_SKEW | Num | 8 | Right middle third: Skewness of lung density histogram at Residual Volume (RV) |
| 112 | TRM_KURT | Num | 8 | Right middle third: Kurtosis of lung density histogram at Residual Volume (RV) |
| 113 | TRM_AIR_V | Num | 8 | Right middle third: Total air volume at Residual Volume (RV) |
| 114 | TRM_TIS_V | Num | 8 | Right middle third: Total tissue volume at Residual Volume (RV) |
| 115 | TRM_TOT_V | Num | 8 | Right middle third: Total volume at Residual Volume (RV) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 116 | TRM_HU15 | Num | 8 | Right middle third: Location of the lowest 15\% Hounsfield unit at Residual <br> Volume (RV) |
| 117 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Residual Volume (RV) |
| 118 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Residual Volume (RV) |
| 119 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including <br> -910 Hounsfield units at Residual Volume (RV) |
| 120 | TRU_PCT_BE_856 | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Residual Volume (RV) |
| 121 | TRU_PCT_AE_0 | Num | 8 | Right upper third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Residual Volume (RV) |
| 122 | TRU_MEAN | Num | 8 | Right upper third: Mean lung density at Residual Volume (RV) |

## Data Set Name: r1_ct_tlc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | VISIT | Char | 10 | Study visit |
| 4 | STUDY_TIME | Num | 8 | Time of scan - 00008,0030 ) StudyTime |
| 5 | SERIES_NAME | Char | 26 | Series name - $(0008,103 \mathrm{e})$ SeriesDescription |
| 6 | SERIES_TIME | Num | 8 | Time the series was reconstructed - $(0008,0031)$ SeriesTime |
| 7 | MANUFACTURER | Char | 18 | Manufacturer of scanner - $(0008,0070)$ Manufacturer |
| 8 | MODEL | Char | 24 | Model of scanner - (0008,1090) ManufacturersModelName |
| 9 | KERNEL | Char | 8 | Convolution kernel used when reconstructing this scan - $(0018,1210)$ ConvolutionKernel |
| 10 | MA | Num | 8 | X-ray tube current |
| 11 | PIXEL_SPACING | Num | 8 | pixel size |
| 12 | ANALYSIS_STATUS | Char | 12 | Indicator of analysis status of CT scan (passed, problem scan, or rejected) at Total Lung Capacity (TLC) |
| 13 | QA_INCORRECTPROTOCOL | Char | 5 | Indicator that incorrect protocol was followed during CT scan at Total Lung Capacity (TLC) |
| 14 | QA_METALARTIFACT | Char | 5 | Indicator of metal artifact in CT scan at Total Lung Capacity (TLC) |
| 15 | QA_FIELDOFVIEWISSUES | Char | 5 | Indicator of field of view issues during CT scan at Total Lung Capacity (TLC) |
| 16 | QA_MOTIONARTIFACT | Char | 5 | Indicator of motion artifact in CT scan at Total Lung Capacity (TLC) |
| 17 | QA_MISSINGSLICES | Char | 5 | Indicator of missing slices in CT scan at Total Lung Capacity (TLC) |
| 18 | QA_RADIATIONDOSEDEVIATION | Char | 5 | Indicator of incorrect radiation dose issues in CT scan at Total Lung Capacity (TLC) |
| 19 | QA_OTHERS | Char | 5 | Indicator of other quality assurance issues in CT scan at Total Lung Capacity (TLC) |
| 20 | BOTH_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for both lungs at Total Lung Capacity (TLC) |
| 21 | BOTH_PCT_BE_950 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 22 | BOTH_PCT_BE_910 | Num | 8 | Both lungs: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 23 | BOTH_PCT_BE_856 | Num | 8 | Both lungs: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 24 | BOTH_PCT_AE_0 | Num | 8 | Both lungs: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 25 | BOTH_MEAN | Num | 8 | Both lungs: Mean lung density at Total Lung Capacity (TLC) |
| 26 | BOTH_SD | Num | 8 | Both lungs: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 27 | BOTH_SKEW | Num | 8 | Both lungs: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 28 | BOTH_KURT | Num | 8 | Both lungs: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 29 | BOTH_AIR_V | Num | 8 | Both lungs: Total air volume at Total Lung Capacity (TLC) |
| 30 | BOTH_TIS_V | Num | 8 | Both lungs: Total tissue volume at Total Lung Capacity (TLC) |
| 31 | BOTH_TOT_V | Num | 8 | Both lungs: Total volume at Total Lung Capacity (TLC) |
| 32 | BOTH_HU15 | Num | 8 | Both lungs: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 33 | LEFT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for left lung at Total Lung Capacity (TLC) |
| 34 | LEFT_PCT_BE_950 | Num | 8 | Left lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 35 | LEFT_PCT_BE_910 | Num | 8 | Left lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 36 | LEFT_PCT_BE_856 | Num | 8 | Left lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 37 | LEFT_PCT_AE_0 | Num | 8 | Left lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 38 | LEFT_MEAN | Num | 8 | Left lung: Mean lung density at Total Lung Capacity (TLC) |
| 39 | LEFT_SD | Num | 8 | Left lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 40 | LEFT_SKEW | Num | 8 | Left lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 41 | LEFT_KURT | Num | 8 | Left lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 42 | LEFT_AIR_V | Num | 8 | Left lung: Total air volume at Total Lung Capacity (TLC) |
| 43 | LEFT_TIS_V | Num | 8 | Left lung: Total tissue volume at Total Lung Capacity (TLC) |
| 44 | LEFT_TOT_V | Num | 8 | Left lung: Total volume at Total Lung Capacity (TLC) |
| 45 | LEFT_HU15 | Num | 8 | Left lung: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 46 | LL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LL lung at Total Lung Capacity (TLC) |
| 47 | LL_PCT_BE_950 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 48 | LL_PCT_BE_910 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 49 | LL_PCT_BE_856 | Num | 8 | Left lower lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 50 | LL_PCT_AE_0 | Num | 8 | Left lower lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 51 | LL_MEAN | Num | 8 | Left lower lobe: Mean lung density at Total Lung Capacity (TLC) |
| 52 | LL_SD | Num | 8 | Left lower lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 53 | LL_SKEW | Num | 8 | Left lower lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 54 | LL_KURT | Num | 8 | Left lower lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 55 | LL_AIR_V | Num | 8 | Left lower lobe: Total air volume at Total Lung Capacity (TLC) |
| 56 | LL_TIS_V | Num | 8 | Left lower lobe: Total tissue volume at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 57 | LL_TOT_V | Num | 8 | Left lower lobe: Total volume at Total Lung Capacity (TLC) |
| 58 | LL_HU15 | Num | 8 | Left lower lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 59 | LU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for LU lung at Total Lung Capacity (TLC) |
| 60 | LU_PCT_BE_950 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 61 | LU_PCT_BE_910 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 62 | LU_PCT_BE_856 | Num | 8 | Left upper lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 63 | LU_PCT_AE_0 | Num | 8 | Left upper lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 64 | LU_MEAN | Num | 8 | Left upper lobe: Mean lung density at Total Lung Capacity (TLC) |
| 65 | LU_SD | Num | 8 | Left upper lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 66 | LU_SKEW | Num | 8 | Left upper lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 67 | LU_KURT | Num | 8 | Left upper lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 68 | LU_AIR_V | Num | 8 | Left upper lobe: Total air volume at Total Lung Capacity (TLC) |
| 69 | LU_TIS_V | Num | 8 | Left upper lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 70 | LU_TOT_V | Num | 8 | Left upper lobe: Total volume at Total Lung Capacity (TLC) |
| 71 | LU_HU15 | Num | 8 | Left upper lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 72 | RIGHT_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for right lung at Total Lung Capacity (TLC) |
| 73 | RIGHT_PCT_BE_950 | Num | 8 | Right lung: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 74 | RIGHT_PCT_BE_910 | Num | 8 | Right lung: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 75 | RIGHT_PCT_BE_856 | Num | 8 | Right lung: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 76 | RIGHT_PCT_AE_0 | Num | 8 | Right lung: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 77 | RIGHT_MEAN | Num | 8 | Right lung: Mean lung density at Total Lung Capacity (TLC) |
| 78 | RIGHT_SD | Num | 8 | Right lung: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 79 | RIGHT_SKEW | Num | 8 | Right lung: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 80 | RIGHT_KURT | Num | 8 | Right lung: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 81 | RIGHT_AIR_V | Num | 8 | Right lung: Total air volume at Total Lung Capacity (TLC) |
| 82 | RIGHT_TIS_V | Num | 8 | Right lung: Total tissue volume at Total Lung Capacity (TLC) |
| 83 | RIGHT_TOT_V | Num | 8 | Right lung: Total volume at Total Lung Capacity (TLC) |
| 84 | RIGHT_HU15 | Num | 8 | Right lung: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 85 | RL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RL lung at Total Lung Capacity (TLC) |
| 86 | RL_PCT_BE_950 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 87 | RL_PCT_BE_910 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 88 | RL_PCT_BE_856 | Num | 8 | Right lower lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 89 | RL_PCT_AE_0 | Num | 8 | Right lower lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 90 | RL_MEAN | Num | 8 | Right lower lobe: Mean lung density at Total Lung Capacity (TLC) |
| 91 | RL_SD | Num | 8 | Right lower lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 92 | RL_SKEW | Num | 8 | Right lower lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 93 | RL_KURT | Num | 8 | Right lower lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 94 | RL_AIR_V | Num | 8 | Right lower lobe: Total air volume at Total Lung Capacity (TLC) |
| 95 | RL_TIS_V | Num | 8 | Right lower lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 96 | RL_TOT_V | Num | 8 | Right lower lobe: Total volume at Total Lung Capacity (TLC) |
| 97 | RL_HU15 | Num | 8 | Right lower lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |
| 98 | RM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RM lung at Total Lung Capacity (TLC) |
| 99 | RM_PCT_BE_950 | Num | 8 | Right middle lobe: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 100 | RM_PCT_BE_910 | Num | 8 | Right middle lobe: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 101 | RM_PCT_BE_856 | Num | 8 | Right middle lobe: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 102 | RM_PCT_AE_0 | Num | 8 | Right middle lobe: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 103 | RM_MEAN | Num | 8 | Right middle lobe: Mean lung density at Total Lung Capacity (TLC) |
| 104 | RM_SD | Num | 8 | Right middle lobe: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 105 | RM_SKEW | Num | 8 | Right middle lobe: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 106 | RM_KURT | Num | 8 | Right middle lobe: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 107 | RM_AIR_V | Num | 8 | Right middle lobe: Total air volume at Total Lung Capacity (TLC) |
| 108 | RM_TIS_V | Num | 8 | Right middle lobe: Total tissue volume at Total Lung Capacity (TLC) |
| 109 | RM_TOT_V | Num | 8 | Right middle lobe: Total volume at Total Lung Capacity (TLC) |
| 110 | RM_HU15 | Num | 8 | Right middle lobe: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 111 | RU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for RU lung at Total Lung Capacity <br> (TLC) |
| 112 | RU_PCT_BE_950 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -950 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 113 | RU_PCT_BE_910 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and including -910 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 114 | RU_PCT_BE_856 | Num | 8 | Right upper lobe: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 115 | RU_PCT_AE_0 | Num | 8 | Right upper lobe: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 116 | RU_MEAN | Num | 8 | Rught upper lobe: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 137 | TLM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TLM lung at Total Lung Capacity <br> (TLC) |  |
| 138 | TLM_PCT_BE_950 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -950 Hounsfield units at Total Lung Capacity (TLC) |  |
| 139 | TLM_PCT_BE_910 | Num | 8 | Left middle third: Percentage of low attenuation area below and including <br> -910 |  |
| 140 | TLM_PCT_BE_856 |  | Num | 8 | Left middle third: Percentage of low attenuation area below and -856 <br> Hounsfield units at Total Lung Capacity (TLC) |
| 141 | TLM_PCT_AE_0 | Num | 8 | Left middle third: Percentage of low attenuation area above and including 0 <br> Hounsfield units at Total Lung Capacity (TLC) |  |
| 142 | TLM_MEAN | Num | 8 | Num | Neft middle third: Mean lung density at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 163 | TRL_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRL lung at Total Lung Capacity (TLC) |
| 164 | TRL_PCT_BE_950 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 165 | TRL_PCT_BE_910 | Num | 8 | Right lower third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 166 | TRL_PCT_BE_856 | Num | 8 | Right lower third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 167 | TRL_PCT_AE_0 | Num | 8 | Right lower third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 168 | TRL_MEAN | Num | 8 | Right lower third: Mean lung density at Total Lung Capacity (TLC) |
| 169 | TRL_SD | Num | 8 | Right lower third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 170 | TRL_SKEW | Num | 8 | Right lower third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 171 | TRL_KURT | Num | 8 | Right lower third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 172 | TRL_AIR_V | Num | 8 | Right lower third: Total air volume at Total Lung Capacity (TLC) |
| 173 | TRL_TIS_V | Num | 8 | Right lower third: Total tissue volume at Total Lung Capacity (TLC) |
| 174 | TRL_TOT_V | Num | 8 | Right lower third: Total volume at Total Lung Capacity (TLC) |
| 175 | TRL_HU15 | Num | 8 | Right lower third: Location of the lowest $15 \%$ Hounsfield unit at Total Lung Capacity (TLC) |
| 176 | TRM_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRM lung at Total Lung Capacity (TLC) |
| 177 | TRM_PCT_BE_950 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 178 | TRM_PCT_BE_910 | Num | 8 | Right middle third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 179 | TRM_PCT_BE_856 | Num | 8 | Right middle third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 180 | TRM_PCT_AE_0 | Num | 8 | Right middle third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 181 | TRM_MEAN | Num | 8 | Right middle third: Mean lung density at Total Lung Capacity (TLC) |
| 182 | TRM_SD | Num | 8 | Right middle third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 183 | TRM_SKEW | Num | 8 | Right middle third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 184 | TRM_KURT | Num | 8 | Right middle third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 185 | TRM_AIR_V | Num | 8 | Right middle third: Total air volume at Total Lung Capacity (TLC) |
| 186 | TRM_TIS_V | Num | 8 | Right middle third: Total tissue volume at Total Lung Capacity (TLC) |
| 187 | TRM_TOT_V | Num | 8 | Right middle third: Total volume at Total Lung Capacity (TLC) |
| 188 | TRM_HU15 | Num | 8 | Right middle third: Location of the lowest 15\% Hounsfield unit at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 189 | TRU_ACCEPTED_UNRELIABLE | Char | 14 | Indicator of reliability of CT scan data for TRU lung at Total Lung Capacity (TLC) |
| 190 | TRU_PCT_BE_950 | Num | 8 | Right upper third: Percentage of low attenuation area below and including -950 Hounsfield units at Total Lung Capacity (TLC) |
| 191 | TRU_PCT_BE_910 | Num | 8 | Right upper third: Percentage of low attenuation area below and including -910 Hounsfield units at Total Lung Capacity (TLC) |
| 192 | TRU_PCT_BE_856 | Num | 8 | Right upper third: Percentage of low attenuation area below and -856 Hounsfield units at Total Lung Capacity (TLC) |
| 193 | TRU_PCT_AE_0 | Num | 8 | Right upper third: Percentage of low attenuation area above and including 0 Hounsfield units at Total Lung Capacity (TLC) |
| 194 | TRU_MEAN | Num | 8 | Right upper third: Mean lung density at Total Lung Capacity (TLC) |
| 195 | TRU_SD | Num | 8 | Right upper third: Standard deviation of mean lung density at Total Lung Capacity (TLC) |
| 196 | TRU_SKEW | Num | 8 | Right upper third: Skewness of lung density histogram at Total Lung Capacity (TLC) |
| 197 | TRU_KURT | Num | 8 | Right upper third: Kurtosis of lung density histogram at Total Lung Capacity (TLC) |
| 198 | TRU_AIR_V | Num | 8 | Right upper third: Total air volume at Total Lung Capacity (TLC) |
| 199 | TRU_TIS_V | Num | 8 | Right upper third: Total tissue volume at Total Lung Capacity (TLC) |
| 200 | TRU_TOT_V | Num | 8 | Right upper third: Total volume at Total Lung Capacity (TLC) |
| 201 | TRU_HU15 | Num | 8 | Right upper third: Location of the lowest $15 \%$ Hounsfield unit at Total Lung Capacity (TLC) |
| 202 | LEFT_PCT_ABV_600 | Num | 8 | Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 203 | LEFT_PCT_ABV_650 | Num | 8 | Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 204 | RIGHT_PCT_ABV_600 | Num | 8 | right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 205 | RIGHT_PCT_ABV_650 | Num | 8 | right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 206 | BOTH_PCT_ABV_600 | Num | 8 | Both lungs: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 207 | BOTH_PCT_ABV_650 | Num | 8 | Both lungs: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 208 | LU_PCT_ABV_600 | Num | 8 | Upper Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 209 | LU_PCT_ABV_650 | Num | 8 | Upper Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 210 | LL_PCT_ABV_600 | Num | 8 | Lower Left lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 211 | LL_PCT_ABV_650 | Num | 8 | Lower Left lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 212 | RU_PCT_ABV_600 | Num | 8 | Upper right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 213 | RU_PCT_ABV_650 | Num | 8 | Upper right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 214 | RM_PCT_ABV_600 | Num | 8 | Middle right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 215 | RM_PCT_ABV_650 | Num | 8 | Middle right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 216 | RL_PCT_ABV_600 | Num | 8 | Lower right lung: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 217 | RL_PCT_ABV_650 | Num | 8 | Lower right lung: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 218 | TLU_PCT_ABV_600 | Num | 8 | Left upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 219 | TLU_PCT_ABV_650 | Num | 8 | Left upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 220 | TLM_PCT_ABV_600 | Num | 8 | Left middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 221 | TLM_PCT_ABV_650 | Num | 8 | Left middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 222 | TLL_PCT_ABV_600 | Num | 8 | Left lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 223 | TLL_PCT_ABV_650 | Num | 8 | Left lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 224 | TRU_PCT_ABV_600 | Num | 8 | right upper third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 225 | TRU_PCT_ABV_650 | Num | 8 | right upper third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 226 | TRM_PCT_ABV_600 | Num | 8 | right middle third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 227 | TRM_PCT_ABV_650 | Num | 8 | right middle third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 228 | TRL_PCT_ABV_600 | Num | 8 | right lower third: Percentage of low attenuation area above 600 Hounsfield units at Total Lung Capacity (TLC) |
| 229 | TRL_PCT_ABV_650 | Num | 8 | right lower third: Percentage of low attenuation area above 650 Hounsfield units at Total Lung Capacity (TLC) |
| 230 | PCT_EMPHYSEMA | Num | 8 | Percentage of emphysema in the lung based on -950 Hounsfield units |
| 231 | STUDY_DATE_DAYS | Num | 8 | Date of scan - Days from enrollment |
| 232 | SERIES_DATE_DAYS | Num | 8 | Date the series was reconstructed - Days from enrollment |

Data Set Name: r1_dem_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | DEM01A | Num | 8 | DEM01A Age |
| 6 | DEM02 | Char | 2 | DEM02 Highest grade completed |
| 7 | DEM03 | Char | 1 | DEM03 Marital status |
| 8 | DEM04 | Char | 1 | DEM04 Total yearly household income |
| 9 | VERSION | Char | 21 | Version |
| 10 | DEM0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_derv_cbc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | CBC03_DERV | Num | 8 | 3) Total red blood cells |
| 6 | CBC04_DERV | Num | 8 | 4) Hemoglobin |
| 7 | CBC05_DERV | Num | 8 | 5) Hemacrit |
| 8 | CBC06_DERV | Num | 8 | 6) Mean corpuscular volume |
| 9 | CBC07_DERV | Num | 8 | 7) Red blood cell distribution width |
| 10 | CBC08_DERV | Num | 8 | 8) Total white blood cells |
| 11 | CBC09_DERV | Num | 8 | 9) Neutrophil granulocyte |
| 12 | CBC10_DERV | Num | 8 | 10) Lymphocytes |
| 13 | CBC11_DERV | Num | 8 | 11) Monocytes |
| 14 | CBC12_DERV | Num | 8 | 12) Eosinophil granuloctyes |
| 15 | CBC13_DERV | Num | 8 | 13) Basophil granuloctyes |
| 16 | CBC14_DERV | Num | 8 | 14) Platelet Count |
| 17 | CBC15_DERV | Num | 8 | 15) Mean Platelet Volume |
| 18 | CBC09A_DERV | Num | 8 | 9a) Neutrophil granulocyte \% |
| 19 | CBC10A_DERV | Num | 8 | 10a) Lymphocyte \% |
| 20 | CBC11A_DERV | Num | 8 | 11a) Monocyte \% |
| 21 | CBC12A_DERV | Num | 8 | 12a) Eosinophil granuloctye \% |
| 22 | CBC13A_DERV | Num | 8 | 13a) Basophil granuloctye \% |
| 23 | VERSION | Char | 21 | Version |
| 24 | CBC0A_DERV_DAYS | Num | 8 | Form Date - Days from enrollment |
| 25 | CBC01_DERV_DAYS | Num | 8 | Date Blood Submitted to Lab - Days from enrollment |
| 26 | CBC02_DERV_DAYS | Num | 8 | Date Results Received - Days from enrollment |

## Data Set Name: r1_derv_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | BMI_AUX_CM01 | Num | 8 | BMI (computed by SC from metric units) (from ANT02,ANT03) at baseline |
| 4 | HT_CM01 | Num | 8 | Height (cm) (ANT02) at baseline |
| 5 | WT_KG01 | Num | 8 | Weight (kg) (ANT03) at baseline |
| 6 | BMI_AUX_IN01 | Num | 8 | BMI (computed by SC from imperial units) (from IEC05a,b at BASELINE) |
| 7 | GENDER | Num | 8 | Gender (1=Male,2=Female) (IEC04) |
| 8 | WT_LB01 | Num | 8 | Weight (lb) (IEC05b) |
| 9 | AGE01 | Num | 8 | Age at Baseline (years) (DEM01a) |
| 10 | ETHNICITY | Num | 8 | Ethnicity (1=Hispanic, $0=$ Non-hispanic) (DEM05 or DEM05a) |
| 11 | RACE | Num | 8 | Race (1=White,2-Black,3-Asian,4-Amer.Ind. or Pacif.Isl.,6-Mixed,7-Missing) (from DEM06a-e) |
| 12 | AGE_DERV_01 | Num | 8 | Age in years at baseline based on date of birth and date of enrollment |
| 13 | AGECAT_BY05 | Num | 8 | Age at Baseline in 5 year groupings ( $1=40-<45,2=45-<50$, $3=50-<55,4=55-<60,5=60-<65,6=65-<70,7=70-<75,8=75,<80)$ |
| 14 | AGECAT_BY10 | Num | 8 | Age at Baseline in 10 year groupings ( $1=40-<50,2=50-<60$, $3=60-<70,4=70-<80$ ) |
| 15 | PRED_FEV1_V1 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) at bestline |
| 16 | PRED_FVC_V1 | Num | 8 | Predicted FVC (computed based on gender, race/ethnicity, age, and height) at bestline |
| 17 | PRED_FEF2575_V1 | Num | 8 | Predicted FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at bestline |
| 18 | PRED_PEFR_V1 | Num | 8 | Predicted PEF rate (Computed based on gender, race/ethnicity, rage, and height) at bestline |
| 19 | PRED_FEV1FVC_V1 | Num | 8 | Predicted FEV1FVC (computed based on gender, race/ethnicity, age, and height) at bestline |
| 20 | PCT_PRE_FEV1_V1 | Num | 8 | Percentage of observed prebronchodilator FEV1 out of predicted FEV1 (100*(sfv45_Derv/pred_FEV1_V1)) at bestline |
| 21 | PCT_PRE_FVC_V1 | Num | 8 | Percentage of observed prebronchodilator FVC out of predicted FVC (100*(sfv40_Derv/pred_FVC_V1)) at bestline |
| 22 | PCT_PRE_FEV1FVC_V1 | Num | 8 | Percentage of observed prebronchodilator FEV1FVC out of predicted FEV1FVC (100*(100*pre_FEV1FVC_DERV/pred_FEV1FVC_V1)) at bestline |
| 23 | PCT_PRE_PEFR_V1 | Num | 8 | Percentage of observed prebronchodilator PEFR out of predicted PEFR (100*(sfv62_Derv/pred_PEFR_V1)) at bestline |
| 24 | PCT_PRE_SVC_V1 | Num | 8 | Percentage of observed prebronchodilator SVC out of predicted FVC (100*(ssv33_Derv/pred_FVC_V1)) at bestline |
| 25 | PCT_PRE_FEF2575_V1 | Num | 8 | Percentage of observed prebronchodilator FEF2575 out of predicted FEF2575 (100*(sfv53_Derv/pred_FEF2575_V1)) at bestline |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 26 | PCT_POST_FEV1_V1 | Num | 8 | Percentage of observed postbronchodilator FEV1 out of predicted FEV1 (100*(pfv45_Derv/pred_FEV1_V1)) at bestline |
| 27 | PCT_POST_FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FVC out of predicted FVC (100*(pfv40_Derv/pred_FVC_V1)) at bestline |
| 28 | PCT_POST_FEV1FVC_V1 | Num | 8 | Percentage of observed postbronchodilator FEV1FVC out of predicted FEV1FVC <br> (100*(100*post_FEV1FVC_DERV/pred_FEV1FVC_V1)) at bestline |
| 29 | PCT_POST_PEFR_V1 | Num | 8 | Percentage of observed postbronchodilator PEFR out of predicted PEFR (100*(pfv62_Derv/pred_PEFR_V1)) at bestline |
| 30 | PCT_POST_SVC_V1 | Num | 8 | Percentage of observed postbronchodilator SVC out of predicted FVC (100*(psv33_Derv/pred_FVC_V1)) at bestline |
| 31 | PCT_POST_FEF2575_V1 | Num | 8 | Percentage of observed postbronchodilator FEF2575 out of predicted FEF2575 (100*(pfv53_Derv/pred_FEF2575_V1)) at bestline |
| 32 | LLN_FEV1_FVC_V1 | Num | 8 | LLN for FEV1/FVC (\%) (computed based on gender, race/ethnicity, age, and height) at bestline |
| 33 | LLN_FEV1_V1 | Num | 8 | LLN for FEV1 (computed based on gender, race/ethnicity, age, and height) at bestline |
| 34 | LLN_FVC_V1 | Num | 8 | LLN for FVC (computed based on gender, race/ethnicity, age, and height) at bestline |
| 35 | LLN_FEF2575_V1 | Num | 8 | LLN for FEF25\%-75\% (Computed based on gender, race/ethnicity, rage, and height) at bestline |
| 36 | PRED_FEV1 | Num | 8 | Predicted FEV1 (computed based on gender, race/ethnicity, age, and height) |
| 37 | GOLD_STAGE_COPD_SEVERITY | Num | 8 | GOLD Stage of COPD Severity |
| 38 | ELIGIBLE | Num | 8 | IE Eligible and non-missing Stratum and excluding Not_to_be_stratified ( $1=$ Yes, $0=$ No) |
| 39 | STRATUM | Num | 8 | Enrollment stratum for SPIROMICS |
| 40 | SIX_MINUTE_WALK_DISTANCE01 | Num | 8 | Six Minute Walk Distance (m) (from SMW08a,b,c at BASELINE) |
| 41 | BODE_INDEX01 | Num | 8 | BODE Index at BASELINE |
| 42 | BRONCH_ELIGIBLE | Num | 8 | Eligible for bronchoscopy substudy (1=Yes, $0=\mathrm{No}$ ) |
| 43 | YEAR1_CONDITION | Num | 8 | condition to be included in YEAR1 tables |
| 44 | YEAR2_CONDITION | Num | 8 | condition to be included in YEAR2 tables |
| 45 | YEAR3_CONDITION | Num | 8 | condition to be included in YEAR3 tables |
| 46 | PEX_TOT0101 | Num | 8 | Total Exacerbations for baseline |
| 47 | PEX_HCUTOT0101 | Num | 8 | Exacerbations requiring HCU for baseline |
| 48 | PEX_ANTITOT0101 | Num | 8 | Exacerbations treated with antibiotics for baseline |
| 49 | PEX_STEROIDTOT0101 | Num | 8 | Exacerbations treated with steroids for baseline |
| 50 | PEX_DRUGTOT0101 | Num | 8 | Exacerbations treated with medications for baseline |
| 51 | PEX_SEVERETOT0101 | Num | 8 | Exacerbations requiring ED visit or hospitalization for baseline |
| 52 | COPDSCORE0101 | Num | 8 | COPD Assessment Test Score at visit 1 |
| 53 | GOLD_MMRC0101 | Char | 1 | Baseline GOLD status using the revised criteria and mMRC at baseline |
| 54 | GOLD_CAT0101 | Char | 1 | Baseline GOLD status using the revised criteria and CAT at baseline |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 55 | PEX_HX | Char | 20 | Exacerbation Hx - past 12 mo |
| 56 | PEX_LAST_VISIT | Char | 16 | Last Exacerbation Recorded Contact - past 12 mo |
| 57 | CB_VISIT1 | Num | 8 | Chronic Bronchitis identified at baseline |
| 58 | ASTHMA_BASELINE | Num | 8 | Baseline Asthma |
| 59 | ASTHMA_EVER_REPORTED | Num | 8 | Ever Reported Asthma |
| 60 | EMPHYSEMA_VISIT1 | Num | 8 | Possible emphysema at visit 1 |
| 61 | EYES_ENT_CONDITION01 | Num | 8 | History of Eyes, Ear, Nose, or Throat condition at baseline |
| 62 | CARDIOVASCULAR_CONDITION01 | Num | 8 | History of Cardiovascular condition at baseline |
| 63 | GI_CONDITION01 | Num | 8 | History of Gastrointestinal condition at baseline |
| 64 | PULMONARY_VASCULAR_CONDITION01 | Num | 8 | History of Pulmonary/vascular condition at baseline |
| 65 | ONCOLOGY_HEMA_CONDITION01 | Num | 8 | History of Oncology/hematology condition at baseline |
| 66 | GENITOURINARY_CONDITION01 | Num | 8 | History of Genitourinary and Reproductive condition at baseline |
| 67 | ENDOCRINE_CONDITION01 | Num | 8 | History of Endocrine condition at baseline |
| 68 | MUSCULAR_SKELETAL_CONDITION01 | Num | 8 | History of Muscular/skeletal condition at baseline |
| 69 | DERMATOLOGY_CONDITION01 | Num | 8 | History of Dermatology condition at baseline |
| 70 | INFECTIOUS_DISEASE_CONDITION01 | Num | 8 | History of Infectious disease condition at baseline |
| 71 | PSYCHIATRIC_CONDITION01 | Num | 8 | History of Psychiatric condition at baseline |
| 72 | CB_FATHER01 | Num | 8 | Father has a reported history of chronic bronchitis at baseline ( $1=$ Yes, 2=No, Unknowns treated as missing) |
| 73 | CB_MOTHER01 | Num | 8 | Mother has a reported history of chronic bronchitis |
| 74 | EMPHYSEMA_FATHER01 | Num | 8 | Father has a reported history of Emphysema |
| 75 | EMPHYSEMA_MOTHER01 | Num | 8 | Mother has a reported history of Emphysema |
| 76 | COPD_FATHER01 | Num | 8 | Father has a reported history of COPD |
| 77 | COPD_MOTHER01 | Num | 8 | Mother has a reported history of COPD |
| 78 | ASTHMA_FATHER01 | Num | 8 | Father has a reported history of Asthma |
| 79 | ASTHMA_MOTHER01 | Num | 8 | Mother has a reported history of Asthma |
| 80 | LUNGCA_FATHER01 | Num | 8 | Father has a reported history of Lung Cancer |
| 81 | LUNGCA_MOTHER01 | Num | 8 | Mother has a reported history of Lung Cancer |
| 82 | CB_DIAGNOSED01 | Num | 8 | Chronic bronchitis diagnosed by a health professional reported at baseline (Yes=1, No=0, Unknowns treated as missing) |
| 83 | EMPHYSEMA_DIAGNOSED01 | Num | 8 | Emphysema diagnosed by a health professional reported at baseline |
| 84 | COPD_DIAGNOSED01 | Num | 8 | COPD diagnosed by a health professional reported at baseline |
| 85 | APNEA_DIAGNOSED01 | Num | 8 | Sleep apnea diagnosed by a health professional reported at baseline |
| 86 | MCQ_TOT01 | Num | 8 | Total MCQ score at baseline |
| 87 | VSASCORE01 | Num | 8 | Baseline veteran specific activity score |
| 88 | PREFEV1_LT_LLN01 | Num | 8 | pre-bronchodilator FEV1 less than LLN defined by Hankinson 1999 ( $1=$ True, $0=$ False) |
| 89 | PREFVC_LT_LLN01 | Num | 8 | pre-bronchodilator FVC less than LLN defined by Hankinson 1999 ( $1=$ True, $0=$ False) |

\(\left.$$
\begin{array}{|r|l|l|l|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\
\hline 90 & \text { PREFEV1FVC_LT_LLN01 } & \text { Num } & 8 & \begin{array}{l}\text { pre-bronchodilator FEV1/FVC less than LLN defined by Hankinson } \\
1999 \quad(1=T r u e, ~ 0=F a l s e) ~\end{array} \\
\hline 91 & \text { FEV1_BDRESPONSE_HANKINSON01 } & \text { Num } & 8 & \text { FEV1 Bronchodilator response, percent Hankinson 1999 } \\
\hline 92 & \text { FEV1_BDRESPONSE_PELLERGINO01 } & \text { Num } & 8 & \begin{array}{l}\text { FEV1 Bronchodilator response, volume (L) Pellergino 2005 (1=True, } \\
\text { 0=False) }\end{array}
$$ <br>

\hline 93 \& FVC_BDRESPONSE_PCT01 \& Num \& 8 \& FVC Bronchodilaotr response, percent baseline\end{array}\right]\)| 94 | FVC_BDRESPONSE_VOL01 | Num | 8 |
| ---: | ---: | :--- | :--- |
| 95 | FVC_BDRE Bronchodilator response, volume (ml) |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 120 | CBC_MONOCYTE_PCT01 | Num | 8 | CBC monocyte PCT at baseline |
| 121 | CBC_EOSINOPHIL_CNT01 | Num | 8 | CBC eosinophil CNT at baseline |
| 122 | CBC_EOSINOPHIL_PCT01 | Num | 8 | CBC eosinophil PCT at baseline |
| 123 | CBC_BASOPHIL_CNT01 | Num | 8 | CBC basophil CNT at baseline |
| 124 | CBC_BASOPHIL_PCT01 | Num | 8 | CBC basophil PCT at baseline |
| 125 | VGDF_EVER01 | Num | 8 | Ever exposed to vapors, gas, dust, or fumes at baseline |
| 126 | VGDF_YEARS01 | Num | 8 | Years exposed to vapors, gas, dust or fumes at baselined |
| 127 | LONGESTJOBDURATION01 | Num | 8 | Duration in years of longest job ever worked at baseline |
| 128 | VGDF_LONGESTJOB01 | Num | 8 | Exposed to vapors, gas, dust, or fumes during longest job |
| 129 | SMOKING_PACK_YEARS01 | Num | 8 | Smoking pack-years at baseline |
| 130 | PEX_SEVERE_365 | Num | 8 | total count of exacerbations requiring ED visit or hospitalization in 365 days since entering the study |
| 131 | V1_LAC_R_APEX_BASE_SLP_910DIF | Num | 8 | lac_r_apex_base_slp_910dif |
| 132 | V1_LAC_R_APEX_BASE_SLP_950DIF | Num | 8 | lac_r_apex_base_slp_950dif |
| 133 | V1_LAC_L_APEX_BASE_SLP_910DIF | Num | 8 | lac_l_apex_base_slp_910dif |
| 134 | V1_LAC_L_APEX_BASE_SLP_950DIF | Num | 8 | lac_l_apex_base_slp_950dif |
| 135 | V1_R_APEX_BASE_PCTBE910_RATIO | Num | 8 | r_apex_base_pctbe910_ratio |
| 136 | V1_R_APEX_BASE_PCTBE950_RATIO | Num | 8 | r_apex_base_pctbe950_ratio |
| 137 | V1_L_APEX_BASE_PCTBE910_RATIO | Num | 8 | l_apex_base_pctbe910_ratio |
| 138 | V1_L_APEX_BASE_PCTBE950_RATIO | Num | 8 | l_apex_base_pctbe950_ratio |
| 139 | V1_RB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB1+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 140 | V1_RB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the RB10+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 141 | V1_LB1_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB1+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 142 | V1_LB10_CHLD_AVGAVGWALTHICK50 | Num | 8 | Wall thickness of the two children of the LB10+1 segment average for visit 1 (NOTE: If only one segment available, that measurement is used in lieu of an average) |
| 143 | V1_PI10_PATH_LEQ20_THICKEST | Num | 8 | Pi10_path_leq20_thickest |
| 144 | V1_PI10_PATH_LEQ20_AVG | Num | 8 | Pi10_path_leq20_avg |
| 145 | BASELINE_ASTHMA_CHILD | Num | 8 | History of childhood asthma diagnosed by a physician reported at baseline |
| 146 | BASELINE_ASTHMA_DX | Num | 8 | History of asthma diagnosed by a physician reported at baseline |
| 147 | EMPH950_HIGH01 | Num | 8 | Emphysema > ULN (defined by reference equation) at baseline |
| 148 | LOG950_VIDA01 | Num | 8 | Log transformed uncorrected percent emphysema 950(VIDA) at baseline |
| 149 | EMPH_ULN01 | Num | 8 | Upper limit of normal (defined by reference equation) at baseline |
| 150 | TOTALVOL_ULN_V1 | Num | 8 | Upper limit of normal for total lung volume based on race, age, gender, height, and BMI at baseline |

$\left.\begin{array}{|r|l|l|l|l|}\hline \text { Num } & \text { Variable } & \text { Type } & \text { Len } & \text { Label } \\ \hline 151 & \text { TOTALVOLUME_YES_V1 } & \text { Num } & 8 & \begin{array}{l}\text { indicator of total volume based total volum (BOTH_TOT_V) and } \\ \text { totalvol_ULN at baseline }\end{array} \\ \hline 152 & \text { SXSMKR2_FVC_CORE3_V1 } & \text { Num } & 8 & \begin{array}{l}\text { Non-smokers and smokers w/ or w/o symptoms using GIC PFT vars; } \\ 1=\text { stratum 1; 2,3=smokers,FEV1/FVC>=.7, FVC }>L L N, ~ \& ~ w i t h ~\end{array} \\ \text { CAT<10 for } 2 \text { \& CAT }>=10 \text { for 3; 4,5=smokers, GOLD 1/2, \& with } \\ \text { CAT<10 for } 4 \text { \& CAT>=10 for 5 }\end{array}\right]$

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 170 | V1_GLI_FEF2575_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEF2575 Z-Score Pre-Bronchodilator |
| 171 | V1_GLI_FEF2575_LLN | Num | 8 | Visit 1 GLI Reference value for FEF2575 Lower Limit of Normal |
| 172 | V1_GLI_FEF2575_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEF2575 Percent Predicted Pre-Bronchodilator |
| 173 | V1_GLI_FEF75_Z_SCORE_PRE | Num | 8 | Visit 1 GLI Reference value for FEF75 Z-Score Pre-Bronchodilator |
| 174 | V1_GLI_FEF75_LLN | Num | 8 | Visit 1 GLI Reference value for FEF75 Lower Limit of Normal |
| 175 | V1_GLI_FEF75_PCT_PRED_PRE | Num | 8 | Visit 1 GLI Reference value for FEF75 Percent Predicted Pre-Bronchodilator |
| 176 | V1_GLI_FEV1_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEV1 Z-Score Post-Bronchodilator |
| 177 | V1_GLI_FEV1_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEV1 Percent Predicted Post-Bronchodilator |
| 178 | V1_GLI_FVC_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FVC Z-Score Post-Bronchodilator |
| 179 | V1_GLI_FVC_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FVC Percent Predicted Post-Bronchodilator |
| 180 | V1_GLI_FEV1FVC_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Z-Score Post-Bronchodilator |
| 181 | V1_GLI_FEV1FVC_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEV1FVC Percent Predicted Post-Bronchodilator |
| 182 | V1_GLI_FEF2575_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEF2575 Z-Score Post-Bronchodilator |
| 183 | V1_GLI_FEF2575_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEF2575 Percent Predicted Post-Bronchodilator |
| 184 | V1_GLI_FEF75_Z_SCORE_POST | Num | 8 | Visit 1 GLI Reference value for FEF75 Z-Score Post-Bronchodilator |
| 185 | V1_GLI_FEF75_PCT_PRED_POST | Num | 8 | Visit 1 GLI Reference value for FEF75 Percent Predicted Post-Bronchodilator |
| 186 | PEX_LAST_VISIT_DAYS | Num | 8 | Date of last exacerbation Report - Days from enrollment |
| 187 | DATE_1STPEXREPORT_DAYS | Num | 8 | Form date of FUQ or HEF where the first any exacerbation ever reported - Days from enrollment |

Data Set Name: r1_derv_post_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | PFV01 | Char | 9 | study_id |
| 6 | PFV04 | Char | 1 | Sex |
| 7 | PFV07 | Num | 8 | Age |
| 8 | PFV08 | Num | 8 | Height |
| 9 | PFV10 | Char | 15 | Position |
| 10 | PFV12 | Num | 8 | visit_num |
| 11 | PFV13 | Num | 8 | interval_num |
| 12 | PFV14 | Num | 8 | stage_num |
| 13 | PFV15 | Num | 8 | seq_num |
| 14 | PFV16 | Char | 15 | vlabel |
| 15 | PFV17 | Num | 8 | repeats |
| 16 | PFV22B | Char | 8 | time |
| 17 | PFV23B | Char | 8 | time_best |
| 18 | PFV24B | Char | 8 | time_first |
| 19 | PFV27 | Num | 8 | temperature |
| 20 | PFV28 | Num | 8 | barometric |
| 21 | PFV29 | Num | 8 | humidity |
| 22 | PFV06D | Num | 8 | Day of Birth |
| 23 | VERSION | Char | 21 | Version |
| 24 | PFV31_DERV | Num | 8 | Fvcpd_derv |
| 25 | PFV36_DERV | Num | 8 | Pctfvc_derv |
| 26 | PFV40_DERV | Num | 8 | Fvc_derv |
| 27 | PFV41 | Num | 8 | flag_fvc_best |
| 28 | PFV49_DERV | Num | 8 | Fev3_derv |
| 29 | PFV51_DERV | Num | 8 | Fev6_derv |
| 30 | PFV68_DERV | Num | 8 | Expt_derv |
| 31 | PFV71_DERV | Num | 8 | Fivc_derv |
| 32 | PFV72_DERV | Num | 8 | Fiv05_derv |
| 33 | PFV73_DERV | Num | 8 | Fiv05fivc_derv |
| 34 | PFV74_DERV | Num | 8 | Fiv1_derv |
| 35 | PFV75_DERV | Num | 8 | Fiv1fivc_derv |
| 36 | PFV76_DERV | Num | 8 | Fiv3_derv |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | PFV78_DERV | Num | 8 | Fif212_derv |
| 38 | PFV79_DERV | Num | 8 | Fif2575_derv |
| 39 | PFV80_DERV | Num | 8 | Mit_derv |
| 40 | PFV30_DERV | Num | 8 | Fevpd_derv |
| 41 | PFV35_DERV | Num | 8 | Pctfev_derv |
| 42 | PFV43_DERV | Num | 8 | Fev05_derv |
| 43 | PFV45_DERV | Num | 8 | Fev1_derv |
| 44 | PFV46 | Num | 8 | flag_fev_best |
| 45 | PFV66_DERV | Num | 8 | Vext_derv |
| 46 | PFV67_DERV | Num | 8 | Pctvext_derv |
| 47 | PFV69_DERV | Num | 8 | RVSPCA_derv |
| 48 | PFV70_DERV | Num | 8 | Fevdiff_derv |
| 49 | PFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 50 | PFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 51 | PFV44_DERV | Num | 8 | Fev05fvc_derv |
| 52 | PFV47_DERV | Num | 8 | Fev1fvc_derv |
| 53 | PFV48 | Num | 8 | flag_fevfvc_best |
| 54 | PFV50_DERV | Num | 8 | Fev3fvc_derv |
| 55 | PFV32_DERV | Num | 8 | Fefpd_derv |
| 56 | PFV37_DERV | Num | 8 | Pctfef2575_derv |
| 57 | PFV52_DERV | Num | 8 | Fef212_derv |
| 58 | PFV53_DERV | Num | 8 | Fef2575_derv |
| 59 | PFV54 | Num | 8 | flag_fef2575_best |
| 60 | PFV55_DERV | Num | 8 | Fef25756_derv |
| 61 | PFV56_DERV | Num | 8 | Fef25_derv |
| 62 | PFV57_DERV | Num | 8 | Fef50_derv |
| 63 | PFV58_DERV | Num | 8 | Fef506_derv |
| 64 | PFV59_DERV | Num | 8 | Fef75_derv |
| 65 | PFV60_DERV | Num | 8 | Fef756_derv |
| 66 | PFV61_DERV | Num | 8 | Fef7585_derv |
| 67 | PFV64_DERV | Num | 8 | Met_derv |
| 68 | PFV34_DERV | Num | 8 | Pefpd_derv |
| 69 | PFV38_DERV | Num | 8 | Pctpefr_derv |
| 70 | PFV62_DERV | Num | 8 | Pefr_derv |
| 71 | PFV63 | Num | 8 | flag_pefr_best |
| 72 | PFV65_DERV | Num | 8 | Peft_derv |
| 73 | PFV77_DERV | Num | 8 | Pifr_derv |
| 74 | POST_FEV1FVC_DERV | Num | 8 | post_BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 75 | PFV22A_DAYS | Num | 8 | Date - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 76 | PFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 77 | PFV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 78 | PFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: r1_derv_post_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | PSV01 | Char | 9 | study_id |
| 6 | PSV04 | Char | 6 | Sex |
| 7 | PSV07 | Num | 8 | Age |
| 8 | PSV08 | Num | 8 | Height |
| 9 | PSV10 | Char | 15 | position |
| 10 | PSV12 | Num | 8 | visit_num |
| 11 | PSV13 | Char | 15 | interval_num |
| 12 | PSV14 | Num | 8 | stage_num |
| 13 | PSV15 | Num | 8 | seq_num |
| 14 | PSV16 | Char | 5 | vlabel |
| 15 | PSV17 | Num | 8 | repeats |
| 16 | PSV19 | Char | 15 | qa_grade |
| 17 | PSV20 | Char | 15 | qa_status |
| 18 | PSV23B | Char | 8 | time_best |
| 19 | PSV24B | Char | 8 | time_first |
| 20 | PSV28 | Num | 8 | temperature |
| 21 | PSV29 | Num | 8 | barometric |
| 22 | PSV30 | Num | 8 | humidity |
| 23 | PSV32 | Char | 5 | tom |
| 24 | PSV06D | Num | 8 | Day of Birth |
| 25 | VERSION | Char | 21 | Version |
| 26 | PSV33_DERV | Num | 8 | Svc_derv |
| 27 | PSV34_DERV | Num | 8 | Svcpd_derv |
| 28 | PSV35_DERV | Num | 8 | Pctsvc_derv |
| 29 | PSV36 | Num | 8 | flag_svc_best |
| 30 | PSV37_DERV | Num | 8 | IC_derv |
| 31 | PSV38_DERV | Num | 8 | IRV_derv |
| 32 | PSV39_DERV | Num | 8 | ERV_derv |
| 33 | PSV40_DERV | Num | 8 | TV_derv |
| 34 | PSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 35 | PSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 36 | PSV24A_DAYS | Num | 8 | Date first - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | PSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: r1_derv_pre_fvc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SFV01 | Char | 9 | study_id |
| 6 | SFV04 | Char | 1 | Sex |
| 7 | SFV07 | Num | 8 | Age |
| 8 | SFV08 | Num | 8 | Height |
| 9 | SFV10 | Char | 15 | Position |
| 10 | SFV12 | Num | 8 | visit_num |
| 11 | SFV13 | Num | 8 | interval_num |
| 12 | SFV14 | Num | 8 | stage_num |
| 13 | SFV15 | Num | 8 | seq_num |
| 14 | SFV16 | Char | 10 | vlabel |
| 15 | SFV17 | Num | 8 | repeats |
| 16 | SFV22B | Char | 8 | time |
| 17 | SFV23B | Char | 8 | time_best |
| 18 | SFV24B | Char | 8 | time_first |
| 19 | SFV27 | Num | 8 | temperature |
| 20 | SFV28 | Num | 8 | barometric |
| 21 | SFV29 | Num | 8 | humidity |
| 22 | SFV06D | Num | 8 | Day of Birth |
| 23 | VERSION | Char | 21 | Version |
| 24 | SFV31_DERV | Num | 8 | Fvcpd_derv |
| 25 | SFV36_DERV | Num | 8 | Pctfvc_derv |
| 26 | SFV40_DERV | Num | 8 | Fvc_derv |
| 27 | SFV41 | Num | 8 | flag_fvc_best |
| 28 | SFV49_DERV | Num | 8 | Fev3_derv |
| 29 | SFV51_DERV | Num | 8 | Fev6_derv |
| 30 | SFV68_DERV | Num | 8 | Expt_derv |
| 31 | SFV71_DERV | Num | 8 | Fivc_derv |
| 32 | SFV72_DERV | Num | 8 | Fiv05_derv |
| 33 | SFV73_DERV | Num | 8 | Fiv05fivc_derv |
| 34 | SFV74_DERV | Num | 8 | Fiv1_derv |
| 35 | SFV75_DERV | Num | 8 | Fiv1fivc_derv |
| 36 | SFV76_DERV | Num | 8 | Fiv3_derv |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SFV78_DERV | Num | 8 | Fif212_derv |
| 38 | SFV79_DERV | Num | 8 | Fif2575_derv |
| 39 | SFV80_DERV | Num | 8 | Mit_derv |
| 40 | SFV30_DERV | Num | 8 | Fevpd_derv |
| 41 | SFV35_DERV | Num | 8 | Pctfev_derv |
| 42 | SFV43_DERV | Num | 8 | Fev05_derv |
| 43 | SFV45_DERV | Num | 8 | Fev1_derv |
| 44 | SFV46 | Num | 8 | flag_fev_best |
| 45 | SFV66_DERV | Num | 8 | Vext_derv |
| 46 | SFV67_DERV | Num | 8 | Pctvext_derv |
| 47 | SFV33_DERV | Num | 8 | Fev1_fvcpd_derv |
| 48 | SFV39_DERV | Num | 8 | Pctfev_fvc_derv |
| 49 | SFV44_DERV | Num | 8 | Fev05fvc_derv |
| 50 | SFV47_DERV | Num | 8 | Fev1fvc_derv |
| 51 | SFV48 | Num | 8 | flag_fevfvc_best |
| 52 | SFV50_DERV | Num | 8 | Fev3fvc_derv |
| 53 | SFV32_DERV | Num | 8 | Fefpd_derv |
| 54 | SFV37_DERV | Num | 8 | Pctfef2575_derv |
| 55 | SFV52_DERV | Num | 8 | Fef212_derv |
| 56 | SFV53_DERV | Num | 8 | Fef2575_derv |
| 57 | SFV54 | Num | 8 | flag_fef2575_best |
| 58 | SFV55_DERV | Num | 8 | Fef25756_derv |
| 59 | SFV56_DERV | Num | 8 | Fef25_derv |
| 60 | SFV57_DERV | Num | 8 | Fef50_derv |
| 61 | SFV58_DERV | Num | 8 | Fef506_derv |
| 62 | SFV59_DERV | Num | 8 | Fef75_derv |
| 63 | SFV60_DERV | Num | 8 | Fef756_derv |
| 64 | SFV61_DERV | Num | 8 | Fef7585_derv |
| 65 | SFV64_DERV | Num | 8 | Met_derv |
| 66 | SFV34_DERV | Num | 8 | Pefpd_derv |
| 67 | SFV38_DERV | Num | 8 | Pctpefr_derv |
| 68 | SFV62_DERV | Num | 8 | Pefr_derv |
| 69 | SFV63 | Num | 8 | flag_pefr_best |
| 70 | SFV65_DERV | Num | 8 | Peft_derv |
| 71 | SFV77_DERV | Num | 8 | Pifr_derv |
| 72 | PRE_FEV1FVC_DERV | Num | 8 | pre-BD derived FEV1 FVC ratio using best FEV1 and FVC value |
| 73 | SFV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 74 | SFV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 75 | SFV24A_DAYS | Num | 8 | Date first - Days from enrollment |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :---: | ---: | :--- |
| 76 | SFV42A_DAYS | Num | 8 | Trials Date - Days from enrollment |

Data Set Name: r1_derv_pre_svc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SSV01 | Char | 9 | study_id |
| 6 | SSV04 | Char | 6 | Sex |
| 7 | SSV07 | Num | 8 | Age |
| 8 | SSV08 | Num | 8 | Height |
| 9 | SSV10 | Char | 15 | position |
| 10 | SSV12 | Num | 8 | visit_num |
| 11 | SSV13 | Num | 8 | interval_num |
| 12 | SSV14 | Num | 8 | stage_num |
| 13 | SSV15 | Num | 8 | seq_num |
| 14 | SSV16 | Char | 5 | vlabel |
| 15 | SSV17 | Num | 8 | repeats |
| 16 | SSV19 | Char | 15 | qa_grade |
| 17 | SSV20 | Char | 15 | qa_status |
| 18 | SSV23B | Char | 8 | time_best |
| 19 | SSV28 | Num | 8 | temperature |
| 20 | SSV29 | Num | 8 | barometric |
| 21 | SSV30 | Num | 8 | humidity |
| 22 | SSV31 | Num | 8 | pre_washout_1 |
| 23 | SSV06D | Num | 8 | Day of Birth |
| 24 | VERSION | Char | 21 | Version |
| 25 | SSV33_DERV | Num | 8 | Svc_derv |
| 26 | SSV34_DERV | Num | 8 | Svcpd_derv |
| 27 | SSV35_DERV | Num | 8 | Pctsvc_derv |
| 28 | SSV36 | Num | 8 | flag_svc_best |
| 29 | SSV37_DERV | Num | 8 | IC_derv |
| 30 | SSV38_DERV | Num | 8 | IRV_derv |
| 31 | SSV39_DERV | Num | 8 | ERV_derv |
| 32 | SSV40_DERV | Num | 8 | TV_derv |
| 33 | SSV22A_DAYS | Num | 8 | Date - Days from enrollment |
| 34 | SSV23A_DAYS | Num | 8 | Date best - Days from enrollment |
| 35 | SSV24A_DAYS | Num | 8 | Date first - Days from enrollment |
| 36 | SSV25A_DAYS | Num | 8 | Trials Date - Days from enrollment |

## Data Set Name: r1_ehf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | FORM |
| 4 | VISIT | Char | 10 | VISIT |
| 5 | EHF01 | Char | 1 | EHF01 Have you ever been employed |
| 6 | EHF02 | Char | 1 | EHF02 current employment situation |
| 7 | EHF07 | Num | 8 | EHF07 Total number of years at last job |
| 8 | EHF08 | Char | 1 | EHF08 left last job because of breathing or lung problems |
| 9 | EHF09 | Char | 1 | EHF09 Not working because of difficulty breathing |
| 10 | EHF10 | Char | 1 | EHF10 stoped work because of missed time due to illness |
| 11 | EHF11 | Char | 1 | EHF11 Exposure to vapors, gas, dust or fumes at last job |
| 12 | EHF12 | Char | 1 | EHF12 was last job the longest job ever held |
| 13 | EHF12D | Char | 1 | EHF12D Exposure to vapors, gas, dust, or fumes at longest job |
| 14 | EHF16 | Num | 8 | EHF16 Number of years at current job |
| 15 | EHF17 | Num | 8 | EHF17 average hours worked per week at current job |
| 16 | EHF18A | Char | 1 | EHF18A ever worked in a cotton, flax or hemp mill? |
| 17 | EHF18B | Char | 1 | EHF18B ever worked in a foundry? |
| 18 | EHF18C | Char | 1 | EHF18C ever worked in a glass works? |
| 19 | EHF18D | Char | 1 | EHF18D ever worked in a mine? |
| 20 | EHF18E | Char | 1 | EHF18E ever worked in a pottery? |
| 21 | EHF18F | Char | 1 | EHF18F ever worked in a power plant? |
| 22 | EHF18G | Char | 1 | EHF18G ever worked in a quarry? |
| 23 | EHF18H | Char | 1 | EHF18H ever worked in a refinery? |
| 24 | EHF18I | Char | 1 | EHF18I ever worked or with asbestos? |
| 25 | EHF18J | Char | 1 | EHF18J ever worked in synthetic fibers or fabric manufacturing? |
| 26 | EHF18K | Char | 1 | EHF18K ever worked in a paper mill? |
| 27 | EHF18L | Char | 1 | EHF18L ever worked in building or highway construction? |
| 28 | EHF18M | Char | 1 | EHF18M ever worked in an aluminum factory? |
| 29 | EHF18N | Char | 1 | EHF18N ever worked in a rubber tire plant? |
| 30 | EHF18O | Char | 1 | EHF18O ever worked in HVAC? |
| 31 | EHF18P | Char | 1 | EHF18P ever worked in demolition? |
| 32 | EHF18Q | Char | 1 | EHF18Q ever worked in remodeling? |
| 33 | EHF18R | Char | 1 | EHF18R ever worked in professional cleaning? |
| 34 | EHF18S | Char | 1 | EHF18S ever worked in beauty care? |
| 35 | EHF18T | Char | 1 | EHF18T ever worked in agriculture? |
| 36 | EHF18U | Char | 1 | EHF18U ever worked in the flooring industry? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | EHF19A | Char | 1 | EHF19A ever worked as a boilermaker? |
| 38 | EHF19B | Char | 1 | EHF19B ever worked as a carpenter? |
| 39 | EHF19C | Char | 1 | EHF19C ever worked as a chemical worker? |
| 40 | EHF19D | Char | 1 | EHF19D ever worked as an electrician? |
| 41 | EHF19E | Char | 1 | EHF19E ever worked as an elevator operator? |
| 42 | EHF19F | Char | 1 | EHF19F ever worked as an insulator? |
| 43 | EHF19G | Char | 1 | EHF19G ever worked as a lather? |
| 44 | EHF19H | Char | 1 | EHF19H ever worked as a machinist? |
| 45 | EHF19I | Char | 1 | EHF19I ever worked as a mechanic? |
| 46 | EHF19J | Char | 1 | EHF19J ever worked as a millwright? |
| 47 | EHF19K | Char | 1 | EHF19K ever worked as a pipefitter? |
| 48 | EHF19L | Char | 1 | EHF19L ever worked as a plasterer? |
| 49 | EHF19M | Char | 1 | EHF19M ever worked as a plumber? |
| 50 | EHF19N | Char | 1 | EHF19N ever worked as a sander? |
| 51 | EHF19O | Char | 1 | EHF19O ever worked as a sheet metal worker? |
| 52 | EHF19P | Char | 1 | EHF19P ever worked as a steelworker? |
| 53 | EHF19Q | Char | 1 | EHF19Q ever worked as a welder? |
| 54 | EHF19R | Char | 1 | EHF19R ever worked as a pig farmer? |
| 55 | EHF19S | Char | 1 | EHF19S ever worked as a rigger? |
| 56 | EHF19T | Char | 1 | EHF19T ever worked as a roofer? |
| 57 | EHF19U | Char | 1 | EHF19U ever worked as a painter? |
| 58 | EHF19V | Char | 1 | EHF19V ever worked as a mason? |
| 59 | EHF20A | Char | 1 | EHF20A ever had regular exposure to Irritant gases, such as chlorine or ammonia? |
| 60 | EHF20B | Char | 1 | EHF20B ever had regular exposure to Fire, smoke or other combustion products? |
| 61 | EHF20C | Char | 1 | EHF20C ever had regular exposure to Incinerators, boilers, or oil refineries? |
| 62 | EHF20D | Char | 1 | EHF20D ever had regular exposure to Coal dust or powder? |
| 63 | EHF20E | Char | 1 | EHF20E ever had regular exposure to Silica or sand, or concrete or cement dust? |
| 64 | EHF20F | Char | 1 | EHF20F ever had regular exposure to Indoor fuel powered motors, compressors, or engines? |
| 65 | EHF20G | Char | 1 | EHF20G ever had regular exposure to Diesel engine exhaust? |
| 66 | EHF20H | Char | 1 | EHF20H ever had regular exposure to Wheat flour or other grain dusts? |
| 67 | EHF20I | Char | 1 | EHF20I ever had regular exposure to Animal feeds or fodder? |
| 68 | EHF20J | Char | 1 | EHF20J ever had regular exposure to Cotton dust or cotton processing? |
| 69 | EHF20K | Char | 1 | EHF20K ever had regular exposure to Wood dust or saw dust? |
| 70 | EHF20L | Char | 1 | EHF20L ever had regular exposure to Cadmium fumes or batteries or sliver solder? |
| 71 | EHF20M | Char | 1 | EHF20M ever had regular exposure to Other metal dusts or metal fumes? |
| 72 | EHF20N | Char | 1 | EHF20N ever had regular exposure to Welding or flame cutting? |
| 73 | EHF20O | Char | 1 | EHF200 ever had regular exposure to Fiberglass or other man-made mineral fibers? |
| 74 | EHF20P | Char | 1 | EHF20P ever had regular exposure to Explosives or blasting fumes? |
| 75 | EHF07A | Num | 8 | EHF07A average number of hours per week worked at last job |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | EHF12E | Num | 8 | EHF12E year longest held job started |
| 77 | EHF12F | Num | 8 | EHF12F Total number of years at longest job held |
| 78 | EHF12G | Num | 8 | EHF12G average number of hours per week worked at longest held job |
| 79 | EHF18A1 | Num | 8 | EHF18A1 How many years worked in a cotton, flax or hemp mill? |
| 80 | EHF18B1 | Num | 8 | EHF18B1 How many years worked in a foundry? |
| 81 | EHF18C1 | Num | 8 | EHF18C1 How many years worked in a glass works? |
| 82 | EHF18D1 | Num | 8 | EHF18D1 How many years worked in a mine? |
| 83 | EHF18E1 | Num | 8 | EHF18E1 How many years worked in a pottery? |
| 84 | EHF18F1 | Num | 8 | EHF18F1 How many years worked in a power plant? |
| 85 | EHF18G1 | Num | 8 | EHF18G1 How many years worked in a quarry? |
| 86 | EHF18H1 | Num | 8 | EHF18H1 How many years worked in a refinery? |
| 87 | EHF18I1 | Num | 8 | EHF18I1 How many years worked or with asbestos? |
| 88 | EHF18J1 | Num | 8 | EHF18J1 How many years worked in synthetic fibers or fabric manufacturing? |
| 89 | EHF18K1 | Num | 8 | EHF18K1 How many years worked in a paper mill? |
| 90 | EHF18L1 | Num | 8 | EHF18L1 How many years worked in building or highway construction? |
| 91 | EHF18M1 | Num | 8 | EHF18M1 How many years worked in an aluminum factory? |
| 92 | EHF18N1 | Num | 8 | EHF18N1 How many years worked in a rubber tire plant? |
| 93 | EHF18O1 | Num | 8 | EHF18O1 How many years worked in HVAC? |
| 94 | EHF18P1 | Num | 8 | EHF18P1 How many years worked in demolition? |
| 95 | EHF18Q1 | Num | 8 | EHF18Q1 How many years worked in remodeling? |
| 96 | EHF18R1 | Num | 8 | EHF18R1 How many years worked in professional cleaning? |
| 97 | EHF18S1 | Num | 8 | EHF18S1 How many years worked in beauty care? |
| 98 | EHF18T1 | Num | 8 | EHF18T1 How many years worked in agriculture? |
| 99 | EHF18U1 | Num | 8 | EHF18U1 How many years worked in the flooring industry? |
| 100 | EHF19A1 | Num | 8 | EHF19A1 How many years worked as a boilermaker? |
| 101 | EHF19B1 | Num | 8 | EHF19B1 How many years worked as a carpenter? |
| 102 | EHF19C1 | Num | 8 | EHF19C1 How many years worked as a chemical worker? |
| 103 | EHF19D1 | Num | 8 | EHF19D1 How many years worked as an electrician? |
| 104 | EHF19E1 | Num | 8 | EHF19E1 How many years worked as an elevator operator? |
| 105 | EHF19F1 | Num | 8 | EHF19F1 How many years worked as an insulator? |
| 106 | EHF19G1 | Num | 8 | EHF19G1 How many years worked as a lather? |
| 107 | EHF19I1 | Num | 8 | EHF19I1 How many years worked as a machinist? |
| 108 | EHF19J1 | Num | 8 | EHF19J1 How many years worked as a mechanic? |
| 109 | EHF19K1 | Num | 8 | EHF19K1 How many years worked as a millwright? |
| 110 | EHF19L1 | Num | 8 | EHF19L1 How many years worked as a pipefitter? |
| 111 | EHF19M1 | Num | 8 | EHF19M1 How many years worked as a plasterer? |
| 112 | EHF19N1 | Num | 8 | EHF19N1 How many years worked as a plumber? |
| 113 | EHF19O1 | Num | 8 | EHF1901 How many years worked as a sander? |
| 114 | EHF19P1 | Num | 8 | EHF19P1 How many years worked as a sheet metal worker? |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | EHF19Q1 | Num | 8 | EHF19Q1 How many years worked as a steelworker? |
| 116 | EHF19R1 | Num | 8 | EHF19R1 How many years worked as a welder? |
| 117 | EHF19S1 | Num | 8 | EHF19S1 How many years worked as a pig farmer? |
| 118 | EHF19T1 | Num | 8 | EHF19T1 How many years worked as a rigger? |
| 119 | EHF19U1 | Num | 8 | EHF19U1 How many years worked as a roofer? |
| 120 | EHF19V1 | Num | 8 | EHF19V1 How many years worked as a painter? |
| 121 | EHF20A1 | Num | 8 | EHF20A1 How many years worked as a mason? |
| 122 | EHF20B1 | Num | 8 | EHF20B1 How many years regularly exposed to Irritant gases, such as chlorine or ammonia? |
| 123 | EHF20C1 | Num | 8 | EHF20C1 How many years regularly exposed to Fire, smoke or other combustion products? |
| 124 | EHF20D1 | Num | 8 | EHF20D1 How many years regularly exposed to Incinerators, boilers, or oil refineries? |
| 125 | EHF20E1 | Num | 8 | EHF20E1 How many years regularly exposed to Coal dust or powder? |
| 126 | EHF20F1 | Num | 8 | EHF20F1 How many years regularly exposed to Silica or sand, or concrete or cement dust? |
| 127 | EHF20G1 | Num | 8 | EHF20G1 How many years regularly exposed to Indoor fuel powered motors, compressors, or engines? |
| 128 | EHF20H1 | Num | 8 | EHF20H1 How many years regularly exposed to Diesel engine exhaust? |
| 129 | EHF2011 | Num | 8 | EHF2011 How many years regularly exposed to Wheat flour or other grain dusts? |
| 130 | EHF20J1 | Num | 8 | EHF20J1 How many years regularly exposed to Animal feeds or fodder? |
| 131 | EHF20K1 | Num | 8 | EHF20K1 How many years regularly exposed to Cotton dust or cotton processing? |
| 132 | EHF20L1 | Num | 8 | EHF20L1 How many years regularly exposed to Wood dust or saw dust? |
| 133 | EHF20M1 | Num | 8 | EHF20M1 How many years regularly exposed to Cadmium fumes or batteries or sliver solder? |
| 134 | EHF20N1 | Num | 8 | EHF20N1 How many years regularly exposed to Other metal dusts or metal fumes? |
| 135 | EHF2001 | Num | 8 | EHF2001 How many years regularly exposed to Welding or flame cutting? |
| 136 | EHF20P1 | Num | 8 | EHF20P1 How many years regularly exposed to Fiberglass or other man-made mineral fibers? |
| 137 | EHF21 | Char | 1 | EHF21 Type of mine |
| 138 | EHF21A | Char | 50 | EHF21A Specify type of mine |
| 139 | EHF22 | Char | 1 | EHF22 What was mined? |
| 140 | EHF22A | Char | 50 | EHF22A Specify type of material mined |
| 141 | EHF23 | Char | 1 | EHF23 Exposure to vapors, gas, dust, or fumes at current job |
| 142 | EHF24 | Char | 1 | EHF24 Is current job the longest job you ever had |
| 143 | EHF24D | Char | 1 | EHF24D Exposure to vapors, gas, dust, or fumes in current/longest held job |
| 144 | EHF24F | Num | 8 | EHF24F number of years worked at current/longest held job |
| 145 | EHF24G | Num | 8 | EHF24G average number of hours per week at current/longest job |
| 146 | EHF19H1 | Num | 8 | How many years? |
| 147 | VERSION | Char | 21 | VERSION |
| 148 | EHF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_fct_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | FCT01 | Char | 1 | FCT01 Lack of energy |
| 6 | FCT02 | Char | 1 | FCT02 Nausea |
| 7 | FCT03 | Char | 1 | FCT03 Physical limitations |
| 8 | FCT04 | Char | 1 | FCT04 Pain |
| 9 | FCT05 | Char | 1 | FCT05 Side effects of treatment |
| 10 | FCT06 | Char | 1 | FCT06 Illness |
| 11 | FCT07 | Char | 1 | FCT07 Forced time in bed |
| 12 | FCT08 | Char | 1 | FCT08 Closeness to friends |
| 13 | FCT09 | Char | 1 | FCT09 Emotional support from family |
| 14 | FCT10 | Char | 1 | FCT10 Support from friends |
| 15 | FCT11 | Char | 1 | FCT11 Family accepted illness |
| 16 | FCT12 | Char | 1 | FCT12 Satisfied with communication |
| 17 | FCT13 | Char | 1 | FCT13 Closeness to partner |
| 18 | FCT14 | Num | 8 | FCT14 Answer or mark box |
| 19 | FCT15 | Char | 1 | FCT15 Satisfaction with sex life |
| 20 | FCT16 | Char | 1 | FCT16 Feeling sad |
| 21 | FCT17 | Char | 1 | FCT17 Satisfaction with coping |
| 22 | FCT18 | Char | 1 | FCT18 Loss of hope |
| 23 | FCT19 | Char | 1 | FCT19 Feeling nervous |
| 24 | FCT20 | Char | 1 | FCT20 Worries about death |
| 25 | FCT21 | Char | 1 | FCT21 Worry about worsening condition |
| 26 | FCT22 | Char | 1 | FCT22 Ability to work |
| 27 | FCT23 | Char | 1 | FCT23 Fulfillment of work |
| 28 | FCT24 | Char | 1 | FCT24 Ability to enjoy life |
| 29 | FCT25 | Char | 1 | FCT25 Acceptance of illness |
| 30 | FCT26 | Char | 1 | FCT26 Sleeping well |
| 31 | FCT27 | Char | 1 | FCT27 Enjoyment of fun activities |
| 32 | FCT28 | Char | 1 | FCT28 Content with quality of life |
| 33 | FCT29 | Char | 1 | FCT29 Feeling fatigued |
| 34 | FCT30 | Char | 1 | FCT30 Feeling weak |
| 35 | FCT31 | Char | 1 | FCT31 Feeling listless |
| 36 | FCT32 | Char | 1 | FCT32 Feeling tired |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | :--- | :--- |
| 37 | FCT33 | Char | 1 | FCT33 Trouble starting things |
| 38 | FCT34 | Char | 1 | FCT34 Trouble finishing things |
| 39 | FCT35 | Char | 1 | FCT35 Energy |
| 40 | FCT36 | Char | 1 | FCT36 Ability to do usual activities |
| 41 | FCT37 | Char | 1 | FCT37 Need to sleep during day |
| 42 | FCT38 | Char | 1 | FCT38 Too tired to eat |
| 43 | FCT39 | Char | 1 | FCT39 Need helping with usual activities |
| 44 | FCT40 | Char | 1 | FCT40 Frustrated with fatigue |
| 45 | FCT41 | Char | 1 | FCT41 Fatigue limits social activities |
| 46 | VERSION | Char | 21 | Version |
| 47 | FACIT_PHYSICALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT physical wellbeing score |
| 48 | FACIT_SOCIALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT social wellbeing score |
| 49 | FACIT_EMOTIONALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT emotional wellbeing score |
| 50 | FACIT_FUNCTIONALWELLBEINGSCORE01 | Num | 8 | Baseline FACIT functional wellbeing score |
| 51 | FACIT_FATIGUESCORE01 | Num | 8 | Baseline FACIT fatigue score |
| 52 | FACIT_FTRIALOUTCOMEINDEX01 | Num | 8 | Baseline FACIT F trial outcome index score |
| 53 | FACIT_GTOTALSCORE01 | Num | 8 | Baseline FACIT G total score |
| 54 | FACIT_FTOTALSCORE01 | Num | 8 | Baseline FACIT F total score |
| 55 | FCT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |
|  |  |  |  |  |

Data Set Name: r1_hds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Num | 10 | Visit |
| 5 | HDS01 | Num | 8 | HDS01 Feeling tense Enjoyment |
| 6 | HDS02 | Char | 1 | HDS03 Feeling fearful |
| 7 | HDS03 | Char | 1 | HDS04 Sense of humor |
| 8 | HDS04 | Num | 8 | HDS05 Worried thoughts |
| 9 | HDS05 | 8 | HDS06 Feeling cheerful |  |
| 10 | HDS06 | Num | 8 | 8 |
| 11 | HDSDS07 | Num | 8 | HDS09 Feeling slowed down |
| 12 | HDS08 | Num | 8 | HDS10 Lost interest in appearance |
| 13 | HDS09 | Num | 8 | HDS11 Feeling restless |
| 14 | HDS10 | Num | 8 | HDS12 Looking forward |
| 15 | HDS11 | Num | 8 | HDS13 Sudden feelings of panic |
| 16 | HDS12 | Num | 8 | HDS14 Ability to enjoy |
| 17 | HDS13 | Char | 21 | Version |
| 18 | HDS14 | Num | 8 | Baseline HDS Anxiety Score |
| 19 | VERSION | Num | 8 | Baseline HDS Depression Score |
| 20 | HDS_ANXIETYSCORE01 | Num | 8 | Form Date - Days from enrollment |
| 21 | HDS_DEPRESSIONSCORE01 | Noren |  |  |
| 22 | HDS0A_DAYS |  |  |  |
|  |  |  |  |  |

Data Set Name: r1_mcq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | MCQ01 | Char | 1 | MCQ01 Frequency of cough today |
| 6 | MCQ02 | Char | 1 | MCQ02 Frequency of cough last night |
| 7 | MCQ03 | Char | 1 | MCQ03 Severity of cough episodes |
| 8 | MCQ04 | Char | 1 | MCQ04 Ease of coughing up sputum today |
| 9 | MCQ05 | Char | 1 | MCQ05 Chest tightness/discomfort today |
| 10 | VERSION | Char | 21 | Version |
| 11 | MCQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_mrc_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | MRC01 | Num | 8 | MRC01 Describe shortness of breath |
| 6 | VERSION | Char | 21 | Version |
| 7 | MRC0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_pft_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | PFT01 | Num | 8 | PFT01 Large meal eaten within the last 2 hours |
| 6 | PFT02 | Num | 8 | PFT02 Smoked within the last hour |
| 7 | PFT03 | Num | 8 | PFT03 Vigorous exercise in the past 30 minutes |
| 8 | PFT04 | Num | 8 | PFT04 Consumed alcohol within past 4 hours |
| 9 | PFT05 | Num | 8 | PFT05 Medication for lungs in past 48 hours |
| 10 | PFT06 | Num | 8 | PFT06 Use of Spiriva within past 48 hours |
| 11 | PFT06B | Char | 5 | PFT06B Time last used Spiriva |
| 12 | PFT06B_AMPM | Char | 1 | PFT06B_AMPM Last used Spiriva AM/PM |
| 13 | PFT07 | Num | 8 | PFT07 Use of theophylline within past 48 hrs |
| 14 | PFT07A | Num | 8 | PFT07A Most recent type of theophyline used |
| 15 | PFT07C | Char | 5 | PFT07C Time last used theophyline |
| 16 | PFT07C_AMPM | Char | 1 | PFT07C_AMPM last used theophyline AM/PM |
| 17 | PFT08 | Num | 8 | PFT08 Use of one-a-day bronchodilator |
| 18 | PFT08B | Char | 5 | PFT08B Time last used one-a-day bronchodilator |
| 19 | PFT08B_AMPM | Char | 1 | PFT08B_AMPM last used one-a-day bronchodilator AM/PM |
| 20 | PFT08B1 | Char | 50 | PFT08B1 Name of last used one-a-day bronchodilator |
| 21 | PFT09 | Num | 8 | PFT09 Use of long-acting beta agonist |
| 22 | PFT09A | Num | 8 | PFT09A Most recent long-acting beta agonist used |
| 23 | PFT09A1 | Char | 50 | PFT09A1 Specify long-acting beta agonist |
| 24 | PFT09B | Char | 5 | PFT09B Time last used long-acting beta agonist |
| 25 | PFT09B_AMPM | Char | 1 | PFT09B_AMPM last used long-acting beta agonist AM/PM |
| 26 | PFT10 | Num | 8 | PFT10 Use of ipratropium within the past 8 hours |
| 27 | PFT10A | Num | 8 | PFT10A Most recent ipratropium used |
| 28 | PFT10B | Char | 5 | PFT10B Time last used ipratropium |
| 29 | PFT10C_AMPM | Char | 1 | PFT10C_AMPM last used ipratropium AM/PM |
| 30 | PFT11 | Num | 8 | PFT11 Use of short-acting beta agonist |
| 31 | PFT12 | Char | 1 | PFT12 Consumption of caffeine in past 6 hours |
| 32 | VERSION | Char | 21 | Version |
| 33 | PFT0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 34 | PFT06A_DAYS | Num | 8 | Date last used Spiriva - Days from enrollment |
| 35 | PFT07B_DAYS | Num | 8 | Date last used theophyline - Days from enrollment |
| 36 | PFT08A_DAYS | Num | 8 | Date last used one-a-day bronchodilator - Days from enrollment |

## Data Set Name: r1_psq_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | PSAQ7 | Char | 2000 | PSAQ7 Frequency of taking medication to sleep during the last month |
| 5 | PSAQ8 | Char | 2000 | PSAQ8 Frequency of having trouble staying awake during the last month |
| 6 | PSAQ9 | Char | 2000 | PSAQ9 Difficulty keeping up enthusiasm during the last month |
| 7 | VISIT | Char | 10 | Visit |
| 8 | PSQ01 | Char | 5 | PSQ01 Usual bedtime in the past month |
| 9 | PSQ01_AMPM | Char | 1 | PSQ01_AMPM bedtime AM/PM |
| 10 | PSQ02 | Num | 8 | PSQ02 Time taken to fall asleep in the past month |
| 11 | PSQ03 | Char | 5 | PQQ03 Waking hour in the past month |
| 12 | PSQ03_AMPM | Char | 1 | PSQ03_AMPM waking hour AM/PM |
| 13 | PSQ04 | Num | 8 | PSQ04 Hours of sleep per night in the past month |
| 14 | PSQ05A | Char | 1 | PSQ05A Trouble sleeping: Cannot get to sleep within 30 minutes |
| 15 | PSQ05B | Char | 1 | PSQ05B Trouble sleeping: Wake up in the middle of the night or early morning |
| 16 | PSQ05C | Char | 1 | PSQ05C Trouble sleeping: Have to get up to use the bathroom |
| 17 | PSQ05D | Char | 1 | PSQ05D Trouble sleeping: Cannot breathe comfortably |
| 18 | PSQ05E | Char | 1 | PSQ05E Trouble sleeping: Cough or snore loudly |
| 19 | PSQ05F | Char | 1 | PSQ05F Trouble sleeping: Feel too cold |
| 20 | PSQ05G | Char | 1 | PSQ05G Trouble sleeping: Feel too hot |
| 21 | PSQ05H | Char | 1 | PSQ05H Trouble sleeping: Have bad dreams |
| 22 | PSQ05I | Char | 1 | PSQ05I Trouble sleeping: Have pain |
| 23 | PSQ05J | Char | 1 | PSQ05J Trouble sleeping: Other reasons |
| 24 | PSQ05J1 | Char | 2000 | PSQ05J1 Other reason trouble sleeping describe |
| 25 | PSQ06 | Char | 1 | PSQ06 Sleep quality during the last month |
| 26 | PSQ10 | Char | 1 | PSQ10 Bed partner/roommate |
| 27 | PSQ10A | Char | 1 | PSQ10A Bed partner/roommate reports: Loud snoring |
| 28 | PSQ10B | Char | 1 | PSQ10B Bed partner/roommate reports: Long pauses between breaths while asleep |
| 29 | PSQ10C | Char | 1 | PSQ10C Bed partner/roommate reports: Legs twitching or jerking while you sleep |
| 30 | PSQ10D | Char | 1 | PSQ10D Bed partner/roommate reports: Episodes of disorientation or confusion during sleep |
| 31 | PSQ10E | Char | 1 | PSQ10E Bed partner/roommate reports: Other restlessness while you sleep |
| 32 | PSQ10E1 | Char | 2000 | PSQ10E1 Describe other restlessness during sleep |
| 33 | VERSION | Char | 21 | Version |
| 34 | PSQ_TOTALSCORE01 | Num | 8 | Baseline Pittsburgh sleep total score |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 35 | PSQ_DURATIONSLEEP01 | Num | 8 | Baseline PSQ Duration of sleep) |
| 36 | PSQ_SLEEPDISTURBANCE01 | Num | 8 | Baseline PSQ sleep disturbance |
| 37 | PSQ_SLEEPLATENCY01 | Num | 8 | Baseline PSQ sleep latency |
| 38 | PSQ_DAYSLEEPYDYSFUNC01 | Num | 8 | Baseline PSQ day dysfunction due to sleepness |
| 39 | PSQ_SLEEPEFFICIENCY01 | Num | 8 | Baseline PSQ sleep efficiency |
| 40 | PSQ_OVERALLSLEEPQUALITY01 | Num | 8 | Baseline PSQ overall sleep quality |
| 41 | PSQ_NEEDMEDSTOSLEEP01 | Num | 8 | Baseline PSQ need meds to sleep |
| 42 | PSQ0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_rds_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | WHEEZINGAGE | Num | 8 | RDS08A Age of first wheezing/whistling in chest |
| 5 | NATURECONDITION | Char | 2000 | RDS15a Nature of condition causing inability to walk |
| 6 | VISIT | Char | 10 | Visit |
| 7 | RDS01 | Char | 1 | RDS01 Presence of cough |
| 8 | RDS01A | Char | 1 | RDS01A Frequency of cough |
| 9 | RDS02 | Char | 1 | RDS02 Presence of cough in the morning |
| 10 | RDS03 | Char | 1 | RDS03 Presence of cough during day/night |
| 11 | RDS03A | Char | 1 | RDS03A Severity of cough during the year |
| 12 | RDS03B | Num | 8 | RDS03B Number of years having cough |
| 13 | RDS04 | Char | 1 | RDS04 Bringing up phlegm from chest |
| 14 | RDS04A | Char | 1 | RDS04A Frequency of bringing up phlegm |
| 15 | RDS05 | Char | 1 | RDS05 Bringing up phlegm in the morning |
| 16 | RDS06 | Char | 1 | RDS06 Bringing up phlegm in the day/night |
| 17 | RDS06A | Char | 1 | RDS06A Bringing up phlegm during the year |
| 18 | RDS06B | Num | 8 | RDS06B Number of years having trouble with phlegm |
| 19 | RDS07 | Char | 1 | RDS07 Episodes of cough with phlegm |
| 20 | RDS07A | Num | 8 | RDS07A Number of episodes of cough with phlegm |
| 21 | RDS07B | Num | 8 | RDS07B Number of years having at least one episode |
| 22 | RDS08 | Char | 1 | RDS08 Wheezing/ whistling in chest |
| 23 | RDS09 | Char | 1 | RDS09 Shortness of breath from attack |
| 24 | RDS09A | Num | 8 | RDS09A Age of first attack |
| 25 | RDS09B | Char | 1 | RDS09B Two or more attacks |
| 26 | RDS09C | Char | 1 | RDS09C Required medicine for attacks |
| 27 | RDS10 | Char | 1 | RDS10 Wheezing/whistling in last 12 months |
| 28 | RDS10A1 | Char | 1 | RDS10A1 Recent wheezing with cold |
| 29 | RDS10A2 | Char | 1 | RDS10A2 Recent wheezing apart from colds |
| 30 | RDS10A3 | Char | 1 | RDS10A3 Recent wheezing more than once a week |
| 31 | RDS10A4 | Char | 1 | RDS10A4 Recent wheezing most days/nights |
| 32 | RDS11 | Char | 1 | RDS11 Sleep-disturbing cough |
| 33 | RDS12 | Char | 1 | RDS12 Shortness of breath during sleep |
| 34 | RDS13 | Char | 1 | RDS13 Recent wheezing/whistling |
| 35 | RDS14 | Char | 1 | RDS14 Eye irritation |
| 36 | RDS15 | Char | 1 | RDS15 Inability to walk not related to dyspnea |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | RDS16 | Char | 1 | RDS16 Asthma |
| 38 | RDS16A | Num | 8 | RDS16A Age asthma started |
| 39 | RDS16A1 | Num | 8 | RDS16A1 Age asthma started not known |
| 40 | RDS16B | Char | 1 | RDS16B Diagnosis of asthma |
| 41 | RDS16C | Char | 1 | RDS16C Current asthma |
| 42 | RDS16D | Num | 8 | RDS16D Age asthma stopped |
| 43 | RDS16D1 | Num | 8 | RDS16D1 Age asthma stopped not known |
| 44 | RDS16E | Char | 1 | RDS16E Recent medical treatment for asthma |
| 45 | RDS17 | Char | 1 | RDS17 Nose/eye allergies |
| 46 | RDS17A | Num | 8 | RDS17A Age allergies started |
| 47 | RDS17A1 | Num | 8 | RDS17A1 Age allergies started not known |
| 48 | RDS17B | Char | 1 | RDS17B Diagnosis of allergies |
| 49 | RDS17C | Char | 1 | RDS17C Current allergies |
| 50 | RDS17D | Num | 8 | RDS17D Age allergies stopped |
| 51 | RDS17D1 | Num | 8 | RDS17D1 Age allergies stopped not known |
| 52 | RDS17E | Char | 1 | RDS17E Recent medical treatment for allergies |
| 53 | RDS18 | Char | 1 | RDS18 Attack of bronchitis |
| 54 | RDS18A | Char | 1 | RDS18A Diagnosis of bronchitis |
| 55 | RDS18B | Num | 8 | RDS18B Age first having bronchitis |
| 56 | RDSB1 | Num | 8 | As a child; age not known (Check if appropriate) |
| 57 | RDS18C | Num | 8 | RDS18C Number of times having bronchitis |
| 58 | RDS19 | Char | 1 | RDS19 Pneumonia |
| 59 | RDS19A | Char | 1 | RDS19A Diagnosis of pneumonia |
| 60 | RDS19B | Num | 8 | RDS19B Age first having pneumonia |
| 61 | RDS19B1 | Num | 8 | RDS19B1 Age of first pneumonia not known |
| 62 | RDS19C | Num | 8 | RDS19C Number of times having pneumonia |
| 63 | RDS20 | Char | 1 | RDS20 Chronic bronchitis |
| 64 | RDS20A | Char | 1 | RDS20A Diagnosis of chronic bronchitis |
| 65 | RDS20B | Num | 8 | RDS20B Age chronic bronchitis started |
| 66 | RDS20C | Char | 1 | RDS20C Current chronic bronchitis |
| 67 | RDS20D | Char | 1 | RDS20D Recent medical treatment for chronic bronchitis |
| 68 | RDS21 | Char | 1 | RDS21 Emphysema |
| 69 | RDS21A | Char | 1 | RDS21A Diagnosis of emphysema |
| 70 | RDS21B | Num | 8 | RDS21B Age emphysema started |
| 71 | RDS21C | Char | 1 | RDS21C Current emphysema |
| 72 | RDS21D | Char | 1 | RDS21D Recent medical treatment for emphysema |
| 73 | RDS22 | Char | 1 | RDS22 COPD |
| 74 | RDS22A | Char | 1 | RDS22A Diagnosis of COPD |
| 75 | RDS22B | Num | 8 | RDS22B Age COPD started |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | RDS22C | Char | 1 | RDS22C Current COPD |
| 77 | RDS22D | Char | 1 | RDS22D Recent medical treatment for COPD |
| 78 | RDS23 | Char | 1 | RDS23 Sleep apnea |
| 79 | RDS23A | Char | 1 | RDS23A Diagnosis of sleep apnea |
| 80 | RDS23B | Num | 8 | RDS23B Age sleep apnea started |
| 81 | RDS23C | Char | 1 | RDS23C Current sleep apnea |
| 82 | RDS23D | Char | 1 | RDS23D Recent medical treatment for sleep apnea |
| 83 | RDS24A | Char | 1 | RDS24A Other chest illness |
| 84 | RDS24B | Char | 1 | RDS24B Chest operations |
| 85 | RDS24B1 | Char | 2000 | RDS24B1 Other chest operations specify |
| 86 | RDS24C | Char | 1 | RDS24C Chest injuries |
| 87 | RDS24C1 | Char | 2000 | RDS24C1 Other chest injuries Specify |
| 88 | RDS25A1 | Char | 1 | RDS25A1 Father had chronic bronchitis |
| 89 | RDS25B1 | Char | 1 | RDS25B1 Mother had chronic bronchitis |
| 90 | RDS25A2 | Char | 1 | RDS25A2 Father had emphysema |
| 91 | RDS25B2 | Char | 1 | RDS25B2 Mother had emphysema |
| 92 | RDS25A3 | Char | 1 | RDS25A3 Father had COPD |
| 93 | RDS25B3 | Char | 1 | RDS25B3 Mother had COPD |
| 94 | RDS25A4 | Char | 1 | RDS25A4 Father had asthma |
| 95 | RDS25B4 | Char | 1 | RDS25B4 Mother had asthma |
| 96 | RDS25A5 | Char | 1 | RDS25A5 Father had lung cancer |
| 97 | RDS25B5 | Char | 1 | RDS25B5 Mother han lung cancer |
| 98 | RDS26A | Char | 1 | RDS26A Father: smoked cigarettes |
| 99 | RDS26B | Char | 1 | RDS26B Mother: smoked cigarettes |
| 100 | RDS27 | Char | 1 | RDS27 Ever Smoked cigarettes |
| 101 | RDS28 | Num | 8 | RDS28 Age first started smoking |
| 102 | RDS29 | Char | 1 | RDS29 Currently smoking as of one month ago |
| 103 | RDS30 | Num | 8 | RDS30 Number Cigarettes smoked per day |
| 104 | RDS31 | Num | 8 | RDS31 Age stopped smoking |
| 105 | RDS32 | Num | 8 | RDS32 Average number cigarettes smoked per day |
| 106 | RDS33 | Num | 8 | RDS33 No cigarettes smoked in the past 24 hours |
| 107 | RDS33A | Num | 8 | RDS33A Number of cigarettes smoked in the last 24 hours |
| 108 | RDS33B | Num | 8 | RDS33B Number of cigarettes smoked in the last 2 hours |
| 109 | RDS33C | Num | 8 | RDS33C Number of cigarettes smoked in the last $1 / 2$ hour |
| 110 | RDS34 | Char | 1 | RDS34 Ever smoked a pipe |
| 111 | RDS35 | Num | 8 | RDS35 Age first started smoking a pipe |
| 112 | RDS36 | Char | 1 | RDS36 Currently smoking pipe as of one month ago |
| 113 | RDS37 | Num | 8 | RDS37 Number of ounces of pipe tobacco smoked per day currently |
| 114 | RDS38 | Num | 8 | RDS38 Age stopped smoking a pipe |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | RDS39 | Num | 8 | RDS39 Average Pipe tobacco usage per week |
| 116 | RDS40 | Char | 1 | RDS40 Ever smoked cigars |
| 117 | RDS41 | Num | 8 | RDS41 Age first started smoking cigars |
| 118 | RDS42 | Char | 1 | RDS42 Currently smoking cigars as of one month ago |
| 119 | RDS43 | Num | 8 | RDS43 Cigars smoked per day currently |
| 120 | RDS44 | Num | 8 | RDS44 Age stopped smoking cigars |
| 121 | RDS45 | Num | 8 | RDS45 Cigars smoked per week |
| 122 | RDS46 | Char | 1 | RDS46 Approach to tobacco smoking in home |
| 123 | RDS47A | Num | 8 | RDS47A Years following approach to smoking in home |
| 124 | RDS47B | Char | 1 | RDS47B Refused or Don't Know number of year following approach to smoking in home |
| 125 | RDS48 | Char | 1 | RDS48 Currently living with tobacco smoker |
| 126 | RDS49 | Char | 1 | RDS49 Ever lived with a tobacco smoker as an adult (age 18) since adulthood |
| 127 | RDS50 | Num | 8 | RDS50 Number of individuals smoking in household |
| 128 | RDS51A | Num | 8 | RDS51A Years living in household with smoker as an adult |
| 129 | RDS51B | Char | 1 | RDS51B Refused or don't know number of years living in a household with a smoker |
| 130 | RDS52 | Char | 1 | RDS52 Ever lived with a tobacco smoker during childhood (prior to age 18) |
| 131 | RDS53FATHERCBI | Num | 8 | RDS53FATHERCBI Father smoked |
| 132 | RDS53MOTHERCBI | Num | 8 | RDS53MOTHERCBI Mother smoked |
| 133 | RDS53OTHERCBI | Num | 8 | RDS53OTHERCBI Other person smoked |
| 134 | RDS53REFUSEDCBI | Num | 8 | RDS53REFUSEDCBI Refused to indicate who smoked |
| 135 | RDS53NOTKNOWCBI | Num | 8 | RDS53NOTKNOWCBI Don't know person who smoked |
| 136 | RDS55 | Char | 1 | RDS55 Mother smoking during pregnancy |
| 137 | RDS55A | Num | 8 | RDS55A Years during childhood living with tobacco smoker |
| 138 | RDS55B | Char | 1 | RDS55B Refused or don't know number of years living with a smoker as a child |
| 139 | RDS56 | Char | 1 | RDS56 Anyone smoked in home in the last 7 days |
| 140 | RDS57 | Num | 8 | RDS57 House of tobacco smoke exposure in the home in the last 7 days |
| 141 | RDS58 | Char | 1 | RDS58 Visibly smokey room in the home in the last 7 days |
| 142 | RDS59 | Char | 1 | RDS59 Tobacco smell in home in the last 7 days |
| 143 | RDS60 | Char | 1 | RDS60 Eye irriation in the last 7 days after in-home exposure |
| 144 | RDS61 | Char | 1 | RDS61 Nose irriation in the last 7 days after in-home exposure |
| 145 | RDS62 | Char | 1 | RDS62 Coughing in the last 7 days after in-home exposure |
| 146 | RDS637 | Char | 1 | RDS63 Extra inhalers used in the last 7 days due to smoke in home |
| 147 | RDS64 | Char | 1 | RDS64 Visited home with indoor tobacco smokers in the last 7 days |
| 148 | RDS65 | Num | 8 | RDS65 Number of hours of exposure to second-hand smoke in anothers home in the last 7 days |
| 149 | RDS66 | Char | 1 | RDS66 Visibly smokey room when visiting another's home in the last 7 days |
| 150 | RDS67 | Char | 1 | RDS67 Tobacco smell when visiting another's home in the last 7 days |
| 151 | RDS72 | Char | 1 | RDS72 Traveled by car or other vehicle in the last 7 days with someone who smokes |
| 152 | RDS73 | Num | 8 | RDS73 Hours spent traveling with tobacco smokers in the last 7 days |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 153 | RDS78 | Char | 1 | RDS78 Exposure to tobacco smoke at indoors at work in the last 7 days |
| 154 | RDS79 | Num | 8 | RDS79 Hours exposed to tobacco smoke in doors at work in the last 7 days |
| 155 | RDS80 | Char | 1 | RDS80 Visibly smoky indoors at work in the last 7 days |
| 156 | RDS81 | Char | 1 | RDS81 Tobacco smell indoors at work in the last 7 days |
| 157 | RDS86 | Char | 1 | RDS86 Outdoor area for smokers at work |
| 158 | RDS87 | Num | 8 | RDS87 Number of times walking through outdoor smoker area in the last 7 days |
| 159 | RDS88 | Num | 8 | RDS88 Hours spent at outdoor smoking area in the last 7 days |
| 160 | RDS89 | Char | 1 | RDS89 Smell smoke in outdoor smokers area |
| 161 | RDS95 | Num | 8 | RDS95 Hours spent in proximity to smoking coworkers in the last 7 days |
| 162 | RDS96 | Char | 1 | RDS96 Smell smoke while working outdoors in the last 7 days |
| 163 | RDS101 | Char | 1 | RDS101 Exposure to tobacco smoke outdoors somewhere other than work in the last 7 days |
| 164 | RDS103 | Char | 1 | RDS103 Smell tobacco smoke at non-work outdoor location in the last 7 days |
| 165 | RDS104 | Num | 8 | RDS104 Hours of smoke exposure at non-work outdoor location in the last 7 days |
| 166 | RDS109 | Char | 1 | RDS109 Exposure to tobacco smoke at place of entertainment in the last 7 days |
| 167 | RDS110 | Num | 8 | RDS110 Hours of exposure to smoke at place of entertainment in the last 7 days |
| 168 | RDS111 | Char | 1 | RDS111 Visibly smoky in place of entertainment in the last 7 days |
| 169 | RDS112 | Char | 1 | RDS112 Smell tobacco in place of entertainment in the last 7 days |
| 170 | RDS117 | Char | 1 | RDS1167Other sites of exposure to tobacco smoke in the last 7 days |
| 171 | RDS118 | Char | 90 | RDS118 Other location of smoke exposure |
| 172 | RDS119 | Num | 8 | RDS119 Hours of exposure to smoke at this other location in the last 7 days |
| 173 | RDS124 | Char | 1 | RDS124 Ever smoked marijuana |
| 174 | RDS125 | Char | 1 | RDS125 Ever regularly smoked marijuana (at least five times in a year) |
| 175 | RDS126 | Num | 8 | RDS126 Average joints smoked per week |
| 176 | RDS127 | Num | 8 | RDS127 Average number of pipes smoked per week |
| 177 | RDS128 | Num | 8 | RDS128 Years smoking marijuana |
| 178 | RDS129 | Char | 1 | RDS129 Recent marijuana smoking (last 12 months) |
| 179 | RDS130 | Char | 1 | 130) When was the last time you smoked marijuana? |
| 180 | VERSION | Char | 21 | Version |
| 181 | RDS0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_rmu_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | VISIT |
| 5 | RMU01 | Char | 1 | RMU01 Currently using Theophylline |
| 6 | RMU02 | Char | 1 | RMU02 Currently using Oral Corticosteroids |
| 7 | RMU02A1 | Num | 8 | RMU02A1 Years on oral corticosteroids |
| 8 | RMU02A2 | Num | 8 | RMU02A2 Days on oral corticosteroids |
| 9 | RMU03 | Char | 1 | RMU03 Supplemental oxygen usage |
| 10 | RMU03A | Num | 8 | RMU03A Hours using supplemental oxygen per day |
| 11 | RMU04 | Char | 1 | RMU04 Inhaled steroids usage in last three months |
| 12 | RMU04A1 | Char | 1 | RMU04A1 Inhaled steroids used in last 3 months: Azmacort (triamcinolone) |
| 13 | RMU04A2 | Char | 1 | RMU04A2 Inhaled steroids used in last 3 months: Beclovent (beclomethasone) |
| 14 | RMU04A3 | Char | 1 | RMU04A3 Inhaled steroids used in last 3 months: Vanceril (beclomethasone) |
| 15 | RMU04A4 | Char | 1 | RMU04A4 Inhaled steroids used in last 3 months: AeroBid (blunisolide) |
| 16 | RMU04A5 | Char | 1 | RMU04A5 Inhaled steroids used in last 3 months: Flovent (fluticasone) |
| 17 | RMU04A5A | Num | 8 | RMU04A5A Flovent (fluticasone): Puffs/day? |
| 18 | RMU04A6 | Char | 1 | RMU04A6 Inhaled steroids used in last 3 months: Pulmicort (budesonide) |
| 19 | RMU04A6A | Num | 8 | RMU04A6A Pulmicort (budesonide): Puffs/day? |
| 20 | RMU04A6B | Char | 1 | RMU04A6B Inhaled steroids used in last 3 months: Pulmicort dose |
| 21 | RMU04A7 | Char | 1 | RMU04A7 Inhaled steroids used in last 3 months: Qvar (beclomethasone) |
| 22 | RMU04A7A | Num | 8 | RMU04A7A Qvar (beclomethasone): Puffs/day? |
| 23 | RMU04A7B | Char | 1 | RMU04A7B Inhaled steroids used in last 3 months: Qvar dose |
| 24 | RMU04A8 | Char | 1 | RMU04A8 Inhaled steroids used in last 3 months: Advair (bluticasone/salmeterol) |
| 25 | RMU04A8A | Num | 8 | RMU04A8A Advair (bluticasone/salmeterol): Puffs/day? |
| 26 | RMU04A8B | Char | 1 | RMU04A8B Inhaled steroids used in last 3 months: Advair dose |
| 27 | RMU04A9 | Char | 1 | RMU04A9 Inhaled steroids used in last 3 months: Symbicort |
| 28 | RMU04A9A | Num | 8 | RMU04A9A Symbicort): Puffs/day? |
| 29 | RMU04A9B | Char | 1 | RMU04A9B Inhaled steroids used in last 3 months: Symbicort dose |
| 30 | RMU04A10 | Char | 1 | RMU04A10 Inhaled steroids used in last 3 months: Other, specify |
| 31 | RMU04A10A | Num | 8 | RMU04A10A Other, specify: Puffs/day? |
| 32 | RMU04A10B | Char | 50 | RMU04A10B Inhaled steroids used in last 3 months:Specify |
| 33 | RMU05 | Char | 1 | RMU05 Inhaled bronchodilators in last three months |
| 34 | RMU05A1 | Char | 1 | RMU05A1 Inhaled bronchodilators used in last 3 months: Albuterol (Proventil, Ventolin, ProAir) |
| 35 | RMU05A1A | Num | 8 | RMU05A1A Albuterol (Proventil, Ventolin, ProAir): Puffs/day? |
| 36 | RMU05A2 | Char | 1 | RMU05A2 Inhaled bronchodilators used in last 3 months: ipratropium bromide (Atrovent) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | RMU05A2A | Num | 8 | RMU05A2A ipratropium bromide (Atrovent): Puffs/day? |
| 38 | RMU05A3 | Char | 1 | RMU05A3 Inhaled bronchodilators used in last 3 months: ipratropium bromide/albuterol sulfate |
| (Combivent) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 74 | RMU08A7 | Char | 1 | RMU08A7 statin used in last 3 months: Zocor (simvastatin) |
| 75 | RMU08A8 | Char | 1 | RMU08A8 statin used in last 3 months: Other |
| 76 | RMU08A8B | Char | 50 | RMU08A8B statin used in last 3 months:Specify |
| 77 | RMU09 | Char | 1 | RMU09 Beta-blocker medications usage in the last three months |
| 78 | RMU09A1 | Char | 1 | RMU09A1 beta blocker used in last 3 months: Atenolol (tenormin, tenoretic) |
| 79 | RMU09A2 | Char | 1 | RMU09A2 beta blocker used in last 3 months: Metoprolol (lopresor, toprol) |
| 80 | RMU09A3 | Char | 1 | RMU09A3 beta blocker used in last 3 months: Carvedilol (coreg) |
| 81 | RMU09A4 | Char | 1 | RMU09A4 beta blocker used in last 3 months: Labetalol (trandate, normodyne) |
| 82 | RMU09A5 | Char | 1 | RMU09A5 beta blocker used in last 3 months: Propranalol (Inderal, Inderide) |
| 83 | RMU09A6 | Char | 1 | RMU09A6 beta blocker used in last 3 months: Sotalol (Betapace, Sorine) |
| 84 | RMU09A7 | Char | 1 | RMU09A7 beta blocker used in last 3 months: Timolol (Blocadren, timolide) |
| 85 | RMU09A8 | Char | 1 | RMU09A8 beta blocker used in last 3 months: bisoprolol (zebeta, ziac) |
| 86 | RMU09A9 | Char | 1 | RMU09A9 beta blocker used in last 3 months: pindolol (visken) |
| 87 | RMU09A10 | Char | 1 | RMU09A10 beta blocker used in last 3 months: Other |
| 88 | RMU09A10B | Char | 50 | RMU09A10B beta blocker used in last 3 months:Specify |
| 89 | RMU10 | Char | 1 | RMU10 Oral anti-oxidant supplements usage in the past three months |
| 90 | RMU10A1 | Char | 1 | RMU10A1 oral anti-oxidants used in last 3 months: Vitamin C (ascorbic acid) |
| 91 | RMU10A2 | Char | 1 | RMU10A2 oral anti-oxidants used in last 3 months: Vitamin E (alpha-tocopherol) |
| 92 | RMU10A3 | Char | 1 | RMU10A3 oral anti-oxidants used in last 3 months: beta carotene |
| 93 | RMU10A4 | Char | 1 | RMU10A4 oral anti-oxidants used in last 3 months: zinc |
| 94 | RMU10A5 | Char | 1 | RMU10A5 oral anti-oxidants used in last 3 months: copper |
| 95 | RMU10A6 | Char | 1 | RMU10A6 oral anti-oxidants used in last 3 months: fish oil |
| 96 | RMU10A7 | Char | 1 | RMU10A7 oral anti-oxidants used in last 3 months: omega 3 |
| 97 | RMU10A8 | Char | 1 | RMU10A8 oral anti-oxidants used in last 3 months: Other |
| 98 | RMU10A8B | Char | 50 | RMU10A8B oral anti-oxidants used in last 3 months:Specify |
| 99 | RMU11 | Char | 1 | RMU11 Aspirin usage |
| 100 | RMU12A | Char | 50 | RMU12A Other Medication taken in the last 3 months |
| 101 | RMU12B | Char | 50 | RMU12B Other Medication taken in the last 3 months |
| 102 | RMU12C | Char | 50 | RMU12C Other Medication taken in the last 3 months |
| 103 | RMU12D | Char | 50 | RMU12D Other Medication taken in the last 3 months |
| 104 | RMU12E | Char | 50 | RMU12E Other Medication taken in the last 3 months |
| 105 | RMU12F | Char | 50 | RMU12F Other Medication taken in the last 3 months |
| 106 | RMU12G | Char | 50 | RMU12G Other Medication taken in the last 3 months |
| 107 | RMU12H | Char | 50 | RMU12H Other Medication taken in the last 3 months |
| 108 | RMU12I | Char | 50 | RMU12I Other Medication taken in the last 3 months |
| 109 | RMU13A | Char | 50 | RMU13A Other Supplement taken in the last 3 months |
| 110 | RMU13B | Char | 50 | RMU13B Other Supplement taken in the last 3 months |
| 111 | RMU13C | Char | 50 | RMU13C Other Supplement taken in the last 3 months |
| 112 | RMU13D | Char | 50 | RMU13D Other Supplement taken in the last 3 months |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 113 | RMU13E | Char | 50 | RMU13E Other Supplement taken in the last 3 months |
| 114 | RMU13F | Char | 50 | RMU13F Other Supplement taken in the last 3 months |
| 115 | RMU13G | Char | 50 | RMU13G Other Supplement taken in the last 3 months |
| 116 | RMU13H | Char | 50 | RMU13H Other Supplement taken in the last 3 months |
| 117 | VERSION | Char | 21 | VERSION |
| 118 | RMU0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_sdf_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SDF01 | Char | 1 | SDF01 Exhaled CO Measured |
| 6 | SDF01A | Num | 8 | SDF01A Monitor number |
| 7 | SDF01B | Num | 8 | SDF01B eCO Measurement 1 |
| 8 | SDF01C | Num | 8 | SDF01C eCO Measurement 2 |
| 9 | SDF02 | Char | 1 | SDF02 Pre-bronchodilator spirometry |
| 10 | SDF02A | Char | 5 | SDF02A Time pre-BD slow vital capacity procedure began |
| 11 | SDF02A_AMPM | Char | 1 | SDF02A_AMPM AM/PM |
| 12 | SDF03A | Num | 8 | SDF03A Pre-BD Inspiratory Capacity |
| 13 | SDF03B | Num | 8 | SDF03B Pre-BD Expiratory slow vital capacity |
| 14 | SDF03C | Num | 8 | SDF03C Pre-BD FEV1 |
| 15 | SDF03D | Num | 8 | SDF03D Pre-BD FVC |
| 16 | SDF04 | Char | 1 | SDF04 Post-bronchodilator spirometry |
| 17 | SDF04A | Char | 5 | SDF04A Time first puff of bronchodilator administered |
| 18 | SDF04A_AMPM | Char | 1 | SDF04A_AMPM AM/PM |
| 19 | SDF04B | Char | 5 | SDF04B Time post-BD slow vital capacity procedure began |
| 20 | SDF04B_AMPM | Char | 1 | SDF04B_AMPM AM/PM |
| 21 | SDF05A | Num | 8 | SDF05A Post-BD Inspiratory Capacity |
| 22 | SDF05B | Num | 8 | SDF05B Post-BD Expiratory slow vital capacity |
| 23 | SDF05C | Num | 8 | SDF05C Post-BD FEV1 |
| 24 | SDF05D | Num | 8 | SDF05D Post-BD FVC |
| 25 | SDF06 | Char | 1 | SDF06 Post-BD Meet ATS-ERS requirements |
| 26 | SDF07 | Char | 1 | SDF07 Complications during spirometry |
| 27 | SDF07A | Char | 2000 | SDF07A Explain spirometry complications |
| 28 | SDF08 | Char | 2000 | SDF08 Other comments |
| 29 | VERSION | Char | 21 | Version |
| 30 | SDF0A_DAYS | Num | 8 | Form Date - Days from enrollment |

Data Set Name: r1_sfh_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SFH01 | Num | 8 | SFH01 General Health |
| 6 | SFH02A | Num | 8 | SFH02A Limitations on moderate activites |
| 7 | SFH02B | Num | 8 | SFH02B Limitations on difficult activities |
| 8 | SFH03A | Char | 1 | SFH03A Limited in accomplishing tasks |
| 9 | SFH03B | Char | 1 | SFH03B Limited in daily activities |
| 10 | SFH04A | Char | 1 | SFH04A Emotional limitations on activities |
| 11 | SFH04B | Char | 1 | SHF04B Emotional limitations on daily life |
| 12 | SFH05 | Num | 8 | SFH05 Pain interfering with normal work |
| 13 | SFH06A | Num | 8 | SFH06A Feeling calm |
| 14 | SFH06B | Num | 8 | SFH06B Energy level |
| 15 | SFH06C | Num | 8 | SFH06C Feeling depressed |
| 16 | SFH07 | Num | 8 | SFH07 Physical/emotional health interfering with social life |
| 17 | VERSION | Char | 21 | Version |
| 18 | SFH_BP01 | Num | 8 | Baseline SFH bodily pain |
| 19 | SFH_GH01 | Num | 8 | Baseline SFH general health |
| 20 | SFH_MCS01 | Num | 8 | Baseline SFH mental component summary |
| 21 | SFH_MH01 | Num | 8 | Baseline SFH mental health |
| 22 | SFH_PCS01 | Num | 8 | Baseline SFH physical component summary |
| 23 | SFH_PF01 | Num | 8 | Baseline SFH physical functioning |
| 24 | SFH_RE01 | Num | 8 | Baseline SFH role emotion |
| 25 | SFH_RP01 | Num | 8 | Baseline SFH role physical |
| 26 | SFH_SF01 | Num | 8 | Baseline SFH social functioning |
| 27 | SFH_VT01 | Num | 8 | Baseline SFH vitality |
| 28 | SFH0A_DAYS | Num | 8 | Form Date - Days from enrollment |
|  |  |  |  |  |

## Data Set Name: r1_sgr_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SGR0 | Char | 1 | SGR01 Describe current health |
| 6 | SGR01 | Num | 8 | SGR01 chest trouble: I cough: |
| 7 | SGR02 | Num | 8 | SGR02 chest trouble: I bring up phlegm (sputum): |
| 8 | SGR03 | Num | 8 | SGR03 chest trouble: I have had shortness of breath: |
| 9 | SGR04 | Num | 8 | SGR04 chest trouble: I have attacks of wheezing: |
| 10 | SGR05 | Char | 1 | SGR05 Number of attacks |
| 11 | SGR06 | Char | 1 | SGR06 Days with little chest trouble |
| 12 | SGR07 | Char | 1 | SGR07 Wheeze in morning |
| 13 | SGR08 | Char | 1 | SGR08 Describe chest condition |
| 14 | SGR09A | Char | 1 | SGR09A Feel breathless:Getting washed or dressed |
| 15 | SGR09B | Char | 1 | SGR09B Feel breathless:Walking around the home |
| 16 | SGR09C | Char | 1 | SGR09C Feel breathless:Walking outside on the level |
| 17 | SGR09D | Char | 1 | SGR09D Feel breathless:Walking up a flight of stairs |
| 18 | SGR09E | Char | 1 | SGR09E Feel breathless:Walking up hills |
| 19 | SGR10A | Char | 1 | SGR10A About cough and breathlessness: Painful cough |
| 20 | SGR10B | Char | 1 | SGR10B About cough and breathlessness: Tiring cough |
| 21 | SGR10C | Char | 1 | SGR10C About cough and breathlessness: Breathless when talking |
| 22 | SGR10D | Char | 1 | SGR10D About cough and breathlessness: Breathless when bending over |
| 23 | SGR10E | Char | 1 | SGR10E About cough and breathlessness: Coughing/breathing disturbs sleep |
| 24 | SGR10F | Char | 1 | SGR10F About cough and breathlessness: Easily exhausted |
| 25 | SGR11A | Char | 1 | SGR11A Effect of chest trouble: Embarrassed in public |
| 26 | SGR11B | Char | 1 | SGR11B Effect of chest trouble: Chest trouble annoys others |
| 27 | SGR11C | Char | 1 | SGR11C Effect of chest trouble: Feeling panicked when out of breath |
| 28 | SGR11D | Char | 1 | SGR11D Effect of chest trouble: Chest problem beyond control |
| 29 | SGR11E | Char | 1 | SGR11E Effect of chest trouble: Frail/invalid |
| 30 | SGR11F | Char | 1 | SGR11F Effect of chest trouble: Exercise is unsafe |
| 31 | SGR11G | Char | 1 | SGR11G Effect of chest trouble: Effort |
| 32 | SGR12A | Char | 1 | SGR12A Activities effected by respiratory problems: Long time washing/dressing |
| 33 | SGR12B | Char | 1 | SGR12B Activities effected by respiratory problems: Long time bathing |
| 34 | SGR12C | Char | 1 | SGR12C Activities effected by respiratory problems: Walking slowly/pausing often |
| 35 | SGR12D | Char | 1 | SGR12D Activities effected by respiratory problems: Long time doing housework |
| 36 | SGR12E | Char | 1 | SGR12E Activities effected by respiratory problems: Walking up stairs |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SGR12F | Char | 1 | SGR12F Activities effected by respiratory problems: Difficulty walking fast |
| 38 | SGR12G | Char | 1 | SGR12G Activities effected by respiratory problems: Difficulty performing moderate <br> tasks |
| 39 | SGR12H | Char | 1 | SGR12H Activities effected by respiratory problems: Difficulty performing hard tasks |
| 40 | SGR13A | Char | 1 | SGR13A Activities usually effected by chest: Cannot play sports or games |
| 41 | SGR13B | Char | 1 | 1 |
| 42 | SGR13C | Char | 1 | SGR13DActivities usually effected by chest: Cannot do housework |
| 43 | SGR13D | Char | 1 | SGR13E Activities usually effected by chest: Cannot move far from bed/chair |
| 44 | SGR13E | Num | 8 | SGR14 Personal effects of chest trouble |
| 45 | SGR14 | Char | 21 | Version |
| 46 | VERSION | Cannot go out for recreation |  |  |
| 47 | SGR_SYMPTOMSCORE01 | Num | 8 | Baseline SGR symptom score |
| 48 | SGR_ACTIVITYSCORE01 | Num | 8 | Baseline SGR activity score |
| 49 | SGR_IMPACTSCORE01 | Num | 8 | Baseline SGR impact score |
| 50 | SGR_TOTALSCORE01 | Num | 8 | Baseline SGR total score |
| 51 | SGR0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_smw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SMW01 | Num | 8 | SMW01 Medications taken since post-bronchodilator spirometry |
| 6 | SMW02 | Char | 1 | SMW02 blood pressure taken more than 4 hours prior to SMW |
| 7 | SMW03 | Char | 1 | SMW03 Supplemental Oxygen |
| 8 | SMW03A | Num | 8 | SMW03A Supplemental Oxygen Flow rate |
| 9 | SMW03B | Char | 1 | SMW03B Flow Type |
| 10 | SMW04A | Num | 8 | SMW04A Oxygen saturation (SpO2) at rest prior to SMW |
| 11 | SMW04B | Num | 8 | SMW04B Pulse at rest prior to SMW |
| 12 | SMW05 | Char | 1 | SMW05 Was continuous oximetry recorded? |
| 13 | SMW06 | Char | 5 | SMW06 Start time of 6MW |
| 14 | SMW06_AMPM | Char | 1 | SMW06_AMPM AM/PM |
| 15 | SMW07A | Num | 8 | SMW07A Oxygen saturation (SpO2) immediately following SMW |
| 16 | SMW07B | Num | 8 | SMW07B Pulse immediately following SMW |
| 17 | SMW07C | Num | 8 | SMW07C Breathlessness Score immediately following SMW |
| 18 | SMW07D | Num | 8 | SMW07D Exertion score immediately following SMW |
| 19 | SMW08A | Char | 1 | SMW08A Type of SMW course used (meters, feet, or other) |
| 20 | SMW08B | Num | 8 | SMW08B Number of full laps |
| 21 | SMW08C | Num | 8 | SMW08C Distance walked final partial lap |
| 22 | SMW09 | Char | 1 | SMW09 Stopped before 6 minutes |
| 23 | SMW09A1 | Num | 8 | SMW09A1 Duration (minutes) |
| 24 | SMW09A2 | Num | 8 | SMW09A2 Duration (seconds) |
| 25 | SMW09B1 | Num | 8 | SMW09B1 Primary reason for stopping/not walking faster: Desaturation to LT 80\% |
| 26 | SMW09B2 | Num | 8 | SMW09B2 Primary reason for stopping/not walking faster: Orthopedic pain |
| 27 | SMW09B3 | Num | 8 | SMW09B3 Primary reason for stopping/not walking faster: Muscle pain |
| 28 | SMW09B4 | Num | 8 | SMW09B4 Primary reason for stopping/not walking faster: Breathlessness |
| 29 | SMW09B5 | Num | 8 | SMW09B5 Primary reason for stopping/not walking faster: Adverse Event |
| 30 | SMW09B5A | Num | 8 | SMW09B5A SMW related AE: Angina |
| 31 | SMW09B5B | Num | 8 | SMW09B5B SMW related AE: Lightheadedness |
| 32 | SMW09B5C | Num | 8 | SMW09B5C SMW related AE: Intolerable dyspnea |
| 33 | SMW09B5D | Num | 8 | SMW09B5D SMW related AE: Leg cramps |
| 34 | SMW09B5E | Num | 8 | SMW09B5E SMW related AE: Staggering |
| 35 | SMW09B5F | Num | 8 | SMW09B5F SMW related AE: Diaphoresis |
| 36 | SMW09B5G | Num | 8 | SMW09B5G SMW related AE: Pale or ashen appearance |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 37 | SMW09B5H | Num | 8 | SMW09B5H SMW related AE: Mental confusion or headache |
| 38 | SMW09B5I | Num | 8 | SMW09B5I SMW related AE: Other |
| 39 | VERSION | Char | 21 | Version |
| 40 | SMW0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: r1_spw_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | SPW01 | Num | 8 | SPW01 Weight of entire sample |
| 6 | SPW02A | Num | 8 | SPW02A Salivary Contamination: Minimal |
| 7 | SPW02B | Num | 8 | SPW02B Salivary Contamination: Mild |
| 8 | SPW02C | Num | 8 | SPW02C Salivary Contamination: Moderate |
| 9 | SPW02D | Num | 8 | SPW02D Salivary Contamination: Excessive |
| 10 | SPW03A | Num | 8 | SPW03A Consistency: Watery |
| 11 | SPW03B | Num | 8 | SPW03B Consistency: Mucoid |
| 12 | SPW03C | Num | 8 | SPW03C Consistency: Purulent (puss) |
| 13 | SPW04A | Num | 8 | SPW04A Mucus plugs: Numerous |
| 14 | SPW04B | Num | 8 | SPW04B Mucus plugs: Moderate number |
| 15 | SPW04C | Num | 8 | SPW04C Mucus plugs: Sparse |
| 16 | SPW04D | Num | 8 | SPW04D Mucus plugs: Large |
| 17 | SPW04E | Num | 8 | SPW04E Mucus plugs: Small |
| 18 | SPW04F | Num | 8 | SPW04F Mucus plugs: Dense/flocculent |
| 19 | SPW04G | Num | 8 | SPW04G Mucus plugs: Diffuse opacity |
| 20 | SPW05A | Num | 8 | SPW05A Color of plugs: Clear |
| 21 | SPW05B | Num | 8 | SPW05B Color of plugs: White |
| 22 | SPW05C | Num | 8 | SPW05C Color of plugs: Yellow/Tan |
| 23 | SPW05D | Num | 8 | SPW05D Color of plugs: Brown |
| 24 | SPW06 | Char | 2000 | SPW06 General Notes |
| 25 | SPW07A | Num | 8 | SPW07A Mucin Method: SPW07A Weighing Trayweight in grams |
| 26 | SPW07B | Num | 8 | SPW07B Mucin Method: SPW07B Whole Sputumweight in grams |
| 27 | SPW07C | Num | 8 | SPW07C Mucin Method: SPW07C Guanidine Vol.weight in grams |
| 28 | SPW08A | Num | 8 | SPW08A Microbiology Method: SPW08A Microcentrifuge tubeweight in grams |
| 29 | SPW08B | Num | 8 | SPW08B Microbiology Method: SPW08B Whole sputumweight in grams |
| 30 | SPW09A | Num | 8 | SPW09A Viscoelastic Method: SPW09A Microcentrifuge tubeweight in grams |
| 31 | SPW09B | Num | 8 | SPW09B Viscoelastic Method: SPW09B Whole sputumweight in grams |
| 32 | SPW10A | Num | 8 | SPW10A EDTA processing: SPW10A Weight of centrifuge tube |
| 33 | SPW10B | Num | 8 | SPW10B EDTA processing: SPW10B Weight of sputum |
| 34 | SPW10C | Num | 8 | SPW10C EDTA processing: SPW10C 1\% sputolysin volume |
| 35 | SPW10D | Num | 8 | SPW10D EDTA processing: SPW10D Volume EDTA added |
| 36 | SPW10E | Char | 5 | SPW10E EDTA processing: SPW10E Time of 15 minute tumble |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | SPW10F | Num | 8 | SPW10F EDTA processing: SPW10F Volume EDTA added after tumble |
| 38 | SPW10G | Char | 5 | SPW10G EDTA processing: SPW10G Time of 5 minute tumble |
| 39 | SPW11A | Num | 8 | SPW11A Supernatants: SPW11A Number of aliquots in SPW11A |
| 40 | SPW11B | Num | 8 | SPW11B Supernatants: SPW11B Volume stored in SPW11B |
| 41 | SPW11C | Num | 8 | SPW11C Supernatants: SPW11C Number of aliquots in SPW11C |
| 42 | SPW11D | Num | 8 | SPW11D Supernatants: SPW11D Volumbe stored in SPW11D |
| 43 | SPW11E | Num | 8 | SPW11E Supernatants: SPW11E Volume of Hanks added |
| 44 | SPW12A1 | Num | 8 | SPW12A1 Cell counts: SPW12A1 Dead cell count in SPW12A1 |
| 45 | SPW12A2 | Num | 8 | SPW12A2 Cell counts: SPW12A2 Live cell count in SPW12A2 |
| 46 | SPW12A3 | Num | 8 | SPW12A3 Cell counts: SPW12A3 Total cell count in SPW12A3 |
| 47 | SPW12B1 | Num | 8 | SPW12B1 Cell counts: SPW12B1 Dead cell count in SPW12B1 |
| 48 | SPW12B2 | Num | 8 | SPW12B2 Cell counts: SPW12B2 Live cell count in SPW12B2 |
| 49 | SPW12B3 | Num | 8 | SPW12B3 Cell counts: SPW12B3 Total cell count in SPW12B3 |
| 50 | SPW12C1 | Num | 8 | SPW12C1 Cell counts: SPW12C1 Dead cell count in SPW12C1 |
| 51 | SPW12C2 | Num | 8 | SPW12C2 Cell counts: SPW12C2 Live cell count in SPW12C2 |
| 52 | SPW12C3 | Num | 8 | SPW12C3 Cell counts: SPW12C3 Dead cell count in SPW12C3 |
| 53 | SPW12D1 | Num | 8 | SPW12D1 Cell counts: SPW12D1 Dead cell count in SPW12D1 |
| 54 | SPW12D2 | Num | 8 | SPW12D2 Cell counts: SPW12D2 Live cell count in SPW12D2 |
| 55 | SPW12D3 | Num | 8 | SPW12D3 Cell counts: SPW12D3 Total cell count in SPW12D3 |
| 56 | SPW12E1 | Num | 8 | SPW12E1 Cell counts: SPW12E1 Dead cell count in SPW12E1 |
| 57 | SPW12E2 | Num | 8 | SPW12E2 Cell counts: SPW12E2 Live cell count in SPW12E2 |
| 58 | SPW12E3 | Num | 8 | SPW12E3 Cell counts: SPW12F Totals |
| 59 | SPW12F | Num | 8 | SPW12F Cell counts: SPW12F TCC |
| 60 | SPW12G | Num | 8 | SPW12G Cell counts: SPW12G TCC/Weight of selected sample |
| 61 | SPW12H | Num | 8 | SPW12H Cell counts: SPW12H Viability |
| 62 | SPW13 | Num | 8 | SPW13 Hema 3 stained slides |
| 63 | SPW14 | Num | 8 | SPW14 Trizol Cell Pellet: Number of cells |
| 64 | SPW06A | Char | 1 | 6a) Sputum processing method |
| 65 | SPW0D | Char | 5 | Processing Started |
| 66 | SPW0D_AMPM | Char | 1 | AM/PM |
| 67 | SPW0E | Char | 5 | Processing Ended |
| 68 | SPW0E_AMPM | Char | 1 | AM/PM |
| 69 | VERSION | Char | 21 | Version |
| 70 | SPW0A_DAYS | Num | 8 | Form Date - Days from enrollment |
| 71 | SPW0C_DAYS | Num | 8 | Date Collected - Days from enrollment |

Data Set Name: r1_vsa_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | R_BLINDID | Char | 5 | Public Repeatability ID |
| 3 | FORM | Char | 10 | Form |
| 4 | VISIT | Char | 10 | Visit |
| 5 | VSA01 | Char | 1 | VSA01 1 MET |
| 6 | VSA02 | Char | 1 | VSA02 2 METs |
| 7 | VSA03 | Char | 1 | VSA03 3 METs |
| 8 | VSA04 | Char | 1 | VSA04 4 METs |
| 9 | VSA05 | Char | 1 | VSA05 5 METs |
| 10 | VSA06 | Char | 1 | VSA06 6 METs |
| 11 | VSA07 | Char | 1 | VSA07 7 METs |
| 12 | VSA08 | Char | 1 | VSA08 8 METs |
| 13 | VSA09 | Char | 1 | VSA09 9 METs |
| 14 | VSA10 | Char | 1 | VSA10 10 METs |
| 15 | VSA11 | Char | 1 | VSA11 11 METs |
| 16 | VSA12 | Char | 1 | VSA12 12 METs |
| 17 | VSA13 | Char | 1 | VSA13 13 METs |
| 18 | VERSION | Char | 21 | Version |
| 19 | VSASCORE01 | Num | 8 | Baseline veteran specific activity score |
| 20 | VSA0A_DAYS | Num | 8 | Form Date - Days from enrollment |

## Data Set Name: rp_arup_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | ANAB_URN | Char | 14 | Anabasine level. Anabasine is a minor alkaloid in the tobacco plant and is a biomarker of <br> active tobacco use. However, anabasine is detected in the urine of approximately 5\% of <br> non-tobacco users. |
| 3 | COT_3H_URN | Char | 14 | Cotinine 3OH level. Nicotine is metabolized to cotinine, and 3-OH-cotinine is a <br> metabolite of cotinine. This metabolite may persist beyond 2 weeks of abstinence from <br> nicotine use. |
| 4 | CRT_DL_URINE | Char | 14 | Urine creatinine level |
| 5 | COT_URN | Char | 14 | Cotinine level. Cotinine is the major metabolite of nicotine and has a half-life of <br> approximately 16 hours. |
| 6 | NRNC_URN | Char | 14 | Nornicotine level. Nornicotine may be present in tobacco products or may result from <br> metabolism of nicotine. |
| 7 | NIC_URN | Char | 14 | Nicotine level |
| 8 | ANAB_URN_UNIT | Char | 8 | Anabasine unit |
| 9 | COT_3H_URN_UNIT | Char | 8 | Cotinine 3OH unit |
| 10 | CRT_DL_URINE_UNIT | Char | 8 | Urine creatinine unit |
| 11 | COT_URN_UNIT | Char | 8 | Cotinine unit |
| 12 | NRNC_URN_UNIT | Char | 8 | Nornicotine unit |
| 13 | NIC_URN_UNIT | Char | 8 | Nicotine unit |
| 14 | VISIT | Char | 10 | Visit |
| 15 | REPLICATE | Num | 8 | Replicate |
| 16 | NICOTINE_UR | Num | 8 | Indicator if nicotine levels are elevated (1 - Nic_URN>2, 0 - Nic_URN<=2) |
| 17 | COTININE_UR | Num | 8 | Indicator if cotinine levels are elevated (1 - Cot_URN>5, 0 - Cot_URN<=5) |
| 18 | COTININE_3OH_UR | Num | 8 | Indicator if cotinine 3OH levels are elevated (1 - Cot_3H_URN>50, 0 - <br> Cot_3H_URN<=50) |
| 19 | NORNICOTINE_UR | Num | 8 | Indicator if nornicotine levels are elevated (1 - NRNC_URN>2, 0 - NRNC_URN<=2) |
| 20 | ANABASINE_UR | Num | 8 | Indicator if anabsine levels are elevated (1 - ANAB_URN>3, 0 - ANAB_URN<=3) |

## Data Set Name: rp_rbm1_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | REPLICATE | Char | 1 | Replicate |
| 3 | VISIT | Char | 10 | Visit |
| 4 | A2M_UNIT | Char | 5 | Analyte unit |
| 5 | A2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 6 | A2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 7 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 8 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 9 | ADIPOQ_UNIT | Char | 5 | Analyte unit |
| 10 | ADIPOQ_LOW_RANGE | Char | 5 | Low range for analyte |
| 11 | ADIPOQ_HIGH_RANGE | Char | 5 | High range for analyte |
| 12 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 13 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 14 | AGER_UNIT | Char | 5 | Analyte unit |
| 15 | AGER_LOW_RANGE | Char | 5 | Low range for analyte |
| 16 | AGER_HIGH_RANGE | Char | 5 | High range for analyte |
| 17 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 18 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 19 | APCS_UNIT | Char | 5 | Analyte unit |
| 20 | APCS_LOW_RANGE | Char | 5 | Low range for analyte |
| 21 | APCS_HIGH_RANGE | Char | 5 | High range for analyte |
| 22 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 23 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 24 | APOA4_UNIT | Char | 5 | Analyte unit |
| 25 | APOA4_LOW_RANGE | Char | 5 | Low range for analyte |
| 26 | APOA4_HIGH_RANGE | Char | 5 | High range for analyte |
| 27 | APOA4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 28 | APOA4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 29 | B2M_UNIT | Char | 6 | Analyte unit |
| 30 | B2M_LOW_RANGE | Char | 6 | Low range for analyte |
| 31 | B2M_HIGH_RANGE | Char | 6 | High range for analyte |
| 32 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 33 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 34 | BDNF_UNIT | Char | 5 | Analyte unit |
| 35 | BDNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 36 | BDNF_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 38 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 39 | C3_UNIT | Char | 6 | Analyte unit |
| 40 | C3_LOW_RANGE | Char | 6 | Low range for analyte |
| 41 | C3_HIGH_RANGE | Char | 6 | High range for analyte |
| 42 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 43 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 44 | CCL11_UNIT | Char | 5 | Analyte unit |
| 45 | CCL11_LOW_RANGE | Char | 5 | Low range for analyte |
| 46 | CCL11_HIGH_RANGE | Char | 5 | High range for analyte |
| 47 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 48 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 49 | CCL13_UNIT | Char | 5 | Analyte unit |
| 50 | CCL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 51 | CCL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 52 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 53 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 54 | CCL2_UNIT | Char | 5 | Analyte unit |
| 55 | CCL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 56 | CCL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 57 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 58 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 59 | CCL20_UNIT | Char | 5 | Analyte unit |
| 60 | CCL20_LOW_RANGE | Char | 5 | Low range for analyte |
| 61 | CCL20_HIGH_RANGE | Char | 5 | High range for analyte |
| 62 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 63 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 64 | CCL23_UNIT | Char | 5 | Analyte unit |
| 65 | CCL23_LOW_RANGE | Char | 5 | Low range for analyte |
| 66 | CCL23_HIGH_RANGE | Char | 5 | High range for analyte |
| 67 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 68 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 69 | CCL24_UNIT | Char | 5 | Analyte unit |
| 70 | CCL24_LOW_RANGE | Char | 5 | Low range for analyte |
| 71 | CCL24_HIGH_RANGE | Char | 5 | High range for analyte |
| 72 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 73 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 74 | CCL3_UNIT | Char | 5 | Analyte unit |
| 75 | CCL3_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | CCL3_HIGH_RANGE | Char | 5 | High range for analyte |
| 77 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 78 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 79 | CCL4_UNIT | Char | 5 | Analyte unit |
| 80 | CCL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 81 | CCL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 82 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 83 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 84 | CCL5_UNIT | Char | 5 | Analyte unit |
| 85 | CCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 86 | CCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 87 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 88 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 89 | CCL8_UNIT | Char | 5 | Analyte unit |
| 90 | CCL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 91 | CCL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 92 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 93 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 94 | CDH1_UNIT | Char | 5 | Analyte unit |
| 95 | CDH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 96 | CDH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 97 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 98 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 99 | CHGA_UNIT | Char | 5 | Analyte unit |
| 100 | CHGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 101 | CHGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 102 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 103 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 104 | CRP_UNIT | Char | 5 | Analyte unit |
| 105 | CRP_LOW_RANGE | Char | 5 | Low range for analyte |
| 106 | CRP_HIGH_RANGE | Char | 5 | High range for analyte |
| 107 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 108 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 109 | CSF2_UNIT | Char | 5 | Analyte unit |
| 110 | CSF2_LOW_RANGE | Char | 5 | Low range for analyte |
| 111 | CSF2_HIGH_RANGE | Char | 5 | High range for analyte |
| 112 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 113 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 114 | CSTB_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | CSTB_LOW_RANGE | Char | 5 | Low range for analyte |
| 116 | CSTB_HIGH_RANGE | Char | 5 | High range for analyte |
| 117 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 118 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 119 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 120 | CXCL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 121 | CXCL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 122 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 123 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 124 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 125 | CXCL9_LOW_RANGE | Char | 5 | Low range for analyte |
| 126 | CXCL9_HIGH_RANGE | Char | 5 | High range for analyte |
| 127 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 128 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 129 | F7_UNIT | Char | 5 | Analyte unit |
| 130 | F7_LOW_RANGE | Char | 5 | Low range for analyte |
| 131 | F7_HIGH_RANGE | Char | 5 | High range for analyte |
| 132 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 133 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 134 | FGA_FGB_FGG_UNIT | Char | 5 | Analyte unit |
| 135 | FGA_FGB_FGG_LOW_RANGE | Char | 5 | Low range for analyte |
| 136 | FGA_FGB_FGG_HIGH_RANGE | Char | 5 | High range for analyte |
| 137 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 138 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 139 | FTL_FTH1_UNIT | Char | 5 | Analyte unit |
| 140 | FTL_FTH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 141 | FTL_FTH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 142 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 143 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 144 | GC_UNIT | Char | 5 | Analyte unit |
| 145 | GC_LOW_RANGE | Char | 5 | Low range for analyte |
| 146 | GC_HIGH_RANGE | Char | 5 | High range for analyte |
| 147 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 148 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 149 | HP_UNIT | Char | 6 | Analyte unit |
| 150 | HP_LOW_RANGE | Char | 6 | Low range for analyte |
| 151 | HP_HIGH_RANGE | Char | 6 | High range for analyte |
| 152 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 153 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | HSPD1_UNIT | Char | 5 | Analyte unit |
| 155 | HSPD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 156 | HSPD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 157 | HSPD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 158 | HSPD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 159 | ICAM1_UNIT | Char | 5 | Analyte unit |
| 160 | ICAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 161 | ICAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 162 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 163 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 164 | IFNG_UNIT | Char | 5 | Analyte unit |
| 165 | IFNG_LOW_RANGE | Char | 5 | Low range for analyte |
| 166 | IFNG_HIGH_RANGE | Char | 5 | High range for analyte |
| 167 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 168 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 169 | IGA_UNIT | Char | 6 | Analyte unit |
| 170 | IGA_LOW_RANGE | Char | 6 | Low range for analyte |
| 171 | IGA_HIGH_RANGE | Char | 6 | High range for analyte |
| 172 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 173 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 174 | IGM_UNIT | Char | 5 | Analyte unit |
| 175 | IGM_LOW_RANGE | Char | 5 | Low range for analyte |
| 176 | IGM_HIGH_RANGE | Char | 5 | High range for analyte |
| 177 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 178 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 179 | IL10_UNIT | Char | 5 | Analyte unit |
| 180 | IL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 181 | IL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 182 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 183 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 184 | IL12A_IL12B_UNIT | Char | 5 | Analyte unit |
| 185 | IL12A_IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 186 | IL12A_IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 187 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 188 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 189 | IL12B_UNIT | Char | 5 | Analyte unit |
| 190 | IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 191 | IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 192 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 193 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 194 | IL15_UNIT | Char | 5 | Analyte unit |
| 195 | IL15_LOW_RANGE | Char | 5 | Low range for analyte |
| 196 | IL15_HIGH_RANGE | Char | 5 | High range for analyte |
| 197 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 198 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 199 | IL17A_UNIT | Char | 5 | Analyte unit |
| 200 | IL17A_LOW_RANGE | Char | 5 | Low range for analyte |
| 201 | IL17A_HIGH_RANGE | Char | 5 | High range for analyte |
| 202 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 203 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 204 | IL18_UNIT | Char | 5 | Analyte unit |
| 205 | IL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 206 | IL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 207 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 208 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 209 | IL1A_UNIT | Char | 7 | Analyte unit |
| 210 | IL1A_LOW_RANGE | Char | 7 | Low range for analyte |
| 211 | IL1A_HIGH_RANGE | Char | 7 | High range for analyte |
| 212 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 213 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 214 | IL1B_UNIT | Char | 5 | Analyte unit |
| 215 | IL1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 216 | IL1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 217 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 218 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 219 | IL1RN_UNIT | Char | 5 | Analyte unit |
| 220 | IL1RN_LOW_RANGE | Char | 5 | Low range for analyte |
| 221 | IL1RN_HIGH_RANGE | Char | 5 | High range for analyte |
| 222 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 223 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 224 | IL2_UNIT | Char | 5 | Analyte unit |
| 225 | IL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 226 | IL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 227 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 228 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 229 | IL23A_UNIT | Char | 5 | Analyte unit |
| 230 | IL23A_LOW_RANGE | Char | 5 | Low range for analyte |
| 231 | IL23A_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 233 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 234 | IL2RA_UNIT | Char | 5 | Analyte unit |
| 235 | IL2RA_LOW_RANGE | Char | 5 | Low range for analyte |
| 236 | IL2RA_HIGH_RANGE | Char | 5 | High range for analyte |
| 237 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 238 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 239 | IL3_UNIT | Char | 6 | Analyte unit |
| 240 | IL3_LOW_RANGE | Char | 6 | Low range for analyte |
| 241 | IL3_HIGH_RANGE | Char | 6 | High range for analyte |
| 242 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 243 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 244 | IL4_UNIT | Char | 5 | Analyte unit |
| 245 | IL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 246 | IL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 247 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 248 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 249 | IL5_UNIT | Char | 5 | Analyte unit |
| 250 | IL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 251 | IL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 252 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 253 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 254 | IL6_UNIT | Char | 5 | Analyte unit |
| 255 | IL6_LOW_RANGE | Char | 5 | Low range for analyte |
| 256 | IL6_HIGH_RANGE | Char | 5 | High range for analyte |
| 257 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 258 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 259 | IL6R_UNIT | Char | 5 | Analyte unit |
| 260 | IL6R_LOW_RANGE | Char | 5 | Low range for analyte |
| 261 | IL6R_HIGH_RANGE | Char | 5 | High range for analyte |
| 262 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 263 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 264 | IL7_UNIT | Char | 5 | Analyte unit |
| 265 | IL7_LOW_RANGE | Char | 5 | Low range for analyte |
| 266 | IL7_HIGH_RANGE | Char | 5 | High range for analyte |
| 267 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 268 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 269 | IL8_UNIT | Char | 5 | Analyte unit |
| 270 | IL8_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 271 | IL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 272 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 273 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 274 | INS_INTACT_UNIT | Char | 3 | Analyte unit |
| 275 | INS_INTACT_LOW_RANGE | Char | 3 | Low range for analyte |
| 276 | INS_INTACT_HIGH_RANGE | Char | 3 | High range for analyte |
| 277 | INS_INTACT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 278 | INS_INTACT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 279 | INS_TOTAL_UNIT | Char | 3 | Analyte unit |
| 280 | INS_TOTAL_LOW_RANGE | Char | 3 | Low range for analyte |
| 281 | INS_TOTAL_HIGH_RANGE | Char | 3 | High range for analyte |
| 282 | INS_TOTAL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 283 | INS_TOTAL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 284 | KIT_UNIT | Char | 5 | Analyte unit |
| 285 | KIT_LOW_RANGE | Char | 5 | Low range for analyte |
| 286 | KIT_HIGH_RANGE | Char | 5 | High range for analyte |
| 287 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 288 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 289 | KITLG_UNIT | Char | 5 | Analyte unit |
| 290 | KITLG_LOW_RANGE | Char | 5 | Low range for analyte |
| 291 | KITLG_HIGH_RANGE | Char | 5 | High range for analyte |
| 292 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 293 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 294 | LPA_UNIT | Char | 5 | Analyte unit |
| 295 | LPA_LOW_RANGE | Char | 5 | Low range for analyte |
| 296 | LPA_HIGH_RANGE | Char | 5 | High range for analyte |
| 297 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 298 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 299 | LTA_UNIT | Char | 5 | Analyte unit |
| 300 | LTA_LOW_RANGE | Char | 5 | Low range for analyte |
| 301 | LTA_HIGH_RANGE | Char | 5 | High range for analyte |
| 302 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 303 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 304 | LTF_UNIT | Char | 5 | Analyte unit |
| 305 | LTF_LOW_RANGE | Char | 5 | Low range for analyte |
| 306 | LTF_HIGH_RANGE | Char | 5 | High range for analyte |
| 307 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 308 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 309 | MB_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | MB_LOW_RANGE | Char | 5 | Low range for analyte |
| 311 | MB_HIGH_RANGE | Char | 5 | High range for analyte |
| 312 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 313 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 314 | MICA_UNIT | Char | 5 | Analyte unit |
| 315 | MICA_LOW_RANGE | Char | 5 | Low range for analyte |
| 316 | MICA_HIGH_RANGE | Char | 5 | High range for analyte |
| 317 | MICA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 318 | MICA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 319 | MMP3_UNIT | Char | 5 | Analyte unit |
| 320 | MMP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 321 | MMP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 322 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 323 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 324 | MMP9_UNIT | Char | 5 | Analyte unit |
| 325 | MMP9_LOW_RANGE | Char | 5 | Low range for analyte |
| 326 | MMP9_HIGH_RANGE | Char | 5 | High range for analyte |
| 327 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 328 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 329 | NGF_UNIT | Char | 5 | Analyte unit |
| 330 | NGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 331 | NGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 332 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 333 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 334 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 335 | NRCAM_LOW_RANGE | Char | 5 | Low range for analyte |
| 336 | NRCAM_HIGH_RANGE | Char | 5 | High range for analyte |
| 337 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 338 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 339 | S100B_UNIT | Char | 5 | Analyte unit |
| 340 | S100B_LOW_RANGE | Char | 5 | Low range for analyte |
| 341 | S100B_HIGH_RANGE | Char | 5 | High range for analyte |
| 342 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 343 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 344 | SELE_UNIT | Char | 5 | Analyte unit |
| 345 | SELE_LOW_RANGE | Char | 5 | Low range for analyte |
| 346 | SELE_HIGH_RANGE | Char | 5 | High range for analyte |
| 347 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 348 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 349 | SERPINA1_UNIT | Char | 6 | Analyte unit |
| 350 | SERPINA1_LOW_RANGE | Char | 6 | Low range for analyte |
| 351 | SERPINA1_HIGH_RANGE | Char | 6 | High range for analyte |
| 352 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 353 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 354 | SERPINA3_UNIT | Char | 5 | Analyte unit |
| 355 | SERPINA3_LOW_RANGE | Char | 5 | Low range for analyte |
| 356 | SERPINA3_HIGH_RANGE | Char | 5 | High range for analyte |
| 357 | SERPINA3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 358 | SERPINA3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 359 | SERPINA7_UNIT | Char | 5 | Analyte unit |
| 360 | SERPINA7_LOW_RANGE | Char | 5 | Low range for analyte |
| 361 | SERPINA7_HIGH_RANGE | Char | 5 | High range for analyte |
| 362 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 363 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 364 | SERPINE1_UNIT | Char | 5 | Analyte unit |
| 365 | SERPINE1_LOW_RANGE | Char | 5 | Low range for analyte |
| 366 | SERPINE1_HIGH_RANGE | Char | 5 | High range for analyte |
| 367 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 368 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 369 | SHBG_UNIT | Char | 6 | Analyte unit |
| 370 | SHBG_LOW_RANGE | Char | 6 | Low range for analyte |
| 371 | SHBG_HIGH_RANGE | Char | 6 | High range for analyte |
| 372 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 373 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 374 | SLPI_UNIT | Char | 5 | Analyte unit |
| 375 | SLPI_LOW_RANGE | Char | 5 | Low range for analyte |
| 376 | SLPI_HIGH_RANGE | Char | 5 | High range for analyte |
| 377 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 378 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 379 | SOD1_UNIT | Char | 5 | Analyte unit |
| 380 | SOD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 381 | SOD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 382 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 383 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 384 | SORT1_UNIT | Char | 5 | Analyte unit |
| 385 | SORT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 386 | SORT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 387 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 388 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 389 | SPINK1_UNIT | Char | 5 | Analyte unit |
| 390 | SPINK1_LOW_RANGE | Char | 5 | Low range for analyte |
| 391 | SPINK1_HIGH_RANGE | Char | 5 | High range for analyte |
| 392 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 393 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 394 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 395 | TGFB1_LAP_LOW_RANGE | Char | 5 | Low range for analyte |
| 396 | TGFB1_LAP_HIGH_RANGE | Char | 5 | High range for analyte |
| 397 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 398 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 399 | TIMP1_UNIT | Char | 5 | Analyte unit |
| 400 | TIMP1_LOW_RANGE | Char | 5 | Low range for analyte |
| 401 | TIMP1_HIGH_RANGE | Char | 5 | High range for analyte |
| 402 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 403 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 404 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 405 | TIMP2_LOW_RANGE | Char | 5 | Low range for analyte |
| 406 | TIMP2_HIGH_RANGE | Char | 5 | High range for analyte |
| 407 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 408 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 409 | TNF_UNIT | Char | 5 | Analyte unit |
| 410 | TNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 411 | TNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 412 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 413 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 414 | TNFRSF11B_UNIT | Char | 4 | Analyte unit |
| 415 | TNFRSF11B_LOW_RANGE | Char | 4 | Low range for analyte |
| 416 | TNFRSF11B_HIGH_RANGE | Char | 4 | High range for analyte |
| 417 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 418 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 419 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 420 | TNFRSF1A_LOW_RANGE | Char | 5 | Low range for analyte |
| 421 | TNFRSF1A_HIGH_RANGE | Char | 5 | High range for analyte |
| 422 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 423 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 424 | TNFRSF1B_UNIT | Char | 5 | Analyte unit |
| 425 | TNFRSF1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 426 | TNFRSF1B_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 427 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 428 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 429 | VCAM1_UNIT | Char | 5 | Analyte unit |
| 430 | VCAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 431 | VCAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 432 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 433 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 434 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 435 | VEGFA_LOW_RANGE | Char | 5 | Low range for analyte |
| 436 | VEGFA_HIGH_RANGE | Char | 5 | High range for analyte |
| 437 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 438 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 439 | VWF_UNIT | Char | 5 | Analyte unit |
| 440 | VWF_LOW_RANGE | Char | 5 | Low range for analyte |
| 441 | VWF_HIGH_RANGE | Char | 5 | High range for analyte |
| 442 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 443 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 444 | A2M | Num | 8 | Alpha-2-Macroglobulin (A2M) |
| 445 | ADIPOQ | Num | 8 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 446 | AGER | Num | 8 | Advanced glycosylation end product-specific receptor (AGER) |
| 447 | APCS | Num | 8 | Amyloid P-component, serum (APCS) |
| 448 | APOA4 | Num | 8 | Apolipoprotein A-IV (APOA4) |
| 449 | B2M | Num | 8 | Beta-2-microglobulin (B2M) |
| 450 | BDNF | Num | 8 | Brain-derived neurotrophic factor (BDNF) |
| 451 | C3 | Num | 8 | Complement component C3 (C3) |
| 452 | CCL11 | Num | 8 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 453 | CCL13 | Num | 8 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 454 | CCL2 | Num | 8 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 455 | CCL20 | Num | 8 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 456 | CCL23 | Num | 8 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 457 | CCL24 | Num | 8 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 458 | CCL3 | Num | 8 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 459 | CCL4 | Num | 8 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 460 | CCL5 | Num | 8 | chemokine (C-C motif) ligand 5 (CCL5) |
| 461 | CCL8 | Num | 8 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 462 | CDH1 | Num | 8 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 463 | CHGA | Num | 8 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 464 | CRP | Num | 8 | C-reactive protein, pentraxin-related (CRP) |
| 465 | CSF2 | Num | 8 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 466 | CSTB | Num | 8 | Cystatin B (stefin B) (CSTB) |
| 467 | CXCL10 | Num | 8 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 468 | CXCL9 | Num | 8 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 469 | F7 | Num | 8 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 470 | FGA_FGB_FGG | Num | 8 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 471 | FTL_FTH1 | Num | 8 | Ferritin [FT(L/H1)] |
| 472 | GC | Num | 8 | Group-specific component (vitamin D binding protein) (GC) |
| 473 | HP | Num | 8 | Haptoglobin (HP) |
| 474 | HSPD1 | Num | 8 | Heat shock 60kDa protein 1 (chaperonin) (HSPD1) |
| 475 | ICAM1 | Num | 8 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 476 | IFNG | Num | 8 | Interferon, gamma (IFNG) |
| 477 | IGA | Num | 8 | Immunoglobulin A (IgA) |
| 478 | IGM | Num | 8 | Immunoglobulin M |
| 479 | IL10 | Num | 8 | Interleukin 10 (IL10) |
| 480 | IL12A_IL12B | Num | 8 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 481 | IL12B | Num | 8 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 482 | IL15 | Num | 8 | Interleukin 15 (IL15) |
| 483 | IL17A | Num | 8 | Interleukin 17 (IL17A) |
| 484 | IL18 | Num | 8 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 485 | IL1A | Num | 8 | Interleukin 1, alpha (IL1A) |
| 486 | IL1B | Num | 8 | Interleukin 1, beta (IL1B) |
| 487 | IL1RN | Num | 8 | Interleukin 1 receptor antagonist (IL1RN) |
| 488 | IL2 | Num | 8 | Interleukin 2 (IL2) |
| 489 | IL23A | Num | 8 | Interleukin 23, alpha subunit p19 (IL23A) |
| 490 | IL2RA | Num | 8 | Interleukin 2 receptor, alpha (IL2RA) |
| 491 | IL3 | Num | 8 | Interleukin 3 (IL3) |
| 492 | IL4 | Num | 8 | Interleukin 4 (IL4) |
| 493 | IL5 | Num | 8 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 494 | IL6 | Num | 8 | Interleukin 6 (interferon, beta 2) (IL6) |
| 495 | IL6R | Num | 8 | Interleukin-6 receptor (IL6R) |
| 496 | IL7 | Num | 8 | Interleukin 7 (IL7) |
| 497 | IL8 | Num | 8 | Interleukin 8 (IL8) |
| 498 | INS_INTACT | Num | 8 | Proinsulin, Intact (INS_intact) |
| 499 | INS_TOTAL | Num | 8 | Proinsulin, Total (INS_total) |
| 500 | KIT | Num | 8 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 501 | KITLG | Num | 8 | KIT ligand (KITLG) |
| 502 | LPA | Num | 8 | Lipoprotein, (Lp(a) (LPA) |
| 503 | LTA | Num | 8 | Lymphotoxin alpha (LTA) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 504 | LTF | Num | 8 | Lactotransferrin |
| 505 | MB | Num | 8 | Myoglobin (MB) |
| 506 | MICA | Num | 8 | MHC class I polypeptide-related sequence A (MICA) |
| 507 | MMP3 | Num | 8 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 508 | MMP9 | Num | 8 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 509 | NGF | Num | 8 | Nerve growth gactor (beta polypeptide) (NGF) |
| 510 | NRCAM | Num | 8 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 511 | S100B | Num | 8 | S100 calcium binding protein B (S100B) |
| 512 | SELE | Num | 8 | Selectin E (SELE) |
| 513 | SERPINA1 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 514 | SERPINA3 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3) |
| 515 | SERPINA7 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 516 | SERPINE1 | Num | 8 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 517 | SHBG | Num | 8 | Sex Hormone-Binding Globulin (SHBG) |
| 518 | SLPI | Num | 8 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 519 | SOD1 | Num | 8 | Superoxide Dismutase 1, soluble (SOD1) |
| 520 | SORT1 | Num | 8 | Sortilin 1 (SORT1) |
| 521 | SPINK1 | Num | 8 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 522 | TGFB1_LAP | Num | 8 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 523 | TIMP1 | Num | 8 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 524 | TIMP2 | Num | 8 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 525 | TNF | Num | 8 | Tumor necrosis factor (TNF) |
| 526 | TNFRSF11B | Num | 8 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 527 | TNFRSF1A | Num | 8 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 528 | TNFRSF1B | Num | 8 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 529 | VCAM1 | Num | 8 | Vascular cell adhesion molecule 1 (VCAM1) |
| 530 | VEGFA | Num | 8 | Vascular endothelial growth factor (VEGFA) |
| 531 | VWF | Num | 8 | von Willebrand Factor (vWF) |
| 532 | ANGPT1_UNIT | Char | 5 | Analyte unit |
| 533 | ANGPT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 534 | ANGPT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 535 | ANGPT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 536 | ANGPT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 537 | AXL_UNIT | Char | 5 | Analyte unit |
| 538 | AXL_LOW_RANGE | Char | 5 | Low range for analyte |
| 539 | AXL_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 540 | AXL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 541 | AXL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 542 | CA9_UNIT | Char | 5 | Analyte unit |
| 543 | CA9_LOW_RANGE | Char | 5 | Low range for analyte |
| 544 | CA9_HIGH_RANGE | Char | 5 | High range for analyte |
| 545 | CA9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 546 | CA9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 547 | CCL16_UNIT | Char | 5 | Analyte unit |
| 548 | CCL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 549 | CCL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 550 | CCL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 551 | CCL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 552 | CCL18_UNIT | Char | 5 | Analyte unit |
| 553 | CCL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 554 | CCL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 555 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 556 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 557 | CCL22_UNIT | Char | 5 | Analyte unit |
| 558 | CCL22_LOW_RANGE | Char | 5 | Low range for analyte |
| 559 | CCL22_HIGH_RANGE | Char | 5 | High range for analyte |
| 560 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 561 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 562 | CDH13_UNIT | Char | 5 | Analyte unit |
| 563 | CDH13_LOW_RANGE | Char | 5 | Low range for analyte |
| 564 | CDH13_HIGH_RANGE | Char | 5 | High range for analyte |
| 565 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 566 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 567 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 568 | CEACAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 569 | CEACAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 570 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 571 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 572 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 573 | CKM_CKB_LOW_RANGE | Char | 5 | Low range for analyte |
| 574 | CKM_CKB_HIGH_RANGE | Char | 5 | High range for analyte |
| 575 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 576 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 577 | CXCL5_UNIT | Char | 5 | Analyte unit |
| 578 | CXCL5_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 579 | CXCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 580 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 581 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 582 | DCN_UNIT | Char | 5 | Analyte unit |
| 583 | DCN_LOW_RANGE | Char | 5 | Low range for analyte |
| 584 | DCN_HIGH_RANGE | Char | 5 | High range for analyte |
| 585 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 586 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 587 | FABP3_UNIT | Char | 5 | Analyte unit |
| 588 | FABP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 589 | FABP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 590 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 591 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 592 | FAS_UNIT | Char | 5 | Analyte unit |
| 593 | FAS_LOW_RANGE | Char | 5 | Low range for analyte |
| 594 | FAS_HIGH_RANGE | Char | 5 | High range for analyte |
| 595 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 596 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 597 | HGF_UNIT | Char | 5 | Analyte unit |
| 598 | HGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 599 | HGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 600 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 601 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 602 | IGE_UNIT | Char | 4 | Analyte unit |
| 603 | IGE_LOW_RANGE | Char | 4 | Low range for analyte |
| 604 | IGE_HIGH_RANGE | Char | 4 | High range for analyte |
| 605 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 606 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 607 | IL13_UNIT | Char | 5 | Analyte unit |
| 608 | IL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 609 | IL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 610 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 611 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 612 | IL16_UNIT | Char | 5 | Analyte unit |
| 613 | IL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 614 | IL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 615 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 616 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 617 | IL18BP_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 618 | IL18BP_LOW_RANGE | Char | 5 | Low range for analyte |
| 619 | IL18BP_HIGH_RANGE | Char | 5 | High range for analyte |
| 620 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 621 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 622 | KLK3_F_UNIT | Char | 6 | Analyte unit |
| 623 | KLK3_F_LOW_RANGE | Char | 6 | Low range for analyte |
| 624 | KLK3_F_HIGH_RANGE | Char | 6 | High range for analyte |
| 625 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 626 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 627 | MDA_LDL_UNIT | Char | 5 | Analyte unit |
| 628 | MDA_LDL_LOW_RANGE | Char | 5 | Low range for analyte |
| 629 | MDA_LDL_HIGH_RANGE | Char | 5 | High range for analyte |
| 630 | MDA_LDL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 631 | MDA_LDL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 632 | MDK_UNIT | Char | 5 | Analyte unit |
| 633 | MDK_LOW_RANGE | Char | 5 | Low range for analyte |
| 634 | MDK_HIGH_RANGE | Char | 5 | High range for analyte |
| 635 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 636 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 637 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 638 | NPPB_PH_LOW_RANGE | Char | 5 | Low range for analyte |
| 639 | NPPB_PH_HIGH_RANGE | Char | 5 | High range for analyte |
| 640 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 641 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 642 | OLR1_UNIT | Char | 5 | Analyte unit |
| 643 | OLR1_LOW_RANGE | Char | 5 | Low range for analyte |
| 644 | OLR1_HIGH_RANGE | Char | 5 | High range for analyte |
| 645 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 646 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 647 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 648 | PECAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 649 | PECAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 650 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 651 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 652 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 653 | SFTPD_LOW_RANGE | Char | 5 | Low range for analyte |
| 654 | SFTPD_HIGH_RANGE | Char | 5 | High range for analyte |
| 655 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 656 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 657 | THBD_UNIT | Char | 5 | Analyte unit |
| 658 | THBD_LOW_RANGE | Char | 5 | Low range for analyte |
| 659 | THBD_HIGH_RANGE | Char | 5 | High range for analyte |
| 660 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 661 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 662 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 663 | TNFRSF10C_LOW_RANGE | Char | 5 | Low range for analyte |
| 664 | TNFRSF10C_HIGH_RANGE | Char | 5 | High range for analyte |
| 665 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 666 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 667 | ANGPT1 | Num | 8 | Angiopoietin 1 (ANGPT1) |
| 668 | AXL | Num | 8 | AXL Receptor Tyrosine Kinase (AXL) |
| 669 | CA9 | Num | 8 | Carbonic anhydrase IX (CA9) |
| 670 | CCL16 | Num | 8 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 671 | CCL18 | Num | 8 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |
| 672 | CCL22 | Num | 8 | chemokine (C-C motif) ligand 22 (CCL22) |
| 673 | CDH13 | Num | 8 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 674 | CEACAM1 | Num | 8 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 675 | СКМ_СКВ | Num | 8 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 676 | CXCL5 | Num | 8 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 677 | DCN | Num | 8 | Decorin (DCN) |
| 678 | FABP3 | Num | 8 | Fatty acid-binding protein 3 , muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 679 | FAS | Num | 8 | Fas cell surface death receptor (FAS) |
| 680 | HGF | Num | 8 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 681 | IGE | Num | 8 | Immunoglobulin E (IgE) |
| 682 | IL13 | Num | 8 | Interleukin 13 (IL13) |
| 683 | IL16 | Num | 8 | Interleukin 16 (IL16) |
| 684 | IL18BP | Num | 8 | Interleukin 18 binding protein (IL18BP) |
| 685 | KLK3_F | Num | 8 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 686 | MDA_LDL | Num | 8 | Malondialdehyde-Modified Low-Density Lipoprotein (MDA-LDL) |
| 687 | MDK | Num | 8 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 688 | NPPB_PH | Num | 8 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 689 | OLR1 | Num | 8 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 690 | PECAM1 | Num | 8 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 691 | SFTPD | Num | 8 | Surfactant protein D (SFTPD) |
| 692 | THBD | Num | 8 | Thrombomodulin (THBD) |
| 693 | TNFRSF10C | Num | 8 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 694 | ADIPOQ_RAW | Char | 5 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 695 | SERPINA3_RAW | Char | 4 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3 (SERPINA3) |
| 696 | SERPINA1_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |
| 697 | A2M_RAW | Char | 6 | Alpha-2-Macroglobulin (A2M) |
| 698 | SLPI_RAW | Char | 3 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 699 | LPA_RAW | Char | 5 | Lipoprotein, (Lp(a) (LPA) |
| 700 | APOA4_RAW | Char | 5 | Apolipoprotein A-IV (APOA4) |
| 701 | B2M_RAW | Char | 4 | Beta-2-microglobulin (B2M) |
| 702 | BDNF_RAW | Char | 5 | Brain-derived neurotrophic factor (BDNF) |
| 703 | CRP_RAW | Char | 5 | C-reactive protein, pentraxin-related (CRP) |
| 704 | CDH1_RAW | Char | 5 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 705 | CHGA_RAW | Char | 5 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 706 | C3_RAW | Char | 5 | Complement component C3 (C3) |
| 707 | CSTB_RAW | Char | 3 | Cystatin B (stefin B) (CSTB) |
| 708 | SELE_RAW | Char | 5 | Selectin E (SELE) |
| 709 | CCL11_RAW | Char | 5 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 710 | CCL24_RAW | Char | 5 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 711 | F7_RAW | Char | 4 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 712 | FTL_FTH1_RAW | Char | 5 | Ferritin [FT(L/H1)] |
| 713 | FGA_FGB_FGG_RAW | Char | 5 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 714 | CSF2_RAW | Char | 5 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 715 | HP_RAW | Char | 6 | Haptoglobin (HP) |
| 716 | HSPD1_RAW | Char | 5 | Heat shock 60kDa protein 1 (chaperonin) (HSPD1) |
| 717 | IGA_RAW | Char | 5 | Immunoglobulin A (IgA) |
| 718 | IGM_RAW | Char | 5 | Immunoglobulin M |
| 719 | ICAM1_RAW | Char | 4 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 720 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 721 | CXCL10_RAW | Char | 4 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 722 | IL1A_RAW | Char | 7 | Interleukin 1, alpha (IL1A) |
| 723 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 724 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 725 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 726 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 727 | IL3_RAW | Char | 6 | Interleukin 3 (IL3) |
| 728 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 729 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 730 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 731 | IL6R_RAW | Char | 4 | Interleukin-6 receptor (IL6R) |
| 732 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 733 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 734 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 735 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 736 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 737 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 738 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 739 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 740 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 741 | LTF_RAW | Char | 3 | Lactotransferrin |
| 742 | TGFB1_LAP_RAW | Char | 4 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 743 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 744 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 745 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 746 | KIT_RAW | Char | 5 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 747 | MMP3_RAW | Char | 4 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 748 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 749 | MICA_RAW | Char | 5 | MHC class I polypeptide-related sequence A (MICA) |
| 750 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 751 | CCL8_RAW | Char | 4 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 752 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 753 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 754 | CCL23_RAW | Char | 5 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 755 | MB_RAW | Char | 5 | Myoglobin (MB) |
| 756 | NGF_RAW | Char | 6 | Nerve growth gactor (beta polypeptide) (NGF) |
| 757 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 758 | TNFRSF11B_RAW | Char | 3 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 759 | SPINK1_RAW | Char | 3 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 760 | SERPINE1_RAW | Char | 5 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 761 | INS_INTACT_RAW | Char | 5 | Proinsulin, Intact (INS_intact) |
| 762 | INS_TOTAL_RAW | Char | 5 | Proinsulin, Total (INS_total) |
| 763 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 764 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 765 | APCS_RAW | Char | 5 | Amyloid P-component, serum (APCS) |
| 766 | SHBG_RAW | Char | 5 | Sex Hormone-Binding Globulin (SHBG) |
| 767 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 768 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |
| 769 | SOD1_RAW | Char | 4 | Superoxide Dismutase 1, soluble (SOD1) |
| 770 | CCL5_RAW | Char | 5 | chemokine (C-C motif) ligand 5 (CCL5) |
| 771 | SERPINA7_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 772 | TIMP1_RAW | Char | 3 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 773 | TIMP2_RAW | Char | 3 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 774 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 775 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 776 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 777 | TNFRSF1B_RAW | Char | 3 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 778 | VCAM1_RAW | Char | 4 | Vascular cell adhesion molecule 1 (VCAM1) |
| 779 | VEGFA_RAW | Char | 4 | Vascular endothelial growth factor (VEGFA) |
| 780 | GC_RAW | Char | 5 | Group-specific component (vitamin D binding protein) (GC) |
| 781 | VWF_RAW | Char | 5 | von Willebrand Factor (vWF) |
| 782 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 783 | AXL_RAW | Char | 3 | AXL Receptor Tyrosine Kinase (AXL) |
| 784 | CDH13_RAW | Char | 4 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 785 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 786 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 787 | CCL16_RAW | Char | 4 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 788 | CKM_CKB_RAW | Char | 4 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 789 | DCN_RAW | Char | 4 | Decorin (DCN) |
| 790 | CXCL5_RAW | Char | 4 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 791 | FAS_RAW | Char | 3 | Fas cell surface death receptor (FAS) |
| 792 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |
| 793 | HGF_RAW | Char | 3 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 794 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |
| 795 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 796 | IL16_RAW | Char | 4 | Interleukin 16 (IL16) |
| 797 | IL18BP_RAW | Char | 3 | Interleukin 18 binding protein (IL18BP) |
| 798 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 799 | CCL22_RAW | Char | 4 | chemokine (C-C motif) ligand 22 (CCL22) |
| 800 | MDA_LDL_RAW | Char | 5 | Malondialdehyde-Modified Low-Density Lipoprotein (MDA-LDL) |
| 801 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 802 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 803 | PECAM1_RAW | Char | 3 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 804 | KLK3_F_RAW | Char | 6 | Kallikrein-related peptidase 3 (free) (PSAF) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 805 | CCL18_RAW | Char | 3 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |
| 806 | SFTPD_RAW | Char | 3 | Surfactant protein D (SFTPD) |
| 807 | THBD_RAW | Char | 4 | Thrombomodulin (THBD) |
| 808 | TNFRSF10C_RAW | Char | 4 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 809 | A2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 810 | ADIPOQ_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 811 | AGER_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 812 | ANGPT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 813 | APCS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 814 | APOA4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 815 | AXL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 816 | B2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 817 | BDNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 818 | C3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 819 | CA9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 820 | CCL11_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 821 | CCL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 822 | CCL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 823 | CCL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 824 | CCL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 825 | CCL20_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 826 | CCL22_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 827 | CCL23_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 828 | CCL24_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 829 | CCL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 830 | CCL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 831 | CCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 832 | CCL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 833 | CDH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 834 | CDH13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 835 | CEACAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 836 | CHGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 837 | CKM_CKB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 838 | CRP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 839 | CSF2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 840 | CSTB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 841 | CXCL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 842 | CXCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 843 | CXCL9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 844 | DCN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 845 | F7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 846 | FABP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 847 | FAS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 848 | FGA_FGB_FGG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 849 | FTL_FTH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 850 | GC_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 851 | HGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 852 | HP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 853 | HSPD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 854 | ICAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 855 | IFNG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 856 | IGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 857 | IGE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 858 | IGM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 859 | IL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 860 | IL12A_IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 861 | IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 862 | IL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 863 | IL15_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 864 | IL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 865 | IL17A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 866 | IL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 867 | IL18BP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 868 | IL1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 869 | IL1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 870 | IL1RN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 871 | IL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 872 | IL23A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 873 | IL2RA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 874 | IL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 875 | IL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 876 | IL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 877 | IL6_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 878 | IL6R_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 879 | IL7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 880 | IL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 881 | INS_INTACT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 882 | INS_TOTAL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 883 | KIT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 884 | KITLG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 885 | KLK3_F_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 886 | LPA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 887 | LTA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 888 | LTF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 889 | MB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 890 | MDA_LDL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 891 | MDK_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 892 | MICA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 893 | MMP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 894 | MMP9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 895 | NGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 896 | NPPB_PH_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 897 | NRCAM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 898 | OLR1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 899 | PECAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 900 | S100B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 901 | SELE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 902 | SERPINA1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 903 | SERPINA3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 904 | SERPINA7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 905 | SERPINE1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 906 | SFTPD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 907 | SHBG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 908 | SLPI_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 909 | SOD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 910 | SORT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 911 | SPINK1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 912 | TGFB1_LAP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 913 | THBD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 914 | TIMP1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 915 | TIMP2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 916 | TNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 917 | TNFRSF10C_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 918 | TNFRSF11B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 919 | TNFRSF1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 920 | TNFRSF1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 921 | VCAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 922 | VEGFA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 923 | VWF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 924 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 925 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 926 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 927 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 928 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 929 | APOA4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 930 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 931 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 932 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 933 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 934 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 935 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 936 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 937 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 938 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 939 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 940 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 941 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 942 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 943 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 944 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 945 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 946 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 947 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 948 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 949 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 950 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 951 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 952 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 953 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 954 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 955 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 956 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 957 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 958 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 959 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 960 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 961 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 962 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 963 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 964 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 965 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 966 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 967 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 968 | HSPD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 969 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 970 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 971 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 972 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 973 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 974 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 975 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 976 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 977 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 978 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 979 |  |  | N16_OUTLIER | Num |
| 980 |  | NL17A_OUTLIER | Num | 8 |
| 981 |  |  |  | Fl18_OUTLIER |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 999 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1000 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1001 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1002 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1003 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1004 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1005 | MDA_LDL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1006 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1007 | MICA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1008 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1009 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1010 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1011 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1012 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1013 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1014 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1015 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1016 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1017 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1018 | SERPINA3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1019 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1020 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1021 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1022 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1023 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1024 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1025 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1026 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1027 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1028 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1029 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1030 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1031 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1032 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1033 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1034 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1035 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1036 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1037 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1038 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1039 | A2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1040 | ADIPOQ_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1041 | AGER_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1042 | ANGPT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1043 | APCS_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1044 | APOA4_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1045 | AXL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1046 | B2M_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1047 | BDNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1048 | C3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1049 | CA9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1050 | CCL11_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1051 | CCL13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1052 | CCL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1053 | CCL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than $99 \%$. |
| 1054 | CCL2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1055 | CCL20_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1056 | CCL22_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1057 | CCL23_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1058 | CCL24_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1059 | CCL3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1060 | CCL4_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1061 | CCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1062 | CCL8_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1063 | CDH1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1064 | CDH13_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1065 | CEACAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1066 | CHGA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1067 | CKM_CKB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1068 | CRP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1069 | CSTB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1070 | CXCL10_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1071 | CXCL5_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1072 | CXCL9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1073 | DCN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1074 | F7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1075 | FABP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1076 | FAS_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1077 | FGA_FGB_FGG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1078 | FTL_FTH1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1079 | GC_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1080 | HGF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1081 | HP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1082 | HSPD1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1083 | ICAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1084 | IFNG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1085 | IGA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1086 | IGE_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1087 | IGM_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1088 | IL10_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1089 | IL12B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1090 | IL15_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1091 | IL16_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1092 | IL17A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1093 | IL18_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1094 | IL18BP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1095 | IL1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1096 | IL1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1097 | IL1RN_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1098 | IL2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1099 | IL23A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1100 | IL2RA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1101 | IL6_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1102 | IL6R_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1103 | IL7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1104 | IL8_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1105 | INS_INTACT_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1106 | INS_TOTAL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1107 | KIT_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1108 | KITLG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1109 | KLK3_F_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1110 | LPA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1111 | LTF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1112 | MB_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1113 | MDA_LDL_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1114 | MDK_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1115 | MICA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1116 | MMP3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1117 | MMP9_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1118 | NPPB_PH_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1119 | NRCAM_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1120 | OLR1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1121 | PECAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1122 | SELE_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1123 | SERPINA1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1124 | SERPINA3_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1125 | SERPINA7_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1126 | SERPINE1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1127 | SFTPD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1128 | SHBG_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1129 | SLPI_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1130 | SOD1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1131 | SORT1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1132 | SPINK1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1133 | TGFB1_LAP_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1134 | THBD_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1135 | TIMP1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1136 | TIMP2_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1137 | TNF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1138 | TNFRSF10C_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1139 | TNFRSF11B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1140 | TNFRSF1A_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1141 | TNFRSF1B_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1142 | VCAM1_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1143 | VEGFA_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |
| 1144 | VWF_NORM | Num | 8 | Normalized values for the analyte. Computed only for analytes with percent below LLOQ less than 99\%. |

## Data Set Name: rp_rbm2_nhlbiv1_160919.sas7bdat

| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 1 | BLINDID | Char | 5 | Public Subject ID |
| 2 | REPLICATE | Num | 8 | Flag indicating the labid is selected is a replicate specimen (i.e., phantom labid where PLI2A=1(serum)/4(Plasma)) |
| 3 | FLAG_BATCH1_REPLICATE | Num | 8 | Flag indicating the labid is replicate of batch1 |
| 4 | VISIT | Char | 10 | Visit |
| 5 | A2M_UNIT | Char | 5 | Analyte unit |
| 6 | A2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 7 | A2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 8 | A2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 9 | A2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 10 | ADIPOQ_UNIT | Char | 5 | Analyte unit |
| 11 | ADIPOQ_LOW_RANGE | Char | 5 | Low range for analyte |
| 12 | ADIPOQ_HIGH_RANGE | Char | 5 | High range for analyte |
| 13 | ADIPOQ_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 14 | ADIPOQ_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 15 | AGER_UNIT | Char | 5 | Analyte unit |
| 16 | AGER_LOW_RANGE | Char | 5 | Low range for analyte |
| 17 | AGER_HIGH_RANGE | Char | 5 | High range for analyte |
| 18 | AGER_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 19 | AGER_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 20 | APCS_UNIT | Char | 5 | Analyte unit |
| 21 | APCS_LOW_RANGE | Char | 5 | Low range for analyte |
| 22 | APCS_HIGH_RANGE | Char | 5 | High range for analyte |
| 23 | APCS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 24 | APCS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 25 | B2M_UNIT | Char | 5 | Analyte unit |
| 26 | B2M_LOW_RANGE | Char | 5 | Low range for analyte |
| 27 | B2M_HIGH_RANGE | Char | 5 | High range for analyte |
| 28 | B2M_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 29 | B2M_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 30 | BDNF_UNIT | Char | 5 | Analyte unit |
| 31 | BDNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 32 | BDNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 33 | BDNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 34 | BDNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 35 | C3_UNIT | Char | 6 | Analyte unit |
| 36 | C3_LOW_RANGE | Char | 6 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 37 | C3_HIGH_RANGE | Char | 6 | High range for analyte |
| 38 | C3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 39 | C3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 40 | CCL11_UNIT | Char | 5 | Analyte unit |
| 41 | CCL11_LOW_RANGE | Char | 5 | Low range for analyte |
| 42 | CCL11_HIGH_RANGE | Char | 5 | High range for analyte |
| 43 | CCL11_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 44 | CCL11_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 45 | CCL13_UNIT | Char | 5 | Analyte unit |
| 46 | CCL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 47 | CCL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 48 | CCL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 49 | CCL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 50 | CCL18_UNIT | Char | 5 | Analyte unit |
| 51 | CCL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 52 | CCL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 53 | CCL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 54 | CCL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 55 | CCL2_UNIT | Char | 5 | Analyte unit |
| 56 | CCL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 57 | CCL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 58 | CCL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 59 | CCL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 60 | CCL20_UNIT | Char | 5 | Analyte unit |
| 61 | CCL20_LOW_RANGE | Char | 5 | Low range for analyte |
| 62 | CCL20_HIGH_RANGE | Char | 5 | High range for analyte |
| 63 | CCL20_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 64 | CCL20_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 65 | CCL23_UNIT | Char | 5 | Analyte unit |
| 66 | CCL23_LOW_RANGE | Char | 5 | Low range for analyte |
| 67 | CCL23_HIGH_RANGE | Char | 5 | High range for analyte |
| 68 | CCL23_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 69 | CCL23_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 70 | CCL24_UNIT | Char | 5 | Analyte unit |
| 71 | CCL24_LOW_RANGE | Char | 5 | Low range for analyte |
| 72 | CCL24_HIGH_RANGE | Char | 5 | High range for analyte |
| 73 | CCL24_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 74 | CCL24_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 75 | CCL3_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 76 | CCL3_LOW_RANGE | Char | 5 | Low range for analyte |
| 77 | CCL3_HIGH_RANGE | Char | 5 | High range for analyte |
| 78 | CCL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 79 | CCL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 80 | CCL4_UNIT | Char | 5 | Analyte unit |
| 81 | CCL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 82 | CCL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 83 | CCL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 84 | CCL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 85 | CCL5_UNIT | Char | 5 | Analyte unit |
| 86 | CCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 87 | CCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 88 | CCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 89 | CCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 90 | CCL8_UNIT | Char | 5 | Analyte unit |
| 91 | CCL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 92 | CCL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 93 | CCL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 94 | CCL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 95 | CDH1_UNIT | Char | 5 | Analyte unit |
| 96 | CDH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 97 | CDH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 98 | CDH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 99 | CDH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 100 | CHGA_UNIT | Char | 5 | Analyte unit |
| 101 | CHGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 102 | CHGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 103 | CHGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 104 | CHGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 105 | CRP_UNIT | Char | 5 | Analyte unit |
| 106 | CRP_LOW_RANGE | Char | 5 | Low range for analyte |
| 107 | CRP_HIGH_RANGE | Char | 5 | High range for analyte |
| 108 | CRP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 109 | CRP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 110 | CSF2_UNIT | Char | 5 | Analyte unit |
| 111 | CSF2_LOW_RANGE | Char | 5 | Low range for analyte |
| 112 | CSF2_HIGH_RANGE | Char | 5 | High range for analyte |
| 113 | CSF2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 114 | CSF2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 115 | CSTB_UNIT | Char | 5 | Analyte unit |
| 116 | CSTB_LOW_RANGE | Char | 5 | Low range for analyte |
| 117 | CSTB_HIGH_RANGE | Char | 5 | High range for analyte |
| 118 | CSTB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 119 | CSTB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 120 | CXCL1_UNIT | Char | 5 | Analyte unit |
| 121 | CXCL1_LOW_RANGE | Char | 5 | Low range for analyte |
| 122 | CXCL1_HIGH_RANGE | Char | 5 | High range for analyte |
| 123 | CXCL1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 124 | CXCL1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 125 | CXCL10_UNIT | Char | 5 | Analyte unit |
| 126 | CXCL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 127 | CXCL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 128 | CXCL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 129 | CXCL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 130 | CXCL9_UNIT | Char | 5 | Analyte unit |
| 131 | CXCL9_LOW_RANGE | Char | 5 | Low range for analyte |
| 132 | CXCL9_HIGH_RANGE | Char | 5 | High range for analyte |
| 133 | CXCL9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 134 | CXCL9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 135 | F7_UNIT | Char | 5 | Analyte unit |
| 136 | F7_LOW_RANGE | Char | 5 | Low range for analyte |
| 137 | F7_HIGH_RANGE | Char | 5 | High range for analyte |
| 138 | F7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 139 | F7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 140 | FGA_FGB_FGG_UNIT | Char | 6 | Analyte unit |
| 141 | FGA_FGB_FGG_LOW_RANGE | Char | 6 | Low range for analyte |
| 142 | FGA_FGB_FGG_HIGH_RANGE | Char | 6 | High range for analyte |
| 143 | FGA_FGB_FGG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 144 | FGA_FGB_FGG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 145 | FTL_FTH1_UNIT | Char | 5 | Analyte unit |
| 146 | FTL_FTH1_LOW_RANGE | Char | 5 | Low range for analyte |
| 147 | FTL_FTH1_HIGH_RANGE | Char | 5 | High range for analyte |
| 148 | FTL_FTH1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 149 | FTL_FTH1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 150 | GC_UNIT | Char | 5 | Analyte unit |
| 151 | GC_LOW_RANGE | Char | 5 | Low range for analyte |
| 152 | GC_HIGH_RANGE | Char | 5 | High range for analyte |
| 153 | GC_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 154 | GC_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 155 | HP_UNIT | Char | 5 | Analyte unit |
| 156 | HP_LOW_RANGE | Char | 5 | Low range for analyte |
| 157 | HP_HIGH_RANGE | Char | 5 | High range for analyte |
| 158 | HP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 159 | HP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 160 | ICAM1_UNIT | Char | 5 | Analyte unit |
| 161 | ICAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 162 | ICAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 163 | ICAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 164 | ICAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 165 | IFNG_UNIT | Char | 5 | Analyte unit |
| 166 | IFNG_LOW_RANGE | Char | 5 | Low range for analyte |
| 167 | IFNG_HIGH_RANGE | Char | 5 | High range for analyte |
| 168 | IFNG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 169 | IFNG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 170 | IGA_UNIT | Char | 5 | Analyte unit |
| 171 | IGA_LOW_RANGE | Char | 5 | Low range for analyte |
| 172 | IGA_HIGH_RANGE | Char | 5 | High range for analyte |
| 173 | IGA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 174 | IGA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 175 | IGM_UNIT | Char | 5 | Analyte unit |
| 176 | IGM_LOW_RANGE | Char | 5 | Low range for analyte |
| 177 | IGM_HIGH_RANGE | Char | 5 | High range for analyte |
| 178 | IGM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 179 | IGM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 180 | IL10_UNIT | Char | 5 | Analyte unit |
| 181 | IL10_LOW_RANGE | Char | 5 | Low range for analyte |
| 182 | IL10_HIGH_RANGE | Char | 5 | High range for analyte |
| 183 | IL10_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 184 | IL10_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 185 | IL12A_IL12B_UNIT | Char | 5 | Analyte unit |
| 186 | IL12A_IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 187 | IL12A_IL12B_HIGH_RANGE | Char | 5 | High range for analyte |
| 188 | IL12A_IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 189 | IL12A_IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 190 | IL12B_UNIT | Char | 5 | Analyte unit |
| 191 | IL12B_LOW_RANGE | Char | 5 | Low range for analyte |
| 192 | IL12B_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 193 | IL12B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 194 | IL12B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 195 | IL15_UNIT | Char | 5 | Analyte unit |
| 196 | IL15_LOW_RANGE | Char | 5 | Low range for analyte |
| 197 | IL15_HIGH_RANGE | Char | 5 | High range for analyte |
| 198 | IL15_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 199 | IL15_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 200 | IL17A_UNIT | Char | 5 | Analyte unit |
| 201 | IL17A_LOW_RANGE | Char | 5 | Low range for analyte |
| 202 | IL17A_HIGH_RANGE | Char | 5 | High range for analyte |
| 203 | IL17A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 204 | IL17A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 205 | IL18_UNIT | Char | 5 | Analyte unit |
| 206 | IL18_LOW_RANGE | Char | 5 | Low range for analyte |
| 207 | IL18_HIGH_RANGE | Char | 5 | High range for analyte |
| 208 | IL18_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 209 | IL18_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 210 | IL1A_UNIT | Char | 6 | Analyte unit |
| 211 | IL1A_LOW_RANGE | Char | 6 | Low range for analyte |
| 212 | IL1A_HIGH_RANGE | Char | 6 | High range for analyte |
| 213 | IL1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 214 | IL1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 215 | IL1B_UNIT | Char | 5 | Analyte unit |
| 216 | IL1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 217 | IL1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 218 | IL1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 219 | IL1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 220 | IL1RN_UNIT | Char | 5 | Analyte unit |
| 221 | IL1RN_LOW_RANGE | Char | 5 | Low range for analyte |
| 222 | IL1RN_HIGH_RANGE | Char | 5 | High range for analyte |
| 223 | IL1RN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 224 | IL1RN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 225 | IL2_UNIT | Char | 5 | Analyte unit |
| 226 | IL2_LOW_RANGE | Char | 5 | Low range for analyte |
| 227 | IL2_HIGH_RANGE | Char | 5 | High range for analyte |
| 228 | IL2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 229 | IL2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 230 | IL23A_UNIT | Char | 5 | Analyte unit |
| 231 | IL23A_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 232 | IL23A_HIGH_RANGE | Char | 5 | High range for analyte |
| 233 | IL23A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 234 | IL23A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 235 | IL2RA_UNIT | Char | 5 | Analyte unit |
| 236 | IL2RA_LOW_RANGE | Char | 5 | Low range for analyte |
| 237 | IL2RA_HIGH_RANGE | Char | 5 | High range for analyte |
| 238 | IL2RA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 239 | IL2RA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 240 | IL3_UNIT | Char | 6 | Analyte unit |
| 241 | IL3_LOW_RANGE | Char | 6 | Low range for analyte |
| 242 | IL3_HIGH_RANGE | Char | 6 | High range for analyte |
| 243 | IL3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 244 | IL3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 245 | IL4_UNIT | Char | 5 | Analyte unit |
| 246 | IL4_LOW_RANGE | Char | 5 | Low range for analyte |
| 247 | IL4_HIGH_RANGE | Char | 5 | High range for analyte |
| 248 | IL4_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 249 | IL4_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 250 | IL5_UNIT | Char | 5 | Analyte unit |
| 251 | IL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 252 | IL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 253 | IL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 254 | IL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 255 | IL6_UNIT | Char | 5 | Analyte unit |
| 256 | IL6_LOW_RANGE | Char | 5 | Low range for analyte |
| 257 | IL6_HIGH_RANGE | Char | 5 | High range for analyte |
| 258 | IL6_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 259 | IL6_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 260 | IL6R_UNIT | Char | 5 | Analyte unit |
| 261 | IL6R_LOW_RANGE | Char | 5 | Low range for analyte |
| 262 | IL6R_HIGH_RANGE | Char | 5 | High range for analyte |
| 263 | IL6R_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 264 | IL6R_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 265 | IL7_UNIT | Char | 5 | Analyte unit |
| 266 | IL7_LOW_RANGE | Char | 5 | Low range for analyte |
| 267 | IL7_HIGH_RANGE | Char | 5 | High range for analyte |
| 268 | IL7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 269 | IL7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 270 | IL8_UNIT | Char | 5 | Analyte unit |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 271 | IL8_LOW_RANGE | Char | 5 | Low range for analyte |
| 272 | IL8_HIGH_RANGE | Char | 5 | High range for analyte |
| 273 | IL8_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 274 | IL8_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 275 | KIT_UNIT | Char | 5 | Analyte unit |
| 276 | KIT_LOW_RANGE | Char | 5 | Low range for analyte |
| 277 | KIT_HIGH_RANGE | Char | 5 | High range for analyte |
| 278 | KIT_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 279 | KIT_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 280 | KITLG_UNIT | Char | 5 | Analyte unit |
| 281 | KITLG_LOW_RANGE | Char | 5 | Low range for analyte |
| 282 | KITLG_HIGH_RANGE | Char | 5 | High range for analyte |
| 283 | KITLG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 284 | KITLG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 285 | LPA_UNIT | Char | 5 | Analyte unit |
| 286 | LPA_LOW_RANGE | Char | 5 | Low range for analyte |
| 287 | LPA_HIGH_RANGE | Char | 5 | High range for analyte |
| 288 | LPA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 289 | LPA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 290 | LTA_UNIT | Char | 5 | Analyte unit |
| 291 | LTA_LOW_RANGE | Char | 5 | Low range for analyte |
| 292 | LTA_HIGH_RANGE | Char | 5 | High range for analyte |
| 293 | LTA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 294 | LTA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 295 | LTF_UNIT | Char | 5 | Analyte unit |
| 296 | LTF_LOW_RANGE | Char | 5 | Low range for analyte |
| 297 | LTF_HIGH_RANGE | Char | 5 | High range for analyte |
| 298 | LTF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 299 | LTF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 300 | MB_UNIT | Char | 5 | Analyte unit |
| 301 | MB_LOW_RANGE | Char | 5 | Low range for analyte |
| 302 | MB_HIGH_RANGE | Char | 5 | High range for analyte |
| 303 | MB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 304 | MB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 305 | MMP3_UNIT | Char | 5 | Analyte unit |
| 306 | MMP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 307 | MMP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 308 | MMP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 309 | MMP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 310 | MMP9_UNIT | Char | 5 | Analyte unit |
| 311 | MMP9_LOW_RANGE | Char | 5 | Low range for analyte |
| 312 | MMP9_HIGH_RANGE | Char | 5 | High range for analyte |
| 313 | MMP9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 314 | MMP9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 315 | NGF_UNIT | Char | 5 | Analyte unit |
| 316 | NGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 317 | NGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 318 | NGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 319 | NGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 320 | NRCAM_UNIT | Char | 5 | Analyte unit |
| 321 | NRCAM_LOW_RANGE | Char | 5 | Low range for analyte |
| 322 | NRCAM_HIGH_RANGE | Char | 5 | High range for analyte |
| 323 | NRCAM_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 324 | NRCAM_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 325 | S100A12_UNIT | Char | 5 | Analyte unit |
| 326 | S100A12_LOW_RANGE | Char | 5 | Low range for analyte |
| 327 | S100A12_HIGH_RANGE | Char | 5 | High range for analyte |
| 328 | S100A12_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 329 | S100A12_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 330 | S100B_UNIT | Char | 5 | Analyte unit |
| 331 | S100B_LOW_RANGE | Char | 5 | Low range for analyte |
| 332 | S100B_HIGH_RANGE | Char | 5 | High range for analyte |
| 333 | S100B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 334 | S100B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 335 | SELE_UNIT | Char | 5 | Analyte unit |
| 336 | SELE_LOW_RANGE | Char | 5 | Low range for analyte |
| 337 | SELE_HIGH_RANGE | Char | 5 | High range for analyte |
| 338 | SELE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 339 | SELE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 340 | SERPINA1_UNIT | Char | 5 | Analyte unit |
| 341 | SERPINA1_LOW_RANGE | Char | 5 | Low range for analyte |
| 342 | SERPINA1_HIGH_RANGE | Char | 5 | High range for analyte |
| 343 | SERPINA1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 344 | SERPINA1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 345 | SERPINA7_UNIT | Char | 5 | Analyte unit |
| 346 | SERPINA7_LOW_RANGE | Char | 5 | Low range for analyte |
| 347 | SERPINA7_HIGH_RANGE | Char | 5 | High range for analyte |
| 348 | SERPINA7_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 349 | SERPINA7_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 350 | SERPINE1_UNIT | Char | 5 | Analyte unit |
| 351 | SERPINE1_LOW_RANGE | Char | 5 | Low range for analyte |
| 352 | SERPINE1_HIGH_RANGE | Char | 5 | High range for analyte |
| 353 | SERPINE1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 354 | SERPINE1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 355 | SHBG_UNIT | Char | 6 | Analyte unit |
| 356 | SHBG_LOW_RANGE | Char | 6 | Low range for analyte |
| 357 | SHBG_HIGH_RANGE | Char | 6 | High range for analyte |
| 358 | SHBG_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 359 | SHBG_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 360 | SLPI_UNIT | Char | 5 | Analyte unit |
| 361 | SLPI_LOW_RANGE | Char | 5 | Low range for analyte |
| 362 | SLPI_HIGH_RANGE | Char | 5 | High range for analyte |
| 363 | SLPI_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 364 | SLPI_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 365 | SOD1_UNIT | Char | 5 | Analyte unit |
| 366 | SOD1_LOW_RANGE | Char | 5 | Low range for analyte |
| 367 | SOD1_HIGH_RANGE | Char | 5 | High range for analyte |
| 368 | SOD1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 369 | SOD1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 370 | SORT1_UNIT | Char | 5 | Analyte unit |
| 371 | SORT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 372 | SORT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 373 | SORT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 374 | SORT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 375 | SPINK1_UNIT | Char | 5 | Analyte unit |
| 376 | SPINK1_LOW_RANGE | Char | 5 | Low range for analyte |
| 377 | SPINK1_HIGH_RANGE | Char | 5 | High range for analyte |
| 378 | SPINK1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 379 | SPINK1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 380 | TGFB1_LAP_UNIT | Char | 5 | Analyte unit |
| 381 | TGFB1_LAP_LOW_RANGE | Char | 5 | Low range for analyte |
| 382 | TGFB1_LAP_HIGH_RANGE | Char | 5 | High range for analyte |
| 383 | TGFB1_LAP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 384 | TGFB1_LAP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 385 | TIMP1_UNIT | Char | 5 | Analyte unit |
| 386 | TIMP1_LOW_RANGE | Char | 5 | Low range for analyte |
| 387 | TIMP1_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 388 | TIMP1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 389 | TIMP1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 390 | TIMP2_UNIT | Char | 5 | Analyte unit |
| 391 | TIMP2_LOW_RANGE | Char | 5 | Low range for analyte |
| 392 | TIMP2_HIGH_RANGE | Char | 5 | High range for analyte |
| 393 | TIMP2_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 394 | TIMP2_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 395 | TNF_UNIT | Char | 5 | Analyte unit |
| 396 | TNF_LOW_RANGE | Char | 5 | Low range for analyte |
| 397 | TNF_HIGH_RANGE | Char | 5 | High range for analyte |
| 398 | TNF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 399 | TNF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 400 | TNFRSF11B_UNIT | Char | 4 | Analyte unit |
| 401 | TNFRSF11B_LOW_RANGE | Char | 4 | Low range for analyte |
| 402 | TNFRSF11B_HIGH_RANGE | Char | 4 | High range for analyte |
| 403 | TNFRSF11B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 404 | TNFRSF11B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 405 | TNFRSF1A_UNIT | Char | 5 | Analyte unit |
| 406 | TNFRSF1A_LOW_RANGE | Char | 5 | Low range for analyte |
| 407 | TNFRSF1A_HIGH_RANGE | Char | 5 | High range for analyte |
| 408 | TNFRSF1A_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 409 | TNFRSF1A_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 410 | TNFRSF1B_UNIT | Char | 5 | Analyte unit |
| 411 | TNFRSF1B_LOW_RANGE | Char | 5 | Low range for analyte |
| 412 | TNFRSF1B_HIGH_RANGE | Char | 5 | High range for analyte |
| 413 | TNFRSF1B_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 414 | TNFRSF1B_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 415 | VCAM1_UNIT | Char | 5 | Analyte unit |
| 416 | VCAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 417 | VCAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 418 | VCAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 419 | VCAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 420 | VEGFA_UNIT | Char | 5 | Analyte unit |
| 421 | VEGFA_LOW_RANGE | Char | 5 | Low range for analyte |
| 422 | VEGFA_HIGH_RANGE | Char | 5 | High range for analyte |
| 423 | VEGFA_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 424 | VEGFA_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 425 | VTN_UNIT | Char | 5 | Analyte unit |
| 426 | VTN_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 427 | VTN_HIGH_RANGE | Char | 5 | High range for analyte |
| 428 | VTN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 429 | VTN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 430 | VWF_UNIT | Char | 5 | Analyte unit |
| 431 | VWF_LOW_RANGE | Char | 5 | Low range for analyte |
| 432 | VWF_HIGH_RANGE | Char | 5 | High range for analyte |
| 433 | VWF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 434 | VWF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 435 | A2M | Num | 8 | Alpha-2-Macroglobulin (A2M) |
| 436 | ADIPOQ | Num | 8 | Adiponectin, C1Q and collagen domain containing (ADIPOQ) |
| 437 | AGER | Num | 8 | Advanced glycosylation end product-specific receptor (AGER) |
| 438 | APCS | Num | 8 | Amyloid P-component, serum (APCS) |
| 439 | B2M | Num | 8 | Beta-2-microglobulin (B2M) |
| 440 | BDNF | Num | 8 | Brain-derived neurotrophic factor (BDNF) |
| 441 | C3 | Num | 8 | Complement component C3 (C3) |
| 442 | CCL11 | Num | 8 | Chemokine (C-C motif) ligand 11 (eotaxin-1) (CCL11) |
| 443 | CCL13 | Num | 8 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 444 | CCL18 | Num | 8 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) (CCL18) |
| 445 | CCL2 | Num | 8 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 446 | CCL20 | Num | 8 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 447 | CCL23 | Num | 8 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 448 | CCL24 | Num | 8 | Chemokine (C-C motif) ligand 24 (CCL24) |
| 449 | CCL3 | Num | 8 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 450 | CCL4 | Num | 8 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 451 | CCL5 | Num | 8 | chemokine (C-C motif) ligand 5 (CCL5) |
| 452 | CCL8 | Num | 8 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 453 | CDH1 | Num | 8 | Cadherin, type 1, E-cadherin (epithelial) (CDH1) |
| 454 | CHGA | Num | 8 | Chromogranin A (parathyroid secretory protein 1) (CHGA) |
| 455 | CRP | Num | 8 | C-reactive protein, pentraxin-related (CRP) |
| 456 | CSF2 | Num | 8 | Colony stimulating factor 2 (granulocyte-macrophage) (CSF2) |
| 457 | CSTB | Num | 8 | Cystatin B (stefin B) (CSTB) |
| 458 | CXCL1 | Num | 8 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) |
| 459 | CXCL10 | Num | 8 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 460 | CXCL9 | Num | 8 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 461 | F7 | Num | 8 | Coagulation factor VII (serum prothrombin conversion accelerator) (F7) |
| 462 | FGA_FGB_FGG | Num | 8 | Fibrinogen (trimer; alpha chain, beta chain, gamma chain) [FG(A/B/G)] |
| 463 | FTL_FTH1 | Num | 8 | Ferritin [FT(L/H1)] |
| 464 | GC | Num | 8 | Group-specific component (vitamin D binding protein) (GC) |
| 465 | HP | Num | 8 | Haptoglobin (HP) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 466 | ICAM1 | Num | 8 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 467 | IFNG | Num | 8 | Interferon, gamma (IFNG) |
| 468 | IGA | Num | 8 | Immunoglobulin A (IgA) |
| 469 | IGM | Num | 8 | Immunoglobulin M |
| 470 | IL10 | Num | 8 | Interleukin 10 (IL10) |
| 471 | IL12A_IL12B | Num | 8 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 472 | IL12B | Num | 8 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 473 | IL15 | Num | 8 | Interleukin 15 (IL15) |
| 474 | IL17A | Num | 8 | Interleukin 17 (IL17A) |
| 475 | IL18 | Num | 8 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 476 | IL1A | Num | 8 | Interleukin 1, alpha (IL1A) |
| 477 | IL1B | Num | 8 | Interleukin 1, beta (IL1B) |
| 478 | IL1RN | Num | 8 | Interleukin 1 receptor antagonist (IL1RN) |
| 479 | IL2 | Num | 8 | Interleukin 2 (IL2) |
| 480 | IL23A | Num | 8 | Interleukin 23, alpha subunit p19 (IL23A) |
| 481 | IL2RA | Num | 8 | Interleukin 2 receptor, alpha (IL2RA) |
| 482 | IL3 | Num | 8 | Interleukin 3 (IL3) |
| 483 | IL4 | Num | 8 | Interleukin 4 (IL4) |
| 484 | IL5 | Num | 8 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 485 | IL6 | Num | 8 | Interleukin 6 (interferon, beta 2) (IL6) |
| 486 | IL6R | Num | 8 | Interleukin-6 receptor (IL6R) |
| 487 | IL7 | Num | 8 | Interleukin 7 (IL7) |
| 488 | IL8 | Num | 8 | Interleukin 8 (IL8) |
| 489 | KIT | Num | 8 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 490 | KITLG | Num | 8 | KIT ligand (KITLG) |
| 491 | LPA | Num | 8 | Lipoprotein, (Lp(a) (LPA) |
| 492 | LTA | Num | 8 | Lymphotoxin alpha (LTA) |
| 493 | LTF | Num | 8 | Lactotransferrin |
| 494 | MB | Num | 8 | Myoglobin (MB) |
| 495 | MMP3 | Num | 8 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 496 | MMP9 | Num | 8 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 497 | NGF | Num | 8 | Nerve growth gactor (beta polypeptide) (NGF) |
| 498 | NRCAM | Num | 8 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 499 | S100A12 | Num | 8 | S100 calcium binding protein A12 (ENRAGE) |
| 500 | S100B | Num | 8 | S100 calcium binding protein B (S100B) |
| 501 | SELE | Num | 8 | Selectin E (SELE) |
| 502 | SERPINA1 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin) (SERPINA1) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 503 | SERPINA7 | Num | 8 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 504 | SERPINE1 | Num | 8 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 505 | SHBG | Num | 8 | Sex Hormone-Binding Globulin (SHBG) |
| 506 | SLPI | Num | 8 | Secretory leukocyte peptidase inhibitor (SLPI) |
| 507 | SOD1 | Num | 8 | Superoxide Dismutase 1, soluble (SOD1) |
| 508 | SORT1 | Num | 8 | Sortilin 1 (SORT1) |
| 509 | SPINK1 | Num | 8 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 510 | TGFB1_LAP | Num | 8 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 511 | TIMP1 | Num | 8 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 512 | TIMP2 | Num | 8 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 513 | TNF | Num | 8 | Tumor necrosis factor (TNF) |
| 514 | TNFRSF11B | Num | 8 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 515 | TNFRSF1A | Num | 8 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 516 | TNFRSF1B | Num | 8 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 517 | VCAM1 | Num | 8 | Vascular cell adhesion molecule 1 (VCAM1) |
| 518 | VEGFA | Num | 8 | Vascular endothelial growth factor (VEGFA) |
| 519 | VTN | Num | 8 | Vitronectin |
| 520 | VWF | Num | 8 | von Willebrand Factor (vWF) |
| 521 | ANGPT1_UNIT | Char | 5 | Analyte unit |
| 522 | ANGPT1_LOW_RANGE | Char | 5 | Low range for analyte |
| 523 | ANGPT1_HIGH_RANGE | Char | 5 | High range for analyte |
| 524 | ANGPT1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 525 | ANGPT1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 526 | AXL_UNIT | Char | 5 | Analyte unit |
| 527 | AXL_LOW_RANGE | Char | 5 | Low range for analyte |
| 528 | AXL_HIGH_RANGE | Char | 5 | High range for analyte |
| 529 | AXL_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 530 | AXL_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 531 | CA9_UNIT | Char | 5 | Analyte unit |
| 532 | CA9_LOW_RANGE | Char | 5 | Low range for analyte |
| 533 | CA9_HIGH_RANGE | Char | 5 | High range for analyte |
| 534 | CA9_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 535 | CA9_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 536 | CCL16_UNIT | Char | 5 | Analyte unit |
| 537 | CCL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 538 | CCL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 539 | CCL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 540 | CCL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 541 | CCL22_UNIT | Char | 5 | Analyte unit |
| 542 | CCL22_LOW_RANGE | Char | 5 | Low range for analyte |
| 543 | CCL22_HIGH_RANGE | Char | 5 | High range for analyte |
| 544 | CCL22_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 545 | CCL22_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 546 | CDH13_UNIT | Char | 5 | Analyte unit |
| 547 | CDH13_LOW_RANGE | Char | 5 | Low range for analyte |
| 548 | CDH13_HIGH_RANGE | Char | 5 | High range for analyte |
| 549 | CDH13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 550 | CDH13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 551 | CEACAM1_UNIT | Char | 5 | Analyte unit |
| 552 | CEACAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 553 | CEACAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 554 | CEACAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 555 | CEACAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 556 | CKM_CKB_UNIT | Char | 5 | Analyte unit |
| 557 | CKM_CKB_LOW_RANGE | Char | 5 | Low range for analyte |
| 558 | CKM_CKB_HIGH_RANGE | Char | 5 | High range for analyte |
| 559 | CKM_CKB_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 560 | CKM_CKB_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 561 | CXCL5_UNIT | Char | 5 | Analyte unit |
| 562 | CXCL5_LOW_RANGE | Char | 5 | Low range for analyte |
| 563 | CXCL5_HIGH_RANGE | Char | 5 | High range for analyte |
| 564 | CXCL5_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 565 | CXCL5_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 566 | DCN_UNIT | Char | 5 | Analyte unit |
| 567 | DCN_LOW_RANGE | Char | 5 | Low range for analyte |
| 568 | DCN_HIGH_RANGE | Char | 5 | High range for analyte |
| 569 | DCN_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 570 | DCN_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 571 | FABP3_UNIT | Char | 5 | Analyte unit |
| 572 | FABP3_LOW_RANGE | Char | 5 | Low range for analyte |
| 573 | FABP3_HIGH_RANGE | Char | 5 | High range for analyte |
| 574 | FABP3_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 575 | FABP3_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 576 | FAS_UNIT | Char | 5 | Analyte unit |
| 577 | FAS_LOW_RANGE | Char | 5 | Low range for analyte |
| 578 | FAS_HIGH_RANGE | Char | 5 | High range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 579 | FAS_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 580 | FAS_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 581 | HGF_UNIT | Char | 5 | Analyte unit |
| 582 | HGF_LOW_RANGE | Char | 5 | Low range for analyte |
| 583 | HGF_HIGH_RANGE | Char | 5 | High range for analyte |
| 584 | HGF_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 585 | HGF_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 586 | IGE_UNIT | Char | 4 | Analyte unit |
| 587 | IGE_LOW_RANGE | Char | 4 | Low range for analyte |
| 588 | IGE_HIGH_RANGE | Char | 4 | High range for analyte |
| 589 | IGE_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 590 | IGE_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 591 | IL13_UNIT | Char | 5 | Analyte unit |
| 592 | IL13_LOW_RANGE | Char | 5 | Low range for analyte |
| 593 | IL13_HIGH_RANGE | Char | 5 | High range for analyte |
| 594 | IL13_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 595 | IL13_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 596 | IL16_UNIT | Char | 5 | Analyte unit |
| 597 | IL16_LOW_RANGE | Char | 5 | Low range for analyte |
| 598 | IL16_HIGH_RANGE | Char | 5 | High range for analyte |
| 599 | IL16_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 600 | IL16_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 601 | IL18BP_UNIT | Char | 5 | Analyte unit |
| 602 | IL18BP_LOW_RANGE | Char | 5 | Low range for analyte |
| 603 | IL18BP_HIGH_RANGE | Char | 5 | High range for analyte |
| 604 | IL18BP_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 605 | IL18BP_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 606 | KLK3_F_UNIT | Char | 6 | Analyte unit |
| 607 | KLK3_F_LOW_RANGE | Char | 6 | Low range for analyte |
| 608 | KLK3_F_HIGH_RANGE | Char | 6 | High range for analyte |
| 609 | KLK3_F_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 610 | KLK3_F_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 611 | MDK_UNIT | Char | 5 | Analyte unit |
| 612 | MDK_LOW_RANGE | Char | 5 | Low range for analyte |
| 613 | MDK_HIGH_RANGE | Char | 5 | High range for analyte |
| 614 | MDK_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 615 | MDK_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 616 | NPPB_PH_UNIT | Char | 5 | Analyte unit |
| 617 | NPPB_PH_LOW_RANGE | Char | 5 | Low range for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 618 | NPPB_PH_HIGH_RANGE | Char | 5 | High range for analyte |
| 619 | NPPB_PH_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 620 | NPPB_PH_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 621 | OLR1_UNIT | Char | 5 | Analyte unit |
| 622 | OLR1_LOW_RANGE | Char | 5 | Low range for analyte |
| 623 | OLR1_HIGH_RANGE | Char | 5 | High range for analyte |
| 624 | OLR1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 625 | OLR1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 626 | PECAM1_UNIT | Char | 5 | Analyte unit |
| 627 | PECAM1_LOW_RANGE | Char | 5 | Low range for analyte |
| 628 | PECAM1_HIGH_RANGE | Char | 5 | High range for analyte |
| 629 | PECAM1_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 630 | PECAM1_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 631 | SFTPD_UNIT | Char | 5 | Analyte unit |
| 632 | SFTPD_LOW_RANGE | Char | 5 | Low range for analyte |
| 633 | SFTPD_HIGH_RANGE | Char | 5 | High range for analyte |
| 634 | SFTPD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 635 | SFTPD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 636 | THBD_UNIT | Char | 5 | Analyte unit |
| 637 | THBD_LOW_RANGE | Char | 5 | Low range for analyte |
| 638 | THBD_HIGH_RANGE | Char | 5 | High range for analyte |
| 639 | THBD_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 640 | THBD_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 641 | TNFRSF10C_UNIT | Char | 5 | Analyte unit |
| 642 | TNFRSF10C_LOW_RANGE | Char | 5 | Low range for analyte |
| 643 | TNFRSF10C_HIGH_RANGE | Char | 5 | High range for analyte |
| 644 | TNFRSF10C_LDD | Num | 8 | LDD (Least Detectable Dose) for analyte |
| 645 | TNFRSF10C_LLOQ | Num | 8 | Lower Limited of Quantitation (LLOQ) for analyte |
| 646 | ANGPT1 | Num | 8 | Angiopoietin 1 (ANGPT1) |
| 647 | AXL | Num | 8 | AXL Receptor Tyrosine Kinase (AXL) |
| 648 | CA9 | Num | 8 | Carbonic anhydrase IX (CA9) |
| 649 | CCL16 | Num | 8 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 650 | CCL22 | Num | 8 | chemokine (C-C motif) ligand 22 (CCL22) |
| 651 | CDH13 | Num | 8 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 652 | CEACAM1 | Num | 8 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 653 | CKM_CKB | Num | 8 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 654 | CXCL5 | Num | 8 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 655 | DCN | Num | 8 | Decorin (DCN) |


| Num | Variable | Type | Len | Label |
| ---: | :--- | :--- | ---: | :--- |
| 656 | FABP3 | Num | 8 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth |
| inhibitor) (FABP3) |  |  |  |  |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 693 | IGA_RAW | Char | 5 | Immunoglobulin A (IgA) |
| 694 | IGM_RAW | Char | 5 | Immunoglobulin M |
| 695 | ICAM1_RAW | Char | 5 | Intercellular Adhesion Molecule 1 (ICAM1) |
| 696 | IFNG_RAW | Char | 5 | Interferon, gamma (IFNG) |
| 697 | CXCL10_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 10 (CXCL10) |
| 698 | IL1A_RAW | Char | 7 | Interleukin 1, alpha (IL1A) |
| 699 | IL1B_RAW | Char | 5 | Interleukin 1, beta (IL1B) |
| 700 | IL1RN_RAW | Char | 5 | Interleukin 1 receptor antagonist (IL1RN) |
| 701 | IL2_RAW | Char | 5 | Interleukin 2 (IL2) |
| 702 | IL2RA_RAW | Char | 5 | Interleukin 2 receptor, alpha (IL2RA) |
| 703 | IL3_RAW | Char | 6 | Interleukin 3 (IL3) |
| 704 | IL4_RAW | Char | 5 | Interleukin 4 (IL4) |
| 705 | IL5_RAW | Char | 5 | Interleukin 5 (colony stimulating factor, eosinophil) (IL5) |
| 706 | IL6_RAW | Char | 5 | Interleukin 6 (interferon, beta 2) (IL6) |
| 707 | IL6R_RAW | Char | 5 | Interleukin-6 receptor (IL6R) |
| 708 | IL7_RAW | Char | 5 | Interleukin 7 (IL7) |
| 709 | IL8_RAW | Char | 5 | Interleukin 8 (IL8) |
| 710 | IL10_RAW | Char | 5 | Interleukin 10 (IL10) |
| 711 | IL12B_RAW | Char | 5 | Interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) |
| 712 | IL12A_IL12B_RAW | Char | 5 | Interleukin12 subunit p70 (IL12A/IL12B heterodimer) |
| 713 | IL15_RAW | Char | 5 | Interleukin 15 (IL15) |
| 714 | IL17A_RAW | Char | 5 | Interleukin 17 (IL17A) |
| 715 | IL18_RAW | Char | 5 | Interleukin 18 (interferon-gamma-inducing factor) (IL18) |
| 716 | IL23A_RAW | Char | 5 | Interleukin 23, alpha subunit p19 (IL23A) |
| 717 | LTF_RAW | Char | 5 | Lactotransferrin |
| 718 | TGFB1_LAP_RAW | Char | 5 | Transforming growth factor, beta 1 (TGFB1; latency associated peptide) |
| 719 | CCL3_RAW | Char | 5 | Chemokine (C-C motif) ligand 3 (CCL3) |
| 720 | CCL4_RAW | Char | 5 | Chemokine (C-C motif) ligand 4 (CCL4) |
| 721 | CCL20_RAW | Char | 5 | Chemokine (C-C motif) ligand 20 (CCL20) |
| 722 | KIT_RAW | Char | 5 | v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog (KIT) |
| 723 | MMP3_RAW | Char | 5 | Matrix metalloproteinase 3 (stromelysin 1, progelatinase) (MMP3) |
| 724 | MMP9_RAW | Char | 5 | Matrix Metalloproteinase 9 (gelatinase B, 92kDA type IV collagenase) (MMP9) |
| 725 | CCL2_RAW | Char | 5 | Chemokine (C-C motif) ligand 2 (CCL2) |
| 726 | CCL8_RAW | Char | 5 | Chemokine (C-C motif) ligand 8 (CCL8) |
| 727 | CCL13_RAW | Char | 5 | Chemokine (C-C motif) ligand 13 (CCL13) |
| 728 | CXCL9_RAW | Char | 5 | Chemokine (C-X-C motif) ligand 9 (CXCL9) |
| 729 | CCL23_RAW | Char | 5 | Chemokine (C-C motif) ligand 23 (CCL23) |
| 730 | MB_RAW | Char | 5 | Myoglobin (MB) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 731 | NGF_RAW | Char | 5 | Nerve growth gactor (beta polypeptide) (NGF) |
| 732 | NRCAM_RAW | Char | 5 | Neuronal Cell Adhesion Molecule (NRCAM) |
| 733 | TNFRSF11B_RAW | Char | 4 | Tumor necrosis factor receptor superfamily, member 11b (TNFRSF11B) |
| 734 | SPINK1_RAW | Char | 5 | Serine peptidase inhibitor, Kazal type 1 (SPINK1) |
| 735 | SERPINE1_RAW | Char | 5 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 1 type 1), member 1 (SERPINE1) |
| 736 | CCL18_RAW | Char | 5 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) |
| 737 | AGER_RAW | Char | 5 | Advanced glycosylation end product-specific receptor (AGER) |
| 738 | S100B_RAW | Char | 5 | S100 calcium binding protein B (S100B) |
| 739 | APCS_RAW | Char | 5 | Amyloid P-component, serum (APCS) |
| 740 | SHBG_RAW | Char | 6 | Sex Hormone-Binding Globulin (SHBG) |
| 741 | SORT1_RAW | Char | 5 | Sortilin 1 (SORT1) |
| 742 | KITLG_RAW | Char | 5 | KIT ligand (KITLG) |
| 743 | SOD1_RAW | Char | 5 | Superoxide Dismutase 1, soluble (SOD1) |
| 744 | CCL5_RAW | Char | 5 | chemokine (C-C motif) ligand 5 (CCL5) |
| 745 | SERPINA7_RAW | Char | 5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 (SERPINA7) |
| 746 | TIMP1_RAW | Char | 5 | TIMP metallopeptidase inhibitor 1 (TIMP1) |
| 747 | TIMP2_RAW | Char | 5 | TIMP metallopeptidase inhibitor 2 (TIMP2) |
| 748 | TNF_RAW | Char | 5 | Tumor necrosis factor (TNF) |
| 749 | LTA_RAW | Char | 5 | Lymphotoxin alpha (LTA) |
| 750 | TNFRSF1A_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) |
| 751 | TNFRSF1B_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B) |
| 752 | VCAM1_RAW | Char | 5 | Vascular cell adhesion molecule 1 (VCAM1) |
| 753 | VEGFA_RAW | Char | 5 | Vascular endothelial growth factor (VEGFA) |
| 754 | GC_RAW | Char | 5 | Group-specific component (vitamin D binding protein) (GC) |
| 755 | VTN_RAW | Char | 5 | Vitronectin |
| 756 | VWF_RAW | Char | 5 | von Willebrand Factor (vWF) |
| 757 | ANGPT1_RAW | Char | 5 | Angiopoietin 1 (ANGPT1) |
| 758 | AXL_RAW | Char | 5 | AXL Receptor Tyrosine Kinase (AXL) |
| 759 | CDH13_RAW | Char | 5 | Cadherin 13, H-cadherin (heart) (CDH13) |
| 760 | CA9_RAW | Char | 5 | Carbonic anhydrase IX (CA9) |
| 761 | CEACAM1_RAW | Char | 5 | Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1) |
| 762 | CCL16_RAW | Char | 5 | Chemokine (C-C motif) ligand 16 (CCL16) |
| 763 | CKM_CKB_RAW | Char | 5 | Creatine kinase, muscle; Creatine kinase, brain (heterodimer) [CK(M/B)] |
| 764 | DCN_RAW | Char | 5 | Decorin (DCN) |
| 765 | CXCL5_RAW | Char | 5 | chemokine (C-X-C motif) ligand 5 chemokine 5 (CXCL5) |
| 766 | FAS_RAW | Char | 5 | Fas cell surface death receptor (FAS) |
| 767 | FABP3_RAW | Char | 5 | Fatty acid-binding protein 3, muscle and heart (mammary-derived growth inhibitor) (FABP3) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 768 | HGF_RAW | Char | 5 | Hepatocyte growth factor (hepapoietin A; scatter factor) (HGF) |
| 769 | IGE_RAW | Char | 5 | Immunoglobulin E (IgE) |
| 770 | IL13_RAW | Char | 5 | Interleukin 13 (IL13) |
| 771 | IL16_RAW | Char | 5 | Interleukin 16 (IL16) |
| 772 | IL18BP_RAW | Char | 5 | Interleukin 18 binding protein (IL18BP) |
| 773 | OLR1_RAW | Char | 5 | Oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1) |
| 774 | CCL22_RAW | Char | 5 | chemokine (C-C motif) ligand 22 (CCL22) |
| 775 | MDK_RAW | Char | 5 | Midkine (neurite growth-promoting factor 2) (MDK) |
| 776 | NPPB_PH_RAW | Char | 5 | Natriuretic peptide (NPPB; N-terminal prohormone) |
| 777 | PECAM1_RAW | Char | 5 | Platelet endothelial cell adhesion molecule (PECAM1) |
| 778 | KLK3_F_RAW | Char | 6 | Kallikrein-related peptidase 3 (free) (PSAF) |
| 779 | SFTPD_RAW | Char | 5 | Surfactant protein D (SFTPD) |
| 780 | THBD_RAW | Char | 5 | Thrombomodulin (THBD) |
| 781 | TNFRSF10C_RAW | Char | 5 | Tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C) |
| 782 | A2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 783 | ADIPOQ_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 784 | AGER_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 785 | ANGPT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 786 | APCS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 787 | AXL_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 788 | B2M_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 789 | BDNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 790 | C3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 791 | CA9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 792 | CCL11_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 793 | CCL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 794 | CCL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 795 | CCL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 796 | CCL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 797 | CCL20_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 798 | CCL22_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 799 | CCL23_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 800 | CCL24_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 801 | CCL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 802 | CCL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 803 | CCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 804 | CCL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 805 | CDH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 806 | CDH13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 807 | CEACAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 808 | CHGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 809 | CKM_CKB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 810 | CRP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 811 | CSF2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 812 | CSTB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 813 | CXCL1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 814 | CXCL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 815 | CXCL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 816 | CXCL9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 817 | DCN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 818 | F7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 819 | FABP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 820 | FAS_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 821 | FGA_FGB_FGG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 822 | FTL_FTH1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 823 | GC_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 824 | HGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 825 | HP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 826 | ICAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 827 | IFNG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 828 | IGA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 829 | IGE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 830 | IGM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 831 | IL10_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 832 | IL12A_IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 833 | IL12B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 834 | IL13_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 835 | IL15_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 836 | IL16_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 837 | IL17A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 838 | IL18_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 839 | IL18BP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 840 | IL1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 841 | IL1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 842 | IL1RN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 843 | IL2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 844 | IL23A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 845 | IL2RA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 846 | IL3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 847 | IL4_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 848 | IL5_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 849 | IL6_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 850 | IL6R_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 851 | IL7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 852 | IL8_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 853 | KIT_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 854 | KITLG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 855 | KLK3_F_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 856 | LPA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 857 | LTA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 858 | LTF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 859 | MB_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 860 | MDK_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 861 | MMP3_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 862 | MMP9_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 863 | NGF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 864 | NPPB_PH_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 865 | NRCAM_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 866 | OLR1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 867 | PECAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 868 | S100A12_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 869 | S100B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 870 | SELE_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 871 | SERPINA1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 872 | SERPINA7_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 873 | SERPINE1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 874 | SFTPD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 875 | SHBG_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 876 | SLPI_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 877 | SOD1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 878 | SORT1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 879 | SPINK1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 880 | TGFB1_LAP_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 881 | THBD_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 882 | TIMP1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 883 | TIMP2_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 884 | TNF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 885 | TNFRSF10C_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 886 | TNFRSF11B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 887 | TNFRSF1A_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 888 | TNFRSF1B_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 889 | VCAM1_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 890 | VEGFA_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 891 | VTN_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 892 | VWF_IMPUTE_FLAG | Num | 8 | Type of imputation applied to analyte (if any) |
| 893 | A2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 894 | ADIPOQ_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 895 | AGER_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 896 | ANGPT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 897 | APCS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 898 | AXL_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 899 | B2M_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 900 | BDNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 901 | C3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 902 | CA9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 903 | CCL11_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 904 | CCL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 905 | CCL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 906 | CCL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 907 | CCL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 908 | CCL20_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 909 | CCL22_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 910 | CCL23_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 911 | CCL24_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 912 | CCL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 913 | CCL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 914 | CCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 915 | CCL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 916 | CDH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 917 | CDH13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 918 | CEACAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 919 | CHGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 920 | CKM_CKB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 921 | CRP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 922 | CSF2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 923 | CSTB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 924 | CXCL1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 925 | CXCL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 926 | CXCL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 927 | CXCL9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 928 | DCN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 929 | F7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 930 | FABP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 931 | FAS_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 932 | FGA_FGB_FGG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 933 | FTL_FTH1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 934 | GC_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 935 | HGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 936 | HP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 937 | ICAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 938 | IFNG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 939 | IGA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 940 | IGE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 941 | IGM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 942 | IL10_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 943 | IL12A_IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 944 | IL12B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 945 | IL13_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 946 | IL15_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 947 | IL16_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 948 | IL17A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 949 | IL18_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 950 | IL18BP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 951 | IL1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 952 | IL1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 953 | IL1RN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 954 | IL2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 955 | IL23A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 956 | IL2RA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 957 | IL3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 958 | IL4_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 959 | IL5_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 960 | IL6_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 961 | IL6R_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| :---: | :---: | :---: | :---: | :---: |
| 962 | IL7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 963 | IL8_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 964 | KIT_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 965 | KITLG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 966 | KLK3_F_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 967 | LPA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 968 | LTA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 969 | LTF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 970 | MB_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 971 | MDK_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 972 | MMP3_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 973 | MMP9_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 974 | NGF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 975 | NPPB_PH_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 976 | NRCAM_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 977 | OLR1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 978 | PECAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 979 | S100A12_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 980 | S100B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 981 | SELE_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 982 | SERPINA1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 983 | SERPINA7_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 984 | SERPINE1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 985 | SFTPD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 986 | SHBG_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 987 | SLPI_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 988 | SOD1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 989 | SORT1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 990 | SPINK1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 991 | TGFB1_LAP_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 992 | THBD_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 993 | TIMP1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 994 | TIMP2_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 995 | TNF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 996 | TNFRSF10C_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 997 | TNFRSF11B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 998 | TNFRSF1A_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 999 | TNFRSF1B_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1000 | VCAM1_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |


| Num | Variable | Type | Len | Label |
| ---: | :--- | ---: | ---: | :--- |
| 1001 | VEGFA_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1002 | VTN_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |
| 1003 | VWF_OUTLIER | Num | 8 | Flag of potential outlier values for analyte |

