

**CLINICAL AND LABORATORY
ADVERSE EVENTS**

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

(Clinic Coordinator completed)

Complete this log if the subject experienced any clinical adverse events (including intercurrent events) since the last visit. Check the "None" box and instruct the subject to initial and date the source documentation box if the subject has not experienced any clinical adverse events since the last visit.

None

Subject's Initials: _____

Date: ____ / ____ / _____

* Please complete a Serious Adverse Event Reporting (SERIOUS) form.

** Please complete the appropriate Change in Medications form.

*** Please complete the Concomitant Medications (CMED) form.

DESCRIPTION OF ADVERSE EVENT (1000)	1. ICD9 CODE (1010)	2. DATE STARTED (Top Line) (1020)	4. ONGOING at current visit (1040)	5. TYPE (1050)	6. SEVERITY (1060)	7. SERIOUS (1070)	8. LIKELIHOOD OF RELATIONSHIP TO STUDY DRUG(S) (1080)	9. CHANGE IN STUDY DRUG(S) (1090)	10. OUTCOME (Skip if #3 is missing.) (1100)	11. TREATMENT REQUIRED (1110)	12. ONGOING at final visit (1120)
		3. DATE STOPPED (Bottom Line) (1030) MONTH / DAY / YEAR		1 - INTERMITTENT 2 - CONTINUOUS	1 - MILD 2 - MODERATE 3 - SEVERE	1 - YES * 0 - NO	1 - NONE 2 - UNLIKELY (REMOTE) 3 - POSSIBLE 4 - PROBABLE	1 - UNCHANGED 2 - ALTERED **	1 - COMPLETELY RECOVERED 2 - RECOVERED, BUT WITH LASTING EFFECTS 3 - DEATH *	1 - NONE 2 - MEDICATION *** 3 - HOSPITALIZATION * 4 - OTHER	
---	---	__ / __ / ____	<input type="checkbox"/>								<input type="checkbox"/>
---	---	__ / __ / ____	<input type="checkbox"/>								<input type="checkbox"/>
---	---	__ / __ / ____	<input type="checkbox"/>								<input type="checkbox"/>
---	---	__ / __ / ____	<input type="checkbox"/>								<input type="checkbox"/>
---	---	__ / __ / ____	<input type="checkbox"/>								<input type="checkbox"/>



**ASTHMA EVALUATION
QUESTIONNAIRE**

Subject ID: _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____/____/____
 Month Day Year
 Coordinator ID: _____

(Subject Interview Completed)

Coordinator Instructions: *Before administering this questionnaire, give the subject his or her diary cards from the two weeks immediately preceding the visit. The subject should refer to the diary cards when answering each question. The AEQ must be the last asthma questionnaire completed at a given visit.*

Subject Instructions: *Please consider your last two weeks of asthma control in answering these questions. Check the box next to the response that best describes your average weekly asthma symptoms, rescue use and nighttime awakenings in the past two weeks.*

- | | |
|---|---|
| <p>1. In the past <u>two weeks</u>, how often have you experienced asthma symptoms?</p> | <p><input type="checkbox"/>₀ Less than or equal to 2 days a week</p> <p><input type="checkbox"/>₁ 3 to 5 days per week</p> <p><input type="checkbox"/>₂ 6 or more days per week, but not continual</p> <p><input type="checkbox"/>₃ Continual (multiple times every day)
(1000)</p> |
| <p>2. In the past <u>two weeks</u>, how often have you used your rescue beta-agonist medicine (e.g., albuterol (Proventil, Ventolin)), aside from preventative use prior to exercise?</p> | <p><input type="checkbox"/>₀ Less than or equal to 2 days per week</p> <p><input type="checkbox"/>₁ 3 to 5 days per week</p> <p><input type="checkbox"/>₂ 6 days per week</p> <p><input type="checkbox"/>₃ At least once per day (daily) (1010)</p> |
| <p>3. In the past <u>two weeks</u>, how often have you awakened at night due to asthma symptoms?</p> | <p><input type="checkbox"/>₀ No awakenings or awakened 1 night during the 2 weeks</p> <p><input type="checkbox"/>₁ 1 night per week</p> <p><input type="checkbox"/>₂ 2 or 3 nights per week</p> <p><input type="checkbox"/>₃ 4 or more nights per week (1020)</p> |

Subject Source Documentation

Subject's Initials: _____ (1030)

Date: ____/____/____ (1040)

Time: _____ (based on a 24-hour clock) (1050)



AM1[®] QUALITY CONTROL

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
Month Day Year
 Technician ID: _____

(Technician completed)

1. Serial Number of AM1[®] being tested _____ (1000)
2. Serial Number of turbine being tested _____
(1010) (1020)
3. Test date _____ / _____ / _____ (1030)
month day year
4. Is a new AM1[®] device being tested for this subject? ₁ Yes ₀ No (1040)
 If **YES**, indicate the primary reason. ₁ First issuing ₅ "Old" device was recalled
₂ "Old" device failed QC testing ₆ "Old" device was lost
₃ "Old" device had display problems ₇ Other (1050)
₄ "Old" device experienced battery failure

	AM1 [®] (L/Min)	Jones FVC (L/Min)
5. Trial 1 (1060/1070)	_____	_____ . _____
6. Trial 2 (1080/1090)	_____	_____ . _____
7. Trial 3 (1100/1110)	_____	_____ . _____
8. Trial 4 (1120/1130)	_____	_____ . _____
9. Trial 5 (1140/1150)	_____	_____ . _____

Clinic Use Only	
Relative Bias <small>(AM1 - Jones FVC) * 100 % Jones FVC</small>	Rank <small>smallest to largest</small>
_____ . _____ %	_____
_____ . _____ %	_____
_____ . _____ %	_____
_____ . _____ %	_____
_____ . _____ %	_____

Clinic Use Only

Median Relative Bias _____ . _____ % **Inter-quartile Range** _____ . _____ %

The Median Relative Bias is the third largest value of the 5 measures of relative bias.

The Inter-quartile Range is determined by subtracting the relative bias of rank 2 from the relative bias of rank 4.

When a subject receives a new AM1[®] or turbine for the first time, the median relative bias must be between -15% and +15%, AND the inter-quartile range must be less than 10%.

When a subject returns to the clinic with a used AM1[®]: (i) subtract the original median relative bias (the median relative bias when the AM1[®] or turbine was first dispensed) from the current median relative bias, and (ii) subtract the original inter-quartile range (the inter-quartile range when the AM1[®] or turbine was first dispensed) from the current inter-quartile range. The difference for (i) must be between -5% and +5% and the difference for (ii) must be less than +5% for the AM1[®] to be reissued to the subject.

10. Did the AM1[®] pass? ₁ Yes ₀ No (1160)
11. If **NO**, is this the second test with this turbine at this visit? ₁ Yes ₀ No (1170)

➔ *If NO, retest the AM1[®] with the same turbine and complete another AM1[®] Quality Control form.*

➔ *If YES, issue a new turbine and complete another AM1[®] Quality Control form. If 2 turbines have been tested with this device, issue a new device and turbine and complete another AM1[®] Quality Control form.*



**ASTHMA
CHARACTERIZATION
QUESTIONNAIRE**

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
Month Day Year
 Coordinator ID: _____

(Subject Interview completed)

ASTHMA HISTORY

1. Approximately how old were you when chest symptoms suggesting asthma first appeared? _____ years (1000)
(Enter '00' if subject was under 1 year.)
- 1a. Did these symptoms appear immediately after or as a result of a respiratory infection such as a cold or pneumonia? ₁ Yes ₀ No ₈ Don't Recall (1010)
2. How old were you when a doctor first diagnosed you with asthma? _____ years (1020)
- 2a. What caused you to seek medical care? ₁ Acute Symptoms
₂ Chronic Symptoms
₃ Other _____ (1030)
3. Have any of your immediate blood relatives been told by a physician that they have asthma?
(Check the 'N/A' box if the subject does not have biological siblings or children.)
- 3a. Mother ₁ Yes ₀ No ₈ Don't Know (1040)
- 3b. Father ₁ Yes ₀ No ₈ Don't Know (1050)
- 3c. Brother(s) or Sister(s) ₁ Yes ₀ No ₈ Don't Know ₉ N/A (1060)
- 3d. Child(ren) ₁ Yes ₀ No ₈ Don't Know ₉ N/A (1070)

ASTHMA SYMPTOMS

4. On average, over the last 4 weeks, how often have you experienced each of the following asthma symptoms:
- 4a. Cough (deep chest) ₀ Never
₁ Less than or equal to twice a week
₂ More than twice a week but not daily
₃ Daily
₄ Continuously (1080)
- 4b. Sputum (phlegm or mucous from the lungs) ₀ Never
₁ Less than or equal to twice a week
₂ More than twice a week but not daily
₃ Daily
₄ Continuously (1090)



**ASTHMA
CHARACTERIZATION
QUESTIONNAIRE**

Subject ID: _____ - _____ - _____

Visit Number: _____

- 4c. Chest tightness (difficulty taking a deep breath, pressure in the chest)
- ₀ Never
₁ Less than or equal to twice a week
₂ More than twice a week but not daily
₃ Daily
₄ Continuously (1100)
- 4d. Wheezing (whistling or musical sound in the chest)
- ₀ Never
₁ Less than or equal to twice a week
₂ More than twice a week but not daily
₃ Daily
₄ Continuously (1110)
- 4e. Shortness of breath
- ₀ Never
₁ Less than or equal to twice a week
₂ More than twice a week but not daily
₃ Daily
₄ Continuously (1120)
- 4f. Nighttime symptoms (waking due to asthma)
- ₀ Never
₁ One or two nights a month
₂ More than two nights per month but at most one night a week
₃ More than one night a week but not frequently
₄ Frequently (1130)
5. How often do you use your rescue beta-agonist medicine (e.g., Albuterol (Proventil, Ventolin)) other than to pretreat prior to exercise?
- ₀ Less than or equal to twice a week
₁ Greater than twice a week but not daily
₂ Daily but not four times a day
₃ Greater than or equal to four times a day (1140)
6. How do you categorize your asthma symptoms throughout the course of the year?
- ₁ Relatively the same all year
₂ Vary by season(s) (1150)
- If 'Vary by season(s)', do your asthma symptoms worsen during the...
- 6ai. Winter? ₁ Yes ₀ No (1160)
- 6aii. Spring? ₁ Yes ₀ No (1170)
- 6aiii. Summer? ₁ Yes ₀ No (1180)
- 6aiv. Fall? ₁ Yes ₀ No (1190)



ASTHMA CHARACTERIZATION QUESTIONNAIRE

Subject ID: _____ - _____ - _____

Visit Number: _____

7. In the last 12 months, how many... (Enter '00' if none)
- 7a. Asthma episodes have you had that required emergency care or an unscheduled office visit? _____ (1200)
- 7b. Hospitalizations have you had due to asthma? _____ (1210)
- 7c. Courses of oral corticosteroid therapy (e.g., Prednisone) for asthma have you taken? _____ (1220)
- 7d. Days of work, school or housework have you missed due to asthma? _____ days (1230)
- If Question #7d > 0, complete Question #7di.
- 7di. In the past 3 months, how many days of work, school, or housework have you missed due to asthma? _____ days (1240)

ASTHMA TRIGGERS

8. Do any of the following currently provoke your asthma?
- 8a. Exercise/Sports ₁ Yes ₀ No ₈ Don't Know (1250)
- 8b. Menstrual cycle (If subject is male or postmenopausal, check N/A) ₁ Yes ₀ No ₈ Don't Know ₉ N/A (1260)
- 8c. Aspirin or non-steroidal anti-inflammatory drugs (e.g., Aleve, Motrin) ₁ Yes ₀ No ₈ Don't Know (1270)
- 8d. Colds, upper respiratory infections, sinus infections ₁ Yes ₀ No ₈ Don't Know (1280)
- 8e. Irritants (e.g., smoke, pollution, odors, perfumes, chemicals) ₁ Yes ₀ No ₈ Don't Know (1290)
- 8f. Weather conditions (e.g., cold, humidity) ₁ Yes ₀ No ₈ Don't Know (1300)
- 8g. Emotional stress ₁ Yes ₀ No ₈ Don't Know (1310)
- 8h. Food additives/preservatives (e.g., MSG, etc.) ₁ Yes ₀ No ₈ Don't Know (1320)
- 8i. Other (please specify) _____ ₁ Yes ₀ No (1330)



ASTHMA CHARACTERIZATION QUESTIONNAIRE

Subject ID: _____ - _____ - _____

Visit Number: _____

ALLERGIES

9. Do you have allergies to pets, pollen, dust, etc.? ₁ Yes ₀ No ₈ Don't Know (1340)

If **YES**,

9a. Do your allergies provoke your asthma? ₁ Yes ₀ No ₈ Don't Know (1350)

9b. Were your allergies diagnosed by a doctor? ₁ Yes ₀ No (1360)

9c. How do you categorize your allergies?
₁ Relatively the same all year
₂ Vary by season(s) (1370)

→ If 'Vary by season(s)', do your allergies worsen during the...

9ci. Winter? ₁ Yes ₀ No (1380)

9cii. Spring? ₁ Yes ₀ No (1390)

9ciii. Summer? ₁ Yes ₀ No (1400)

9ciii. Fall? ₁ Yes ₀ No (1410)

10. Have you ever had eczema (i.e., prolonged itchy, scaly, weepy skin rash)? ₁ Yes ₀ No ₈ Don't Know (1420)

10a. If **YES**, was your eczema diagnosed by a doctor? ₁ Yes ₀ No (1430)

11. Have any of your immediate blood relatives been told by a physician that they have allergies/eczema/hay fever?
(Check the 'N/A' box if the subject does not have biological siblings or children.)

11a. Mother ₁ Yes ₀ No ₈ Don't Know (1440)

11b. Father ₁ Yes ₀ No ₈ Don't Know (1450)

11c. Brother(s) or Sister(s) ₁ Yes ₀ No ₈ Don't Know ₉ N/A (1460)

11d. Child(ren) ₁ Yes ₀ No ₈ Don't Know ₉ N/A (1470)

SMOKING HISTORY

12. Were you ever a smoker? ₁ Yes ₀ No (1472)

12a. If **YES**, how many years did you smoke?
 (total number of years) _____ years (1474)

13. Did you grow up in a household where you were exposed to tobacco smoke? ₁ Yes ₀ No (1480)

14. In an average week, approximately how many hours are you exposed to other people's tobacco smoke in all environments?
 _____ hours (1490)

Subject Source Documentation

Subject's Initials: _____ (1500)

Date: ____ / ____ / _____ (1510)



**CONCOMITANT
MEDICATIONS FOR
ASTHMA/ALLERGY AND
ADVERSE EVENTS**

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

(Coordinator completed)

Instructions: Since signing the informed consent or last study visit, list all prescription and over-the-counter (OTC) concomitant medications used to treat asthma/allergy symptoms and adverse events. Do not list routine use of study drugs or rescue medications. Check the “None” box if the subject has not started taking any medications since signing the informed consent or last study visit. If the medication is not related to an adverse or laboratory event, leave the event number missing and check the “N/A” box. If the subject is still taking the medication at the end of the current visit, check the “ongoing at current visit” check box and leave the stop date missing. All ongoing medications should be reviewed at subsequent visits to document the stop date of a medication. At the last study visit or an early termination visit, review all ongoing medication and indicate a stop date or check the “ongoing at final visit” check box on the data collection form and update the medication data in the ACRN data entry application.

At the final study visit or early termination visit, forward all concomitant medications for asthma/allergy-related medications and adverse events forms to the DCC.

None

NAME OF MEDICATION (1000)	CODE (1010)	RELATED EVENT (1020)	DOSE (1030)	UNITS (1040)	FREQUENCY (1050)	ROUTE	START DATE (MM/DD/YYYY) (1060)	STOP DATE (MM/DD/YYYY) (1070)	ONGOING AT CURRENT VISIT (1080)	ONGOING AT FINAL VISIT (1090)
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>
___		Event ___ <input type="checkbox"/> NA					___/___/___	___/___/___	<input type="checkbox"/>	<input type="checkbox"/>



UNITS and FREQUENCY CODES FOR CONCOMITANT MEDICATIONS

Codes for Units	
Code	Units
1	mg
2	mcg (μ g)
3	ml
4	mg/ml
5	mEq
6	g
7	U
8	teaspoon
9	patch
10	puffs (oral inhalation)
11	nasal spray
12	no units
13	packet
14	1 drop
15	mm
16	other

Codes for Frequency		
Code	Frequency	
1	QD	1 time a day
2	BID	2 times a day
3	TID	3 times a day
4	QID	4 times a day
5	q4h	every 4 hours
6	q5h	every 5 hours
7	q6h	every 6 hours
8	q8h	every 8 hours
9	q12h	every 12 hours
10	q24h	every 24 hours
11	hs	every night at bedtime
12	PRN	as required
13	qod	every other day
14	qw	once a week
15	biw	2 times per week
16	tiw	3 times per week
17	5 times per week	
18	every 5 days	
19	once a month	
20	taper dose	
21	other	



**EXHALED BREATH
CONDENSATE
COLLECTION**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician Completed)

1. Has the subject had anything other than water to drink or eat in the past hour? ₁ Yes ₀ No (1000)

→ If YES, STOP HERE. Subject is ineligible to continue with ebc collection. If possible, wait until the full hour has passed, then proceed with collection.

2. Was ebc collection attempted at this visit? ₁ Yes ₀ No (1010)

→ If NO, complete Question #2a and STOP.

→ If YES, proceed to Question #3

2a. Check the primary reason ebc collection was not attempted.

₁ Subject Refusal

₂ Equipment Unavailable

₃ Clinic Oversight

₄ Other _____ (1020)

3. Time ebc collection started (based on 24-hour clock). _____ (1030)

4. Time ebc collection stopped (based on 24-hour clock). _____ (1040)

→ If collection time exceeds ten minutes, please provide an explanation below.

5. Did the subject experience any of the following during the collection process...

5a. Sneezing? ₁ Yes ₀ No (1050)

5b. Coughing? ₁ Yes ₀ No (1060)

5c. Burping? ₁ Yes ₀ No (1070)



EXHALED BREATH
CONDENSATE

Subject ID: _____ - _____ - _____

Visit Number: _____

6. Were six eppendorf tubes aliquoted at this visit? ₁ Yes ₀ No (1080)

If YES, proceed to Question #7.

6a. Which of the following explain why six tubes were not collected?

Equipment Malfunction ₁ Yes ₀ No (1090)
If YES, explain _____

Low Yield ₁ Yes ₀ No (1100)

Subject could not tolerate procedure ₁ Yes ₀ No (1110)

Other ₁ Yes ₀ No (1120)
If YES, explain _____

6b. Record the number of tubes aliquoted. _____ tubes (1130)

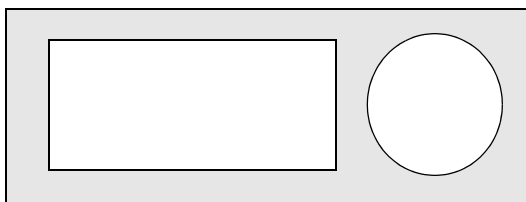
→ If '0', STOP HERE.

7. Was nitrogen gas layered on the tubes before closing them? ₁ Yes ₀ No (1150)

8. Were the tubes stored immediately at -70° Celsius or colder? ₁ Yes ₀ No (1160)

8a. If **NO**, at what temperature were the tubes stored? _____ ° C (1170)

9. Attach one barcode label/dot pair from the subject's visit-specific strip here. Write the barcode number from the label in the spaces provided.



_____ (1180)

Comments: _____



**EXHALED
NITRIC OXIDE**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedures Checklist (PULMONARYCHK) form.

1. Was the exhaled nitric oxide (ENO) procedure performed?

₁ Yes

₀ No (1000)

→ If NO, complete Question #1a and STOP.

→ If YES, proceed to Question #1b.

1a. What was the reason the ENO procedure could not be performed?

₁ Equipment failure, please specify

₂ Equipment not calibrated

₃ Subject refusal

₄ Clinic oversight

₅ Other _____ (1010)

1b. Was the exhaled nitric oxide (ENO) procedure performed on the NIOX Mino?

₁ Yes

₀ No (1015)

→ If YES, do not complete Question #11 on the next page since only 1 acceptable maneuver was obtained.



For each maneuver, record the time and FE_{NO} value. If the maneuver was not accepted by the NIOX machine, record the time and select the 'Maneuver Not Acceptable' check box.

For a procedure done on the ACRN NIOX Machine, when TWO reproducible measurements are achieved, select the 'Reproducible Measurements' check box for both maneuvers. The two measurements are considered reproducible when they are within 5% of their mean or 1.25 ppb of their mean.

	Time (based on 24 - hour clock)	Measured FE_{NO}	Maneuver Not Acceptable	Clinic Use Only Reproducible Measurements
2. Maneuver #1	_____ (1020)	_____. ____ ppb (1030)	<input type="checkbox"/> ₁ (1050)	<input type="checkbox"/>
3. Maneuver #2	_____ (1060)	_____. ____ ppb (1070)	<input type="checkbox"/> ₁ (1090)	<input type="checkbox"/>
4. Maneuver #3	_____ (1100)	_____. ____ ppb (1110)	<input type="checkbox"/> ₁ (1130)	<input type="checkbox"/>
5. Maneuver #4	_____ (1140)	_____. ____ ppb (1150)	<input type="checkbox"/> ₁ (1170)	<input type="checkbox"/>
6. Maneuver #5	_____ (1180)	_____. ____ ppb (1190)	<input type="checkbox"/> ₁ (1210)	<input type="checkbox"/>
7. Maneuver #6	_____ (1220)	_____. ____ ppb (1230)	<input type="checkbox"/> ₁ (1250)	<input type="checkbox"/>
8. Maneuver #7	_____ (1260)	_____. ____ ppb (1270)	<input type="checkbox"/> ₁ (1290)	<input type="checkbox"/>
9. Maneuver #8	_____ (1300)	_____. ____ ppb (1310)	<input type="checkbox"/> ₁ (1330)	<input type="checkbox"/>
10. Maneuver #9	_____ (1340)	_____. ____ ppb (1350)	<input type="checkbox"/> ₁ (1370)	<input type="checkbox"/>

11. Did the subject achieve two reproducible outcomes? ₁ Yes ₀ No (1380)
 If **NO**, explain _____



**MANNITOL
CHALLENGE
TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Mannitol Challenge Testing Checklist form.

Clinic Use Only (Technician completed)

Use the FEV₁ value from the appropriate spirometry testing form as the baseline reference.

- A. Baseline FEV₁ prior to mannitol challenge ____ . ____ ____ L
(obtained on the ACRN KoKo machine)
- B. Mannitol Reversal Reference Value (Question A x 0.90 = ____ . ____ ____ ____ L)
- C. Target FEV₁ Value (Question 1000 x 0.8549 = ____ . ____ ____ ____ L)

1. Reference (0 mg) FEV₁ ____ . ____ ____ ____ L (1000)

2. Did the subject drop ≥ 14.51% at the 0 mg dose? ₁ Yes ₀ No (1010)
 → If **YES**, proceed to Question #4 and record 0 for Question #4a.

3. Mannitol Dispensation			Coordinator Cough Evaluation (At each dose, indicate the severity of the subject's cough)										
			No Cough			Moderate				Extreme			
	Dose	FEV ₁	0	1	2	3	4	5	6	7	8	9	10
3a.	5 mg	____ . ____ ____ ____ L (1020)	____ (1030)										
3b.	10 mg	____ . ____ ____ ____ L (1040)	____ (1050)										
3c.	20 mg	____ . ____ ____ ____ L (1060)	____ (1070)										
3d.	40 mg	____ . ____ ____ ____ L (1080)	____ (1090)										
3e.	80 mg	____ . ____ ____ ____ L (1100)	____ (1110)										
3f.	160 mg	____ . ____ ____ ____ L (1120)	____ (1130)										
3g.	160 mg (second)	____ . ____ ____ ____ L (1140)	____ (1150)										
3h.	160 mg (third)	____ . ____ ____ ____ L (1160)	____ (1170)										



MANNITOL CHALLENGE

Subject ID: _____ - _____ - _____

Visit Number: _____

4. Did the subject achieve a PD₁₅? ₁ Yes ₀ No (1180)
→ If **NO**, proceed to Question #5.
- 4a. PD₁₅ (mg) _____ . _____ mg (1190)
5. Time mannitol challenge ended (*based on 24-hour clock*) _____ (1200)
6. Subject's FEV₁ after standard reversal from mannitol challenge
Standard reversal = 2 puffs albuterol
- 6a. FEV₁ _____ . _____ L (1210)
- 6b. Time of FEV₁ in Question #6a (*based on 24-hour clock*) _____ (1220)
- 6c. Was the FEV₁ from Question #6a ≥ the mannitol reversal
reference value (B) in the gray box above? ₁ Yes ₀ No (1230)
→ If **YES**, **STOP HERE** and continue with remaining visit procedures.
→ If **NO**, proceed to the **Additional Treatment for Mannitol Challenge Testing**
(MANNITOL_ADD_TRT) form.



**ADDITIONAL TREATMENT
POST MANNITOL
CHALLENGE TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject did not reverse to 90% of baseline FEV₁ after the first post-challenge treatment of albuterol.

1. Was an additional treatment used in the first hour? ₁ Yes ₀ No (1000)
→ If NO, skip to Question #3.
- 1a. Additional albuterol by MDI ₁ Yes ₀ No (1010)
→ If NO, skip to Question #1b.
 Number of additional puffs of albuterol administered ₁ two ₂ four ₃ > four (1020)
- 1b. Nebulized Beta-agonist ₁ Yes ₀ No (1030)
- 1c. Subcutaneous epinephrine ₁ Yes ₀ No (1040)
- 1d. Implementation of clinic emergency protocol or algorithm ₁ Yes ₀ No (1050)
- 1e. Other (*specify*) _____ ₁ Yes ₀ No (1060)
2. Subject's FEV₁ after additional treatment within first hour.
- 2a. FEV₁ _____ . _____ _____ L (1070)
- 2b. Time of FEV₁ in Question #2a (*based on 24-hour clock*) _____ : _____ (1090)
- 2c. Was the FEV₁ from Question #2a ≥ the mannitol reversal reference value? ₁ Yes ₀ No (1100)
→ If YES, STOP HERE and continue with remaining visit procedures.
→ If NO, proceed to Question #3.



**ADDITIONAL TREATMENT
POST MANNITOL**

Subject ID: _____ - _____ - _____

Visit Number: _____

3. Was additional treatment used after one hour? ₁ Yes ₀ No (1110)
→ **If NO, skip to Question #4.**
- 3a. Additional albuterol by MDI ₁ Yes ₀ No (1120)
→ **If NO, skip to Question #3b.**
Number of additional puffs of albuterol administered ₁ two ₂ four ₃ > four (1130)
- 3b. Nebulized Beta-agonist ₁ Yes ₀ No (1140)
- 3c. Subcutaneous epinephrine ₁ Yes ₀ No (1150)
- 3d. Implementation of clinic emergency protocol or algorithm ₁ Yes ₀ No (1160)
- 3e. Treatment in the emergency room ₁ Yes ₀ No (1170)
- 3f. Overnight hospitalization ₁ Yes ₀ No (1180)
→ **If YES, please complete the Serious Adverse Event (SERIOUS) form.**
- 3g. Other (specify) _____ ₁ Yes ₀ No (1190)
4. Subject's final FEV₁ after mannitol challenge.
- 4a. FEV₁ _____ . _____ L (1200)
- 4b. Time of FEV₁ from Question #4a (based on 24-hour clock) _____ (1220)
- 4c. Was the FEV₁ from Question #4a ≥ the mannitol reversal reference value? ₁ Yes ₀ No (1230)
→ **If NO, complete the source documentation box below.**

Physician Source Documentation
Physician's signature: _____ (1240)
Date: ____ / ____ / _____ (1250)
Time: _____ (based on 24-hour clock) (1260)



**METHACHOLINE
CHALLENGE
TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the Methacholine Challenge Testing Checklist (METHACHK) form.

Clinic Use Only (Technician completed)

Use the FEV₁ value from the appropriate spirometry testing form as the baseline reference.

- A. Baseline FEV₁ prior to methacholine challenge ____ . ____ ____ L
- B. Methacholine Reversal Reference Value (Question A x 0.90 = ____ . ____ ____ L)
- C. Diluent FEV₁ Reference Value (Question 1000 x 0.8049 = ____ . ____ ____ L)

1. Post Diluent FEV₁ ____ . ____ ____ L (1000)
2. Did the subject drop $\geq 20\%$ at the diluent stage? ₁ Yes ₀ No (1010)
 → If **YES**, proceed to Question #5 and record 0 for Question #5a.
3. Last concentration of methacholine administered ____ . ____ ____ ____ mg/ml (1020)
4. FEV₁ after last concentration of methacholine administered ____ . ____ ____ L (1030)
5. Did the subject achieve a PC₂₀? ₁ Yes ₀ No (1040)
 → If **NO**, proceed to Question #6.
- 5a. PC₂₀ ____ . ____ ____ ____ mg/ml (1050)
6. Time methacholine challenge ended (based on 24-hour clock) ____ . ____ ____ ____ (1060)
7. Subject's FEV₁ after standard reversal from methacholine challenge
If subject is continuing with sputum induction, standard reversal = 4 puffs albuterol.
If subject is not continuing with sputum induction, standard reversal = 2 puffs albuterol.
- 7a. FEV₁ ____ . ____ ____ L (1070)
- 7b. Time of FEV₁ in Question #7a (based on 24-hour clock) ____ . ____ ____ ____ (1090)
- 7c. Was the FEV₁ from Question #7a \geq the methacholine reversal reference value (B) in the gray box above? ₁ Yes ₀ No (1100)
 → If **YES**, **STOP HERE** and continue with remaining visit procedures.
 → If **NO**, proceed to the Additional Treatment for Methacholine Challenge Testing (METHA_ADD_TRT) form.



**ADDITIONAL TREATMENT
POST METHACHOLINE
CHALLENGE TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject did not reverse to 90% of baseline FEV₁ after the first post-challenge treatment of albuterol.

1. Was an additional treatment used in the first hour? ₁ Yes ₀ No (1000)
→ If NO, skip to Question #3.
 - 1a. Additional albuterol by MDI ₁ Yes ₀ No (1010)
→ If NO, skip to Question #1b.
 Number of additional puffs of albuterol administered ₁ two ₂ four ₃ > four (1020)
 - 1b. Nebulized Beta-agonist ₁ Yes ₀ No (1030)
 - 1c. Subcutaneous epinephrine ₁ Yes ₀ No (1040)
 - 1d. Implementation of clinic emergency protocol or algorithm ₁ Yes ₀ No (1050)
 - 1e. Other (specify) _____ ₁ Yes ₀ No (1060)

2. Subject's FEV₁ after additional treatment within first hour.
 - 2a. FEV₁ _____ . _____ L (1070)
 - 2b. FEV₁ (% predicted) _____ % predicted (1080)
 - 2c. Time of FEV₁ in Question #2a (based on 24-hour clock) _____ (1090)
 - 2d. Was the FEV₁ from Question #2a ≥ the methacholine reversal reference value (B) in the gray box on the Methacholine Challenge Testing (METHA) form? ₁ Yes ₀ No (1100)
→ If YES, STOP HERE and continue with remaining visit procedures.
→ If NO, proceed to Question #3.



**ADDITIONAL TREATMENT
POST METHACHOLINE**

Subject ID: _____ - _____ - _____

Visit Number: _____

3. Was additional treatment used after one hour? ₁ Yes ₀ No (1110)
→ *If NO, skip to Question #4.*
- 3a. Additional albuterol by MDI ₁ Yes ₀ No (1120)
→ *If NO, skip to Question #3b.*
Number of additional puffs of albuterol administered ₁ two ₂ four ₃ > four (1130)
- 3b. Nebulized Beta-agonist ₁ Yes ₀ No (1140)
- 3c. Subcutaneous epinephrine ₁ Yes ₀ No (1150)
- 3d. Implementation of clinic emergency protocol or algorithm ₁ Yes ₀ No (1160)
- 3e. Treatment in the emergency room ₁ Yes ₀ No (1170)
- 3f. Overnight hospitalization ₁ Yes ₀ No (1180)
→ *If YES, please complete the Serious Adverse Event (SERIOUS) form.*
- 3g. Other (specify) _____ ₁ Yes ₀ No (1190)
4. Subject's final FEV₁ after methacholine challenge.
- 4a. FEV₁ _____ . _____ L (1200)
- 4b. FEV₁ (% predicted) _____ % predicted (1210)
- 4c. Time of FEV₁ from Question #4a (based on 24-hour clock) _____ (1220)
- 4d. Was the FEV₁ from Question #4a ≥ the methacholine reversal reference value (B) in the gray box on the Methacholine Challenge Testing (METHA) form? ₁ Yes ₀ No (1230)
→ *If NO, complete the source documentation box below.*

Physician Source Documentation

Physician's signature: _____ (1240)

Date: ____ / ____ / _____ (1250)

Time: _____ (based on 24-hour clock) (1260)



**METHACHOLINE
CHALLENGE
TESTING CHECKLIST**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedure Checklist form and successfully completed baseline spirometry session(s).

1. Has the subject had any severe acute illness in the past 4 weeks? ₁ Yes ₀ No (1000)
- If **YES**, has the subject received permission from the supervising physician to proceed with the methacholine challenge testing?
Physician's Signature: _____ (1015) ₁ Yes ₀ No (1010)
2. Does the subject have a baseline (pre-diluent) FEV₁ less than 55% of predicted?
Use the FEV₁ value from the appropriate spirometry testing form as the baseline reference. ₁ Yes ₀ No (1020)
3. Does the subject have a history of urinary retention? ₁ Yes ₀ No (1030)
- ➔ If **NO**, proceed to Question #4.
- 3a. If **YES**, is the subject randomized? ₁ Yes ₀ No (1040)
- ➔ If **NO**, proceed to Question #4 and complete the appropriate Termination of Study Participation form.
- 3b. Was written medical clearance obtained from the study physician? ₁ Yes ₀ No (1050)
- If **YES**, obtain physician's signature:
_____ (1055)
4. Is there any other reason the subject should not proceed with the methacholine challenge testing? ₁ Yes ₀ No (1060)
- If **YES**, explain _____

5. Is the subject eligible to proceed with the diluent (solution #0) spirometry testing for the methacholine challenge? ₁ Yes ₀ No (1070)
- If any of the shaded boxes are completed, the subject is NOT eligible for the methacholine challenge.**
- ➔ **If YES, proceed to the Methacholine Challenge Testing (METHA) form.**



ALLOCATION CHECKLIST

Subject ID: 1_6 - _____ - _____Visit Number: 3

11. Is the subject eligible for allocation? ₁ Yes ₀ No (1100)
If any of the shaded boxes is completed, the subject is ineligible.

- ➔ *If YES, continue with rest of form.*
- ➔ *If NO, complete the BASALT/TALC RUNIN Termination of Study Participation (P16_TERM) form.*

12. Is the subject's prebronchodilator FEV₁ > 70% of predicted? ₁ Yes ₀ No (1110)
➔ If **NO**, skip to Question # 14.

13. Did the subject answer 0 or 1 for each of the three questions on the ACRN Asthma Evaluation Questionnaire (AEQ) at this visit? ₁ Yes ₀ No (1120)
➔ If **YES**, skip to Question # 15. Subject should be allocated to the BASALT study.

14. Does the subject have any medical contraindications for tiotropium use (i.e., narrow angle glaucoma, prostatic hypertrophy, bladder-neck obstruction, renal insufficiency)? ₁ Yes ₀ No (1130)
➔ If **YES**, subject is ineligible to continue in the BASALT/TALC studies. Complete a BASALT/TALC RUNIN Termination of Study Participation (P16_TERM) form.
➔ If **NO**, subject should be allocated to the TALC study.

15. Indicate the study into which the subject is enrolling. ₁₇ BASALT
₁₈ TALC (1140)

16. Record the date on which the subject originally signed the informed consent document for the study to which he or she has been allocated. _____ / _____ / _____ (1150)
Month Day Year

After study allocation, complete the following procedures:

- ➔ *Record study to which the subject was allocated (P16_LOG).*
- ➔ *Enroll subject in appropriate protocol.*



**BASALT/TALC
RUNIN DIARY CARD**

Subject ID: 1 6 - ____ - ____
 Subject Initials: ____
 Return Visit Number: ____
 Return Visit Date: ____ / ____ / ____
 Month Day Year

Subject's Initials: ____
 Date: ____ / ____ / ____

To the subject: If your peak flow is below ____ (1000) liters/minute, use your RESCUE albuterol inhaler as instructed in the handout "If Your Asthma Gets Worse." Contact study personnel if your peak flow does not increase to this value after 1 hour of RESCUE use, or if you are experiencing extreme symptoms. If you have taken at least 10 puffs/24 hours for the past 48 hours from your RESCUE inhaler, contact study personnel.

Please use black ink to complete.	Day 1: ____	Day 2: ____	Day 3: ____	Day 4: ____	Day 5: ____	Day 6: ____	Day 7: ____
Date (ddate)	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day

MORNING EVALUATION (Between 5 AM and 10 AM)

1. Number of times you woke up last night due to asthma (1010)	____	____	____	____	____	____	____
2. Time of AM Peak Flow (within 15 minutes of awakening) (1020)	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____
3. AM Peak Flow (liters/min)** (1030) / (1035)	____	____	____	____	____	____	____
4. Total number of puff(s) from QVAR Inhaler (AM) (1040)	____	____	____	____	____	____	____
Symptoms⁺⁺ during the night	5. Shortness of Breath (1050)	____	____	____	____	____	____
	6. Chest Tightness (1060)	____	____	____	____	____	____
	7. Wheezing (1070)	____	____	____	____	____	____
	8. Cough (1080)	____	____	____	____	____	____
	9. Phlegm/Mucus (1090)	____	____	____	____	____	____

NIGHT-TIME EVALUATION (Between 8 PM and 1 AM)

10. Time of PM Peak Flow (between 8 PM and 1 AM) (1100)	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____
11. PM Peak Flow (liters/min)** (1110) / (1115)	____	____	____	____	____	____	____
12. Total number of puff(s) from QVAR Inhaler (PM) (1120)	____	____	____	____	____	____	____
Symptoms⁺⁺ since you woke	13. Shortness of Breath (1130)	____	____	____	____	____	____
	14. Chest Tightness (1140)	____	____	____	____	____	____
	15. Wheezing (1150)	____	____	____	____	____	____
	16. Cough (1160)	____	____	____	____	____	____
	17. Phlegm/Mucus (1170)	____	____	____	____	____	____

24 HOUR EVALUATION

18. Total number of puffs from albuterol (RESCUE) inhaler during past 24 hours. (Do not record preventive use.) (1180)	____	____	____	____	____	____	____
19. Total number of times you dosed from your albuterol (RESCUE) inhaler during past 24 hours. (Do not record preventive use.) (1190)	____	____	____	____	____	____	____

** Record the best of three attempts. Circle the value if you have taken any medication from your RESCUE albuterol inhaler in the last 2 hours.

0 = Absent No symptom
 1 = Mild Symptom was minimally troublesome, i.e. not sufficient to interfere with normal daily activity or sleep.
 2 = Moderate Symptom was sufficiently troublesome to interfere with normal daily activity or sleep.
 3 = Severe Symptom was so severe as to prevent normal activity and/or sleep.

++ Symptom Severity Rating Scale



**BASALT/TALC RUNIN
ELECTROCARDIOGRAM
REPORT**

Subject ID: 1 6 - ____ - ____
Subject Initials: ____
Visit Number: 3
Visit Date: ____ / ____ / ____
 Month Day Year
Coordinator ID: ____

(Clinic Coordinator completed)

The subject should rest quietly for at least five minutes before the electrocardiogram.

- 1. Time electrocardiogram started *(based on 24-hour clock)* ____ ____ ____ (1000)

- 2. Ventricular heart rate ____ ____ ____ beats/min (1010)

- 3. Cardiac cycle measurements
 - 3a. P - R Interval ____ ____ ____ milliseconds (1020)

 - 3b. QRS Duration ____ ____ ____ milliseconds (1030)

 - 3c. Q - T Interval ____ ____ ____ milliseconds (1040)

Physician Source Documentation
Physician's signature: _____ (1050)
Date: ____ / ____ / ____ (1060)



**BASALT/TALC RUNIN
ELIGIBILITY
CHECKLIST 1**

Subject ID: 1 6 - _____ - _____
 Subject Initials: _____
 Visit Number: 1
 Visit Date: _____ / _____ / _____
Month Day Year
 Interviewer ID: _____

(Subject Interview completed)

1. **Did the subject sign either (or both) of the BASALT/TALC Informed Consent(s)?**

₁ Yes ₀ No (1000)

If YES, record the date the form(s) was (were) signed.

____ / ____ / ____ (1010)
month day year

→ Consent should be reviewed and signed on the day Visit 1 is performed.

2. Are you planning to move away from this clinical center in the upcoming year such that your ability to complete the study will be jeopardized?

₁ Yes ₀ No (1020)

3. Have you had a respiratory tract infection in the past **4 weeks**?

₁ Yes ₀ No (1030)

4. Have you experienced a significant asthma attack in the past **4 weeks**?

₁ Yes ₀ No (1040)

5. Do you work the night shift or have an altered day/night cycle for other reasons?

₁ Yes ₀ No (1050)

6. Is the subject eligible to proceed?

₁ Yes ₀ No (1060)

If any of the shaded boxes are completed, the subject is ineligible.

→ If YES, proceed with remaining Visit 1 procedures.

Subject Source Documentation

Subject Initials: _____ (1070)

Date: ____ / ____ / _____ (1080)



**BASALT/TALC RUNIN
ELIGIBILITY
CHECKLIST 2**

Subject ID: 1 6 - ____ - ____
 Subject Initials: ____
 Visit Number: 1
 Visit Date: ____/____/____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

1. Is the subject 18 years of age or older? ₁ Yes ₀ No (1000)
2. Does the subject have current evidence of any of the conditions listed on the Exclusionary Medical Conditions (P16_EXCLMED) reference card?
 If **YES**, describe _____
₁ Yes ₀ No (1010)
- 2a. Does the subject have unstable or severe coronary artery disease or a history of myocardial infarction within 6 months of Visit 1?
₁ Yes ₀ No (1020)
3. Has the subject taken any medications listed on the Exclusionary Drugs (P16_EXCLDRUG) reference card within the specified time periods?
 If **YES**, describe _____
₁ Yes ₀ No (1030)
4. Is the subject currently taking prescription or over-the-counter medication(s) other than those listed on the Allowed Medications (P16_MEDALLOW) reference card?
 If **YES**, describe _____
₁ Yes ₀ No (1040)
5. Based on input from the subject and the study physician, will the subject need to use intranasal steroids at any time during the study?
₁ Yes ₀ No (1050)
- 5a. If **YES**, is the subject willing to use a single intranasal steroid at a stable dose continuously for the duration of the study?
₁ Yes ₀ No (1060)
6. Is the subject regularly using inhaled corticosteroids?
₁ Yes ₀ No (1070)
 → If **NO**, skip to Question #7 and complete rest of form.
 → If **YES**, answer Questions #6a and 6b, then skip to Question #8.
- 6a. Has the subject been on a stable dose of inhaled corticosteroids for at least **2 weeks**?
₁ Yes ₀ No (1080)
- 6b. Has the subject been using greater than the equivalent of 1000 µg inhaled fluticasone daily?
₁ Yes ₀ No (1090)
 → Refer to the ICS Equivalency (P16_ICS_EQUIV) reference card.



ELIGIBILITY CHECKLIST 2

Subject ID: 1 6 - ____ - ____
Visit Number: 1

- | | | | | | |
|---|--|-----|--|----|---|
| 7. Has the subject used or received a prescription for an asthma controller (inhaled corticosteroids, leukotriene modifier, and/or long-acting beta-agonist) during the past year? | <input type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1100) |
| 7a. If NO , does the subject report experiencing asthma symptoms more than twice a week? | <input type="checkbox"/> ₁ | Yes | <input checked="" type="checkbox"/> ₀ | No | (1110) |
| 8. Is the subject currently receiving hyposensitization therapy (e.g., allergy shots) other than an established maintenance regimen implemented continuously for a minimum of 3 months ? | <input checked="" type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1120) |
| 9. Has the subject experienced a life-threatening asthma exacerbation requiring treatment with intubation and mechanical ventilation in the past 5 years ? | <input checked="" type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1130) |
| 10. Has the subject smoked cigarettes, a pipe, cigar, marijuana, or any other substance in the past year? | <input checked="" type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1140) |
| 11. Record smoking history in pack-years. (Enter 00.0 if subject never smoked.) | ____ . ____ (1150) | | | | |
| Is Question #11 \geq 10? | <input checked="" type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1160) |
| 12. Is the subject potentially able to bear children?
<i>(If subject is male, check N/A and go to Question #13.)</i> | <input type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | <input type="checkbox"/> ₉ N/A
(1170) |
| 12a. If YES , is the subject using one of the approved methods indicated on the Birth Control (BIRCTRL) reference card? | <input type="checkbox"/> ₁ | Yes | <input checked="" type="checkbox"/> ₀ | No | (1180) |
| 12b. If YES , is the subject currently pregnant or lactating? | <input checked="" type="checkbox"/> ₁ | Yes | <input type="checkbox"/> ₀ | No | (1190) |

- | | | | | | |
|--|---------------------------------------|-----|--|----|--------|
| 13. Is the subject eligible to proceed?
<i>If any of the shaded boxes are completed, the subject is ineligible.</i>
→ If YES, proceed with remaining Visit 1 procedures. | <input type="checkbox"/> ₁ | Yes | <input checked="" type="checkbox"/> ₀ | No | (1200) |
|--|---------------------------------------|-----|--|----|--------|

Subject Source Documentation

Subject Initials: ____ (1210)

Date: ____ / ____ / ____ (1220)



**BASALT/TALC RUNIN
ELIGIBILITY
CHECKLIST 3**

Subject ID: 1 6 - ____ - ____
 Subject Initials: ____
 Visit Number: 1
 Visit Date: ____ / ____ / ____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

Section 1

1. Is the subject's prebronchodilator FEV₁ > 40% of predicted? ₁ Yes ₀ No (1000)

➔ If **NO**, **STOP** here. Subject is ineligible for the study.

2. Does the subject have valid source documentation for a methacholine challenge (ACRN systems and procedures only) within the past 6 months? ₁ Yes ₀ No (1001)

➔ If **NO**, skip to Question #3.

➔ If **YES**, record values below:

PC₂₀: _____ mg/ml (1002)

Source Documentation Date: ____ / ____ / ____ (1003)

Technician ID: _____ (1004)

Supervisor ID: _____ (1005)

2a. Was the subject using ICS regularly at the time the challenge was performed? ₁ Yes ₀ No (1006)

➔ If **YES**, complete Question #2b and skip to Question #2d.

➔ If **NO**, complete Question #2c and continue with rest of form.

2b. Does the subject have source documentation of a methacholine PC₂₀ ≤ 16 mg/ml? ₁ Yes ₀ No (1007)

2c. Does the subject have source documentation of a methacholine PC₂₀ ≤ 8 mg/ml? ₁ Yes ₀ No (1008)

2d. Is the subject eligible to proceed? ₁ Yes ₀ No (1009)
If either shaded box in Question # 2b or 2c is completed, the subject must complete testing at Visit 1 to confirm eligibility.

➔ ***If YES, continue with remaining visit procedures and complete Section 4.***

➔ ***If NO, complete Question #3 on the next page and proceed accordingly.***



ELIGIBILITY CHECKLIST 3

Subject ID: 1 6 - ____ - ____
Visit Number: 1

3. Is the subject's prebronchodilator FEV₁ ≥ 55% of predicted and he/she qualifies for methacholine challenge? ₁ Yes ₀ No (1010)
- If **YES**, complete Section 2.
- If **NO**, complete Section 3.

Section 2

4. Is the subject regularly using ICS at this time? ₁ Yes ₀ No (1020)
- If **YES**, complete Question #5 and skip to Question #7.
- If **NO**, complete Question #6 and continue with rest of form.
5. Does the subject have a methacholine PC₂₀ ≤ 16 mg/ml? ₁ Yes ₀ No (1030)
6. Does the subject have a methacholine PC₂₀ ≤ 8 mg/ml? ₁ Yes ₀ No (1040)

7. Is the subject eligible to proceed? ₁ Yes ₀ No (1050)
- If either shaded box in Section 2 is completed, the subject is ineligible at this point.***
- ***If YES, continue with remaining visit procedures and complete Section 4.***
- ***If NO, the subject may return at a later date for a continuation visit to perform albuterol reversibility testing to qualify. Complete Question #8 and proceed accordingly.***

8. Will the subject complete reversibility testing? ₁ Yes ₀ No (1060)
- If **NO**, STOP here. Subject is ineligible for the study.
- If **YES**, continue with visit procedures on the P16_VISITA checklist and complete Section 3.

Section 3

9. Did the subject's FEV₁ improve ≥ 12% in response to four puffs of albuterol? ₁ Yes ₀ No (1070)
- ***If YES, continue with remaining visit procedures and complete Section 4 on the next page.***
- ***If NO, STOP here. Subject is ineligible for the study.***



**ELIGIBILITY
CHECKLIST 3**

Subject ID: 1 6 - ____ - ____

Visit Number: 1

Section 4

10. Is the subject able to use the AM1[®] device correctly, as evidenced by achieving a satisfactory rating on the AM1[®] Performance Checklist (PERF_AM1)? ₁ Yes ₀ No (1080)

11. Is the subject able to use a metered dose inhaler (MDI) properly, as evidenced by achieving a score of 6 on two consecutive, separate inhalations using the MDI Inhalation Technique Checklists (SCORE, TECH_MDI)? ₁ Yes ₀ No (1090)

12. Is the subject eligible to proceed? ₁ Yes ₀ No (1100)

If either shaded box in Section 4 is completed, the subject is ineligible.

➔ ***If YES, continue with remaining visit procedures.***

➔ ***If NO, STOP here. Subject is ineligible for the study.***



**BASALT/TALC RUNIN
LABORATORY
MEASUREMENTS**

Subject ID: 1 6 - _____ - _____
Subject Initials: _____
Visit Number: 2
Visit Date: _____ / _____ / _____
 Month Day Year
Coordinator ID: _____

(Clinic Coordinator completed)

1. Eosinophils (absolute count)

_____ /mm³ (1000)



(Subject Interview completed)

COLD HISTORY

1. On average, how many respiratory tract infections/colds do you experience per year? _____ (1000)
2. How severe are your colds usually?
 - ₁ Extremely severe
 - ₂ Very severe
 - ₃ Severe
 - ₄ Moderate
 - ₅ Mild
 - ₆ Extremely mild (1010)
3. When you get colds, how often do they make your asthma worse?
 - ₁ Always
 - ₂ Usually
 - ₃ Sometimes
 - ₄ Rarely
 - ₅ Never (1020)

→ If NEVER, skip to Question # 5.
4. When colds make your asthma worse, how severe does your asthma usually get?
 - ₁ Extremely severe
 - ₂ Very severe
 - ₃ Severe
 - ₄ Moderate
 - ₅ Mild
 - ₆ Extremely mild (1030)

PRIOR ASTHMA TREATMENT

I will read a list of medications. Indicate if you have ever used each medication. If you have, please indicate, to the best of your knowledge, the date last taken.

If Yes, indicate date medication was last taken
month / day / year

5. Non-long-acting Inhaled Beta-Agonists (Bronkaid Mist, Duo-Medihaler, Medihaler-Epi, Primatene Mist, Alupent, Brethaire, Brethine, Bronkometer, Maxair, Metaprel, Proventil, Tornalate, Ventolin, Xopenex and others)
 - ₁ Yes ₀ No ₈ Unknown
 - (1040) (1050) (1060) (1070)

5a. If YES, indicate average daily puffs in the past month. (Enter '00' if none used.) _____ puffs (1080)
6. Long-acting Inhaled Beta-Agonists (Serevent, Foradil, Advair Diskus, Symbicort Turbuhaler)
 - ₁ Yes ₀ No ₈ Unknown
 - (1090) (1100) (1110) (1120)



MEDICAL HISTORY

Subject ID: 1 6 - _____ - _____Visit Number: 1If Yes, indicate date
medication was last taken
month / day / year

7. Asthma medication via a Nebulizer Machine ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(1130) (1140) (1150) (1160) ___/___/____
8. Oral Beta-Agonists ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Alupent, Brethine, Bricanyl, Metaprel, Proventil, Ventolin, Repetabs, Volmax and others) (1170) (1180) (1190) (1200) ___/___/____
9. Short-acting Oral Theophylline ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Aminophylline, Slo-Phyllin and others) (1210) (1220) (1230) (1240) ___/___/____
10. Sustained release Oral Theophylline ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Slo-bid, Theo-Dur, Uniphyl and others) (1250) (1260) (1270) (1280) ___/___/____
11. Inhaled Anticholinergic ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Atrovent, Combivent, Spiriva) (1290) (1300) (1310) (1320) ___/___/____
12. Anti-allergic Inhaled Medications ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Intal, Tilade and others) (1330) (1340) (1350) (1360) ___/___/____
13. Anti-allergic Nasal Medications ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Nasal crom, Astelin and others) (1370) (1380) (1390) (1400) ___/___/____
14. Anti-allergic Oral Medications ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Allegra, Claritin, Zyrtec, Chlor-Trimeton and others) (1410) (1420) (1430) (1440) ___/___/____
15. Leukotriene Antagonist / 5LO Inhibitors ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Accolate, Zflo, Singulair) (1450) (1460) (1470) (1480) ___/___/____
16. IgE Blocker ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Xolair) (1490) (1500) (1510) (1520) ___/___/____
17. Topical Steroids - Prescription ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Synalar, Lidex, Dermacin, Fluocinonide and others) (1530) (1540) (1550) (1560) ___/___/____
18. Topical Steroids - OTC ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Hydrocortisone - multiple strengths and products) (1570) (1580) (1590) (1600) ___/___/____
19. Nasal Steroids ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Beconase, Vancenase, Flonase, Nasacort, Nasalide, Nasarel, Rhinocort, Nasonex and others) (1610) (1620) (1630) (1640) ___/___/____
20. Oral Steroids ₁ Yes ₀ No ₈ Unknown ₁ Yes ₀ No ₈ Unknown
(Prednisone, Medrol and others) (1650) (1660) (1670) (1680) ___/___/____



MEDICAL HISTORY

Subject ID: 1_6 - _____ - _____

Visit Number: 1

If Yes, indicate date medication was last taken month / day / year

21. Inhaled Steroids _1 Yes _0 No _8 Unknown _____ / _____ / _____
(1690) (1700) (1710) (1720)
(Azmacort, Beclovent, Vanceril, AeroBid, QVAR, Flovent, Pulmicort, Advair Diskus and others)

→ If NO or unknown, skip to Question #22.

→ If YES, complete Questions #21a - 21c.

21a. Indicate most recent type of inhaled steroid taken

- _1 beclomethasone MDI (1 puff = 42 µg) (e.g., **Beclovent, Vanceril**)
- _2 beclomethasone MDI (1 puff = 84 µg) (e.g., **Vanceril-DS**)
- _3 beclomethasone HFA (1 puff = 40 µg) (e.g., **QVAR**)
- _4 beclomethasone HFA (1 puff = 80 µg) (e.g., **QVAR**)
- _5 budesonide DPI (1 puff = 80 µg) (e.g., **Symbicort Turbuhaler**)
- _6 budesonide DPI (1 puff = 160 µg) (e.g., **Symbicort Turbuhaler**)
- _7 budesonide DPI (1 puff = 200 µg) (e.g., **Pulmicort Turbuhaler**)
- _8 budesonide DPI (1 puff = 320 µg) (e.g., **Symbicort Turbuhaler**)
- _9 flunisolide MDI (1 puff = 250 µg) (e.g., **Aerobid, Aerobid - M**)
- _10 fluticasone MDI (1 puff = 44 µg) (e.g., **Flovent**)
- _11 fluticasone MDI (1 puff = 110 µg) (e.g., **Flovent**)
- _12 fluticasone MDI (1 puff = 220 µg) (e.g., **Flovent**)
- _13 fluticasone DPI (1 puff = 50 µg) (e.g., **Flovent Rotadisk**)
- _14 fluticasone DPI (1 puff = 100 µg) (e.g., **Advair Diskus**)
- _15 fluticasone DPI (1 puff = 250 µg) (e.g., **Advair Diskus**)
- _16 fluticasone DPI (1 puff = 500 µg) (e.g., **Advair Diskus**)
- _17 mometasone DPI (1 puff = 220 µg) (e.g., **Asmanex Twister**)
- _18 triamcinolone acetone MDI (1 puff = 100 µg) (e.g., **Azmacort**)
- _19 other _____ (1730)



MEDICAL HISTORY

Subject ID: 1 6 - - - - -

Visit Number: 1

21b. Indicate number of daily puffs used _____ puffs (1740)

- 21c. Indicate how long you used the inhaled steroid... less than 1 month, 1 - 6 months, greater than 6 months (1750)

PRIOR CHOLESTEROL TREATMENT WITH STATIN DRUGS

Indicate if you have ever used statin medications. If you have, please indicate, to the best of your knowledge, the most recent drug taken, date last taken, and the total daily dose.

If Yes, indicate date medication was last taken month / day / year

22. Statin medications (Lipitor, Baycol, Lescol, Advicor, Mevacor, Pravachol, Vytorin, Zocor and Crestor) []1 Yes []0 No []8 Unknown (2030) ___/___/____ (2040) (2050) (2060)

- > If NO or unknown, skip to Question #23.
-> If YES, complete Questions #22a - 22b.

- 22a. Indicate most recent type of statin medication taken []1 atorvastatin (e.g., Lipitor) []2 cerivastatin (e.g., Baycol) []3 fluvastatin (e.g., Lescol) []4 lovastatin (e.g., Advicor, Mevacor) []5 pravastatin (e.g., Pravachol) []6 simvastatin (e.g., Vytorin, Zocor) []7 rosuvastatin (e.g., Crestor) (2070)

22b. Indicate the total daily dose used (If dosage is unknown enter '999') _____ . ____ mg (2080)

PRIOR DISEASES, ILLNESSES AND SURGERIES

Have you had any diseases, illnesses, conditions or surgeries related to the following areas?

- 23. Skin []1 Yes []0 No _____ (1760)
24. Blood, Lymph, or Immune Systems []1 Yes []0 No _____ (1770)
25. Eyes []1 Yes []0 No _____ (1780)
26. Ears, Nose, or Throat []1 Yes []0 No _____ (1790)
26a. Have you ever had nasal polyps? []1 Yes []0 No []9 Don't know (1800)
26ai. If YES, have you ever had any nasal polyps removed? []1 Yes []0 No (1810)
26b. Do you have chronic or recurrent sinusitis (treated with antibiotics)? []1 Yes []0 No []9 Don't know (1820)



MEDICAL HISTORY

Subject ID: 1_6 - _____ - _____

Visit Number: 1

- | | | | |
|--|---|--|---|
| 27. Breasts | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1830) |
| 28. Endocrine Systems | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1840) |
| 29. Lung - other than asthma | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1850) |
| 29a. Have you ever had pneumonia? | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₉ Don't know (1860) |
| 29b. Have you ever had bronchitis? | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₉ Don't know (1870) |
| 30. Heart and Blood Vessels | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1880) |
| 31. Liver or Pancreas | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1890) |
| 32. Kidneys or Urinary Tract System | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1900) |
| 33. Reproductive System | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1910) |
| 34. Stomach or Intestines | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1920) |
| 34a. Do you have gastroesophageal reflux disease (GERD)? | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₉ Don't know (1930) |
| 35. Muscles or Bones | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1940) |
| 36. Nervous System | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1950) |
| 37. Psychiatric | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1960) |
| 38. Other _____ | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1970) |
| 39. Drug Allergies | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1980) |
| | | | _____ |
| | | | _____ |
| 40. Food Allergies | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | _____ (1990) |
| | | | _____ |
| | | | _____ |

SUBJECT'S WEIGHT

(Clinic Coordinator completed)

41. Weight (*without shoes or heavy clothing*) _____ . _____ kg (2000)

Subject Source Documentation

Subject's Initials: _____ (2010)

Date: ___ / ___ / _____ (2020)



**PULMONARY PROCEDURE
CHECKLIST**

Subject ID: _____ - _____ - _____

Visit Number: ____

12. Have you used any smokeless tobacco products today? ₁ Yes ₀ No (1095)

Examples: chewing tobacco, snuff

13. At this time, is your asthma worse because of recent exposure to triggers? ₁ Yes ₀ No (1100)

Examples: cold air, smoke, allergens, recent exercise, a recent respiratory tract infection, or other pulmonary infection

14. Is there any other reason you should not proceed with spirometry testing? ₁ Yes ₀ No (1110)

If **YES**, explain _____

15. Is the subject eligible to proceed with the spirometry testing? ₁ Yes ₀ No (1120)

If any of the shaded boxes are filled in, the subject is ineligible for spirometry and exhaled nitric oxide testing.

→ If YES, proceed to Question #16 or the next form/procedure listed on the visit procedure checklist.

Complete for all subjects at Visit 1.

If subject is less than 21 years old, complete Question #16 at each visit.

16. Height (without shoes) _____ cm (1130)



**BASALT
CLINIC COORDINATOR
STUDY TREATMENT
QUESTIONNAIRE**

Subject ID: 1 7 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____ / ____ / ____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

This questionnaire is to be completed at Visit 12 by the ACRN study coordinator who was primarily responsible for the subject's BASALT visits during the preceding 36 weeks. If a randomized subject terminates prior to Visit 12, this form should be completed at the time of the termination visit.

1. Blinded Scheduled Inhalers (1000)/(1010)

Subjects in the BASALT study were randomized to receive three inhalers where one contained active drug and two contained placebo. You were blinded to the actual treatment assignments. Please check the box that most closely represents your feelings about the treatment the subject received during the randomized treatment period (Visit 4 through Visit 12).

(Choose one statement that represents your feelings and choose one set of inhalers for the statement.)

₁ I am certain the inhaler that contained active drug is:

₁ Inhaler A

₂ Inhaler B

₃ Inhaler C

₂ I think the inhaler that contained active drug is:

₁ Inhaler A

₂ Inhaler B

₃ Inhaler C

₃ I have no idea which inhaler contained active drug however my best guess would be:

₁ Inhaler A

₂ Inhaler B

₃ Inhaler C

2. Please comment with respect to any other observations you made that helped you make your choice in Question #1.

Clinic Coordinator Source Documentation
 Coordinator's Initials: ____ (1020)
 Date: ____ / ____ / ____ (1030)



**BASALT
CHANGE IN
MEDICATIONS**

Subject ID: 17 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____/____/____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

Complete this form if the subject has experienced an adverse event that resulted in altering the dose of any of the subject's study medications.

1. Related Adverse Event Number _____ (1000)

<p>2. Inhaler A</p> <p><input type="checkbox"/>₁ Discontinued</p> <p><input type="checkbox"/>₂ Reduced</p> <p><input type="checkbox"/>₃ Increased</p> <p><input type="checkbox"/>₄ Unchanged</p> <p><input type="checkbox"/>₅ Not Applicable (1010)</p> <p>➔ If <i>Unchanged or Not Applicable</i>, proceed to Question #3.</p> <p>2a. Date change began</p> <p>____/____/____ (1020) <small>Month Day Year</small></p> <p>2b. Date change ended</p> <p>____/____/____ (1030) <small>Month Day Year</small></p> <p>2c. Ongoing at current visit <input type="checkbox"/>₁ (1040)</p>	<p>3. Inhaler B</p> <p><input type="checkbox"/>₁ Discontinued</p> <p><input type="checkbox"/>₂ Reduced</p> <p><input type="checkbox"/>₃ Increased</p> <p><input type="checkbox"/>₄ Unchanged</p> <p><input type="checkbox"/>₅ Not Applicable (1050)</p> <p>➔ If <i>Unchanged or Not Applicable</i>, proceed to Question #4.</p> <p>3a. Date change began</p> <p>____/____/____ (1060) <small>Month Day Year</small></p> <p>3b. Date change ended</p> <p>____/____/____ (1070) <small>Month Day Year</small></p> <p>3c. Ongoing at current visit <input type="checkbox"/>₁ (1080)</p>	<p>4. Inhaler C</p> <p><input type="checkbox"/>₁ Discontinued</p> <p><input type="checkbox"/>₂ Reduced</p> <p><input type="checkbox"/>₃ Increased</p> <p><input type="checkbox"/>₄ Unchanged (1090)</p> <p>➔ If <i>Unchanged</i>, stop here.</p> <p>4a. Date change began</p> <p>____/____/____ (1100) <small>Month Day Year</small></p> <p>4b. Date change ended</p> <p>____/____/____ (1110) <small>Month Day Year</small></p> <p>4c. Ongoing at current visit <input type="checkbox"/>₁ (1120)</p>
--	--	--



COMPLIANCE
CHECKLIST

Subject ID: 17 - _____ - _____
Visit Number: _____

2. **DOSER™ Compliance for Inhaler B**

If the interval between visits exceeds 30 days, complete Questions #2a - #2f using data for the 30 days prior to the visit.

2a. Total number of scheduled puffs since the last visit _____ puffs (1060)

➔ Value obtained from Question #1 on P17_COMPLY_WKS_B

2b. Total number of puffs in blue DOSER™ history _____ puffs (1070)

➔ Value obtained from Question #2 on P17_COMPLY_WKS_B

2c. Percent compliance = $\frac{\text{Question \#2b}}{\text{Question \#2a}} \times 100$ _____ . _____ % (1080)

➔ *If the subject took less than 75% of the scheduled Inhaler B puffs, re-emphasize the importance of maintaining the daily dosing schedule.*

2d. Total number of full days since the last visit _____ days (1090)

➔ Value obtained from Question #4 on P17_COMPLY_WKS_B

2e. Total number of compliant days _____ days (1100)

➔ Value obtained from Question #5 on P17_COMPLY_WKS_B

2f. Percent compliance = $\frac{\text{Question \#2e}}{\text{Question \#2d}} \times 100$ _____ . _____ % (1110)

➔ *If the subject took the correct daily dose less than 75% of the days, re-emphasize the importance of maintaining the daily dosing schedule.*

3. **DOSER™ Compliance for Inhaler C**

If the interval between visits exceeds 30 days, complete Questions #3a - #3f using data for the 30 days prior to the visit.

3a. Total number of albuterol puffs in DOSER™ history _____ puffs (1120)

➔ Value obtained from Question #1 on P17_COMPLY_WKS_C

3b. Total number of puffs in red DOSER™ history _____ puffs (1130)

➔ Value obtained from Question #2 on P17_COMPLY_WKS_C



COMPLIANCE CHECKLIST

Subject ID: 17 - _____ - _____
Visit Number: _____

- 3d. Total number of full days since the last visit _____ days (1140)
→ Value obtained from Question #4 on P17_COMPLY_WKS_C
- 3e. Total number of compliant days _____ days (1150)
→ Value obtained from Question #5 on P17_COMPLY_WKS_C
- 3f. Percent compliance = $\frac{\text{Question \#3e}}{\text{Question \#3d}} \times 100$ _____ . _____ % (1160)
→ *If the subject took the correct daily dose less than 75% of the days, re-emphasize the importance of maintaining the daily dosing schedule.*

4. Diary Card Compliance

If the interval between visits exceeds 30 days, complete Questions #4a - #4e using data for all full days prior to the visit.

- 4a. Total number of full days since the last visit _____ days (1170)
- 4b. Total number of days where all 3 measurements (AM PEFR, PM PEFR, and complete symptom score) have been recorded _____ days (1180)
- 4c. Percent compliance = $\frac{\text{Question \#4b}}{\text{Question \#4a}} \times 100$ _____ . _____ % (1190)
- 4d. Total number of days where the subject measured both AM PEFR and PM PEFR on schedule and transcribed the measurements accurately on his/her diary cards _____ days (1200)
- 4e. Percent compliance on schedule = $\frac{\text{Question \#4d}}{\text{Question \#4a}} \times 100$ _____ . _____ % (1210)
→ *If the percent compliance for either Question #4c or #4e is less than 75%, re-emphasize the importance of accurately and regularly completing diary cards.*



BASALT DIARY CARD

Subject's Initials: _____
Date: ____ / ____ / _____

Subject ID: 17 - ____ - ____
Subject Initials: _____
Return Visit Number: ____
Return Visit Date: ____ / ____ / ____
Month Day Year

To the subject: If your peak flow is below ____ (1000) liters/minute (65% of baseline), use your RESCUE albuterol inhaler as instructed in the handout "If Your Asthma Gets Worse." Contact study personnel if your peak flow does not increase to ____ liters/minute (80% of baseline), after 1 hour of RESCUE use, or if you are experiencing extreme symptoms. If you have taken at least ____ puffs/24 hours for the past 48 hours from your RESCUE inhaler, contact study personnel.

Please use black ink to complete.	Day 1: ____	Day 2: ____	Day 3: ____	Day 4: ____	Day 5: ____	Day 6: ____	Day 7: ____
Date (ddate)	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day	____ / ____ month day

MORNING EVALUATION (Between 5 AM and 10 AM)

1. Number of times you woke up last night due to asthma (1010)	____	____	____	____	____	____	____
2. Time of AM Peak Flow (within 15 minutes of awakening) (1020)	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____
3. AM Peak Flow (liters/min)** (1030)/(1035)	____	____	____	____	____	____	____
4. Total number of <u>puff(s)</u> from yellow Inhaler A (AM) (1040)	____	____	____	____	____	____	____
5. Total number of <u>puff(s)</u> from blue Inhaler B (AM) (1043)	____	____	____	____	____	____	____
Symptoms⁺⁺ during the night	6. Shortness of Breath (AM) (1050)						
	7. Chest Tightness (1060)						
	8. Wheezing (1070)						
	9. Cough (1080)						
	10. Phlegm/Mucus (1090)						

NIGHT-TIME EVALUATION (Between 8 PM and 1 AM)

11. Time of PM Peak Flow (between 8 PM and 1 AM) (1100)	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____	____ : ____
12. PM Peak Flow (liters/min)** (1110)/(1115)	____	____	____	____	____	____	____
13. Total number of <u>puff(s)</u> from yellow Inhaler A (PM) (1120)	____	____	____	____	____	____	____
14. Total number of <u>puff(s)</u> from blue Inhaler B (PM) (1123)	____	____	____	____	____	____	____
Symptoms⁺⁺ since you woke	15. Shortness of Breath (PM) (1130)						
	16. Chest Tightness (PM) (1140)						
	17. Wheezing (1150)						
	18. Cough (1160)						
	19. Phlegm/Mucus (1170)						

24 HOUR EVALUATION

20. Total number of <u>puffs</u> from red Inhaler C during the past 24 hours (1175)	____	____	____	____	____	____	____
21. Total number of <u>puffs</u> from albuterol (RESCUE) inhaler NOT including exercise preventive use, during the past 24 hours (1180)	____	____	____	____	____	____	____
22. Total number of <u>puffs</u> from albuterol (RESCUE) inhaler taken for exercise preventive use, during the past 24 hours (1190)	____	____	____	____	____	____	____

** Record the best of three attempts. Circle the value if you have taken any medication from your RESCUE albuterol inhaler in the last 2 hours.

++ Symptom Severity Rating Scale
0 = Absent No symptom
1 = Mild Symptom was minimally troublesome, i.e. not sufficient to interfere with normal daily activity or sleep.
2 = Moderate Symptom was sufficiently troublesome to interfere with normal daily activity or sleep.
3 = Severe Symptom was so severe as to prevent normal activity and/or sleep.



**BASALT
DOSE
ADJUSTING
FORM**

Subject ID: 17 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____/____/____
 Month Day Year
 Coordinator ID: ____

(Clinic Coordinator completed)

1. This visit is a ...
(Check one box only)

- ₁ Regular study visit
₂ Treatment Failure (TF) visit
 (Visits 90-99) (1000)

(Completed at regular study and Treatment Failure visits)

2. Inhaler A adjustment

2a. Has inhaler A been adjusted within the last 4 weeks due to treatment failure *(If Visit 4, answer No)*?

- ₁ Yes ₀ No (1010)

→ ***If YES, inhaler A should NOT be adjusted. Skip to Question #2e.***

2b. Since the last adjustment of inhaler A, has the subject experienced a treatment failure for which an adjustment has not been considered/made *(If Visit 4, answer No)*?

- ₁ Yes ₀ No (1020)

→ ***If YES, and the TF occurred within 4 weeks of an adjustment of inhaler A due to a previous TF, inhaler A should NOT be adjusted. Otherwise, increase inhaler A by one step. Skip to Question #2e.***

2c. At this visit, is the subject's FEV₁ < 85% of baseline*?
 (* At Visit 4, baseline is the FEV₁ value obtained at Visit 3. After Visit 4, baseline is the FEV₁ value obtained at Visit 4.)

- ₁ Yes ₀ No (1030)

→ ***If YES, increase inhaler A by one step. Skip to Question #2e.***

2d. At this visit, did the subject answer the Asthma Evaluation Questionnaire (AEQ) as follows:

i) 0 on each of the three questions

- ₁ Yes ₀ No (1040)

→ ***If YES, decrease inhaler A by one step. Skip to Question #2e.***

ii) 1 on at least one question and 0's or 1's on other two questions

- ₁ Yes ₀ No (1050)

→ ***If YES, inhaler A should NOT be adjusted. Skip to Question #2e.***

iii) 2 or 3 on at least one question

- ₁ Yes ₀ No (1060)

→ ***If YES, increase inhaler A by one step.***

2e. i) Dosing step for inhaler A prior to this visit

____ (1070)

ii) Dosing step for inhaler A after adjustment, if any, at this visit

____ (1080)



**DOSE ADJUSTING
FORM**

Subject ID: 17 - _____ - _____

Visit Number: _____

(Completed at regular study visits only)

3. Inhaler B adjustment

3a. Record the average ENO value _____ . _____ ppb (1090)

→ *This value is the average of two reproducible values obtained at this visit.*

3ai. Is Question #3a < 22.0 ppb?

₁ Yes ₀ No (1100)

→ *If YES, decrease inhaler B by one step. Skip to Question #3b.*

3aii. Is Question #3a between 22.0 - 35.0 ppb (inclusive)?

₁ Yes ₀ No (1110)

→ *If YES, inhaler B should NOT be adjusted. Skip to Question #3b.*

3aiii. Is Question #3a > 35.0 ppb?

₁ Yes ₀ No (1120)

→ *If YES, increase inhaler B by one step.*

3b. i) Dosing step for inhaler B prior to this visit _____ (1130)

ii) Dosing step for inhaler B after adjustment, if any, at this visit _____ (1140)



**BASALT
DOSE ADJUSTMENT
CORRECTION**

Subject ID: 1 7 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Current Date: _____ / _____ / _____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

1. The dose adjustment was corrected...
(Check one box only)
 - ₁ On the phone
 - ₂ At the visit (1000)

2. The dose adjustment was corrected for ...
 - ➔ ***If inhaler B only, skip to Question #4.***
 - ₁ Inhaler A only
 - ₂ Inhaler B only
 - ₃ Inhalers A and B (1010)

3. Inhaler A
 - 3a. Dosing step for inhaler A prior to the correction _____ (1020)
 - ➔ ***Value obtained from Q1080 on the previous P17_DOSE_ADJUST form***

 - 3b. Dosing step for inhaler A after the correction _____ (1030)

 - 3c. Effective start date of the dose adjustment _____ (1040)
month / day / year

 - 3d. Were any additional inhaler A's dispensed? ₁ Yes ₀ No (1050)
 - ➔ ***If NO, and inhaler B needs to be corrected, skip to Question #4.***
 - ➔ ***If NO, and inhaler B does not need to be corrected, skip to Source Documentation.***

 - 3e. Number of inhaler(s) dispensed _____ (1060)

 - 3f. Box number from which the inhaler(s) has(have) been taken _____ (1070)

 - 3g. Number of puffs written on the label _____ AM (1080)
(Must be same as on the Daily Activities handout for Inhaler A)
 _____ PM (1090)
 - ➔ ***If adjusting inhaler A only, skip to Source Documentation.***

Affix the box # label(s) for inhaler A below:

--	--	--	--



**DOSE ADJUSTMENT
CORRECTION**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

4. Inhaler B

- 4a. Dosing step for inhaler B prior to the correction _____ (1100)
 ➔ *Value obtained from Q1140 on the previous
 P17_DOSE_ADJUST form*
- 4b. Dosing step for inhaler B after the correction _____ (1110)
- 4c. Effective start date of the dose adjustment _____ / _____ / _____ (1120)
 month day year
- 4d. Were any additional inhaler B's dispensed? ₁ Yes ₀ No (1130)
 ➔ *If NO, skip to Source Documentation.*
- 4e. Number of inhaler(s) dispensed _____ (1140)
- 4f. Box number from which the inhaler(s) has(have) been taken _____ (1150)
- 4g. Number of puffs written on the label _____ AM (1160)
 (Must be same as on the Daily Activities handout
 for Inhaler B) _____ PM (1170)

Affix the box # label(s) for inhaler B below:

--	--	--	--	--	--

Coordinator's
Signature: _____ (1180)

Date: ____ / ____ / _____ (1190)



**BASALT
ELIGIBILITY
CHECKLIST**

Subject ID: 17 - _____ - _____
 Subject Initials: _____
 Visit Number: 4
 Visit Date: _____ / _____ / _____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

1. Since Visit 3, has the subject experienced a treatment failure as defined in the protocol? ₁ Yes ₀ No (1000)
 → If **NO**, skip to Question #2.
- 1a. Has the subject received oral, parenteral, inhaled corticosteroids, or another new asthma medication? ₁ Yes ₀ No (1010)
 → If **NO**, and budesonide will be prescribed according to the protocol, Visit 4 should be rescheduled 4 weeks after the last dose.
- 1ai. If **NO**, and budesonide will not be prescribed, has at least 4 weeks passed since the treatment failure? ₁ Yes ₀ No (1020)
 → If **YES**, skip to Question #2.
 → If **NO**, Visit 4 should be rescheduled 4 weeks after the date of the event.
- 1aii. If **YES**, record the date of the subject's last dose from the Concomitant Medications for Asthma/Allergy and Adverse Events (CMED) form. _____ / _____ / _____ (1030)
month day year
- 1aiii. Was the last dose taken at least 4 weeks prior to today's date? ₁ Yes ₀ No (1040)
 → If **NO**, Visit 4 should be rescheduled 4 weeks after the last dose.
2. Using the history stored in the yellow DOSER™ from Inhaler A, did the subject take at least 75% of the required puffs from his or her inhaler A during the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)? ₁ Yes ₀ No (1050)
 → Use Question #1c from P17_COMPLY to answer this question
3. Using the history stored in the yellow DOSER™ for Inhaler A, did the subject take 4 puffs per day (correct daily dose) on at least 75% of the days during the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)? ₁ Yes ₀ No (1060)
 → Use Question #1f from P17_COMPLY to answer this question
4. Using the history stored in the blue DOSER™ from Inhaler B, did the subject take at least 75% of the required puffs from his or her inhaler B during the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)? ₁ Yes ₀ No (1070)
 → Use Question #2c from P17_COMPLY to answer this question



ELIGIBILITY CHECKLIST

Subject ID: 1 7 - _____ - _____Visit Number: 4

5. Using the history stored in the blue DOSER™ for Inhaler B, did the subject take 4 puffs per day (correct daily dose) on at least 75% of the days during the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)?

₁ Yes ₀ No (1080)

→ Use Question #2f from P17_COMPLY to answer this question

6. Using the history stored in the red DOSER™ from Inhaler C and the DOSER™ from albuterol, did the subject take the same number of puffs from red inhaler C as from the albuterol inhaler on at least 75% of the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)?

₁ Yes ₀ No (1090)

→ Use Question #3f from P17_COMPLY to answer this question

7. Did the subject record both AM and PM peak flow measurements and symptoms on his or her Diary Cards (P17_DIARY) on at least 75% of the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)?

₁ Yes ₀ No (1100)

→ Use Question #4c from P17_COMPLY to answer this question

8. Did the subject measure his or her AM and PM peak flow on schedule and accurately transcribe the measurements on his or her Diary Cards (P17_DIARY) on at least 75% of the days during the 14 days prior to Visit 4 (only use the full days between Visit 3 and Visit 4, exclude visit dates)?

₁ Yes ₀ No (1110)

→ Use Question #4e from P17_COMPLY to answer this question

9. Is the subject able to use a metered dose inhaler (MDI) properly, as evidenced by achieving a score of 6 on two consecutive, separate inhalations using the MDI Inhalation Technique Checklist (SCORE, TECH_MDI)?

₁ Yes ₀ No (1120)

10. Does the subject wish to withdraw consent from the study?

₁ Yes ₀ No (1130)

11. Is there any new information that makes the subject ineligible according to the eligibility criteria?

₁ Yes ₀ No (1140)

→ If **YES**, describe: _____

12. Is there any other reason why this subject should not be included in the study?

₁ Yes ₀ No (1150)

→ If **YES**, describe: _____

13. FEV₁ (% predicted) category at Visit 4:

₁ ≤ 80 % predicted

→ Refer to Question #2c on the SPIRO form

₂ > 80% predicted (1160)

ELIGIBILITY CHECKLIST

Subject ID: 1 7 - _____ - _____Visit Number: 4

14. Is the subject eligible?

1

Yes

0

No (1170)

→ ***If any of the shaded boxes are completed, the subject is ineligible. If the subject is not eligible due to the compliance and this is the first compliance assessment at V4, reschedule Visit 4 in 2 weeks. Otherwise, complete the BASALT Termination of Study Participation (P17_TERM) form.***

→ ***If the subject is eligible and will participate in BASALT, randomize the subject.***

15. Inhalers Box Numbers (record on P16_LOG):

Inhalers	A		B		C
Step	1-4	5	1-4	5	
Box #	—	—	—	—	—
	(1180)	(1190)	(1200)	(1210)	(1220)



**BASALT
HOSPITALIZATION
SUMMARY REPORT**

Subject ID: 1 7 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____ / ____ / ____
 Month Day Year
 Coordinator ID: ____

(Clinic Coordinator completed)

This form should only be completed if the subject has been hospitalized during the BASALT Study. Obtain hospital discharge summary or abstract to complete this form. Complete Serious Adverse Event Reporting (SERIOUS) form.

DO NOT ENTER. FOR REFERENCE PURPOSES ONLY.

Hospital Name: _____

Hospital Address: _____

1. Admission date ____ / ____ / ____
month day year (1000)

2. Discharge date ____ / ____ / ____
month day year (1010)

3. Number of days in ICU/CCU/Stepdown Unit ____ . ____ days(s) (1020)

4. Number of days in regular care unit ____ . ____ days(s) (1030)

5. Was intubation or ventilation assistance required? ₁ Yes ₀ No (1040)

6. Was the hospitalization due to... ₁ Asthma
 (Check one box only) ₂ Other _____ (1050)
➔ If asthma related, complete BASALT Significant Exacerbation (P17_SIGEX) and BASALT Treatment Failure (P17_TF) forms.

7. What was the subject's status at discharge? ₁ Alive
₂ Deceased (1060)



**BASALT
HEALTHCARE
UTILIZATION REVIEW**

Subject ID: 1 7 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
Month Day Year
 Interviewer ID: _____

(Subject Interview completed)

DO NOT ENTER. FOR REFERENCE PURPOSES ONLY.

I am going to ask you some questions based on several events which may have occurred since your last study contact that took place on:

____ / ____ / ____
month day year

1. Since your last study contact, were you admitted to a hospital ₁ Yes ₀ No (1000)
 for an overnight stay of at least one night?

➔ If **YES**, how many times were you admitted due to...

1a. asthma-related events _____ time(s) (1010)

➔ **Complete the BASALT Hospitalization Summary Report (P17_HOSPITAL), BASALT Significant Exacerbation (P17_SIGEX), BASALT Treatment Failure (P17_TF) and Serious Adverse Event (SERIOUS) forms for each event.**

1b. other (describe) _____ time(s) (1020)

➔ **Complete the BASALT Hospitalization Summary Report (P17_HOSPITAL) and Serious Adverse Event (SERIOUS) forms for each event.**

2. Since your last study contact, did you go to an emergency room? ₁ Yes ₀ No (1030)

➔ If **YES**, how many times due to...

2a. asthma-related events _____ time(s) (1040)

➔ **Complete the BASALT Significant Exacerbation (P17_SIGEX) and BASALT Treatment Failure (P17_TF) forms for each event.**

2b. other (describe) _____ time(s) (1050)

3. Since your last study contact, did you go to an urgent care visit to a physician? ₁ Yes ₀ No (1060)

➔ If **YES**, how many times were the visits due to...

3a. asthma-related events _____ time(s) (1070)

➔ **Complete the BASALT Significant Exacerbation (P17_SIGEX) and BASALT Treatment Failure (P17_TF) forms for each event.**

3b. other (describe) _____ time(s) (1080)



**HEALTHCARE
UTILIZATION REVIEW**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

4. Since your last study contact, did you have a regular clinic/office visit to a physician (does not apply to study visits)? ₁ Yes ₀ No (1090)

→ If **YES**, how many times were the visits due to...

4a. asthma-related events _____ time(s) (1100)

4b. other (describe) _____
_____ time(s) (1110)

5. Since your last study contact, did you miss at least a half-day of work, house work, or school because of your health (does not apply to time off for study visits)? ₁ Yes ₀ No (1120)

→ If **YES**, complete **BASALT School/Work Absenteeism (P17_SWA)** form.

6. Since your last study contact, were you prescribed any new medication? ₁ Yes ₀ No (1130)

→ If **YES**, record the new medication on the **Concomitant Medications for Asthma/Allergy and Adverse Events (CMED)** form.

7. Since your last study contact, did you purchase any over-the-counter (OTC) medication? ₁ Yes ₀ No (1140)

→ If **YES**, record the new medication on the **Concomitant Medications for Asthma/Allergy and Adverse Events (CMED)** form.



**BASALT
MANNITOL
CHALLENGE
TESTING CHECKLIST**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedure Checklist form and successfully completed baseline spirometry session(s).

1. **(Complete at Visit 4A Only)** Did the subject consent to perform a mannitol challenge? ₁ Yes ₀ No (1000)
 If **YES**, record the date the consent form was signed. _____ / _____ / _____ (1010)
 month day year
2. **(Complete at Visit 4A Only)** Has the subject performed a methacholine challenge at Visit 4? ₁ Yes ₀ No (1020)
 → If **YES**, proceed to Question #2a.
- 2a. Did the subject require > 4 puffs of albuterol for reversal after Visit 4 methacholine challenge testing? ₁ Yes ₀ No (1030)
3. **(Complete at Visits 8 and 10 Only)** Has the subject performed a mannitol challenge at Visit 4A? ₁ Yes ₀ No (1040)
4. Has the subject had any severe acute illness in the past 4 weeks? ₁ Yes ₀ No (1050)
 If **YES**, has the subject received permission from the supervising physician to proceed with the mannitol challenge testing? ₁ Yes ₀ No (1060)
 Physician's Signature: _____ (1070)
5. Does the subject have a baseline FEV₁ < 70% of predicted? ₁ Yes ₀ No (1080)
6. Is there any other reason the subject should not proceed with the mannitol challenge? ₁ Yes ₀ No (1090)
 If **YES**, explain _____



**BASALT
SCHEDULED
MEDICATIONS
(Visits 4-11)**

Subject ID: 1 7 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
 Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

1. Inhaler A

- 1a. Number of inhaler(s) dispensed _____ (1000)
 → If 0, skip to Question #2.
- 1b. Box number from which the inhaler(s) has(have) been taken _____ (1010)
- 1c. Number of puffs written on the label _____ AM (1020)
 *(Must be same as on the Daily Activities handout
 for Inhaler A)* _____ PM (1025)

Affix the box # label(s) for inhaler A below:

--	--	--	--	--	--

2. Inhaler B

- 2a. Number of inhaler(s) dispensed _____ (1030)
 → If 0, skip to Question #3.
- 2b. Box number from which the inhaler(s) has(have) been taken _____ (1040)
- 2c. Number of puffs written on the label _____ AM (1050)
 *(Must be same as on the Daily Activities handout
 for Inhaler B)* _____ PM (1055)

Affix the box # label(s) for inhaler B below:

--	--	--	--	--	--



**SCHEDULED
MEDICATIONS**

Subject ID: 1 7 - _____ - _____

Visit Number: _____

3. Inhaler C

3a. Number of inhaler(s) dispensed _____ (1060)

3b. Box number from which the inhaler(s) has
(have) been taken _____ (1070)

Affix the box # label(s) for inhaler C below:

--	--	--	--	--	--

Coordinator's Signature: _____ (1080) Date: ____ / ____ / _____ (1090)
--

By signing in the source documentation box you are:

- 1) confirming that the same number of inhalers A, B, and C were dispensed as indicated on this form.
- 2) confirming that the box number from which each set of inhalers were dispensed is correctly written on this form.
- 3) confirming that the box number from which each set of inhalers were dispensed corresponds to the box numbers for each set as indicated on the subject's randomization report.
- 4) confirming that the dosing instructions for inhalers A and B are written on the labels as indicated on this form.
- 5) confirming that the dosing instruction label has been attached to inhaler C.



**BASALT
PULMONARY
PROCEDURE CHECKLIST
(Visits 4-12)**

Subject ID: 1 7 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
 Month Day Year
 Interviewer ID: _____

(Subject Interview completed)

Please reference the Drug Classifications list for a complete list of examples for the questions below. If any medications other than study inhalers or rescue albuterol were used, record the medication(s) on the Concomitant Medications for Asthma/Allergies and Adverse Events (CMED) form.

1. Have you consumed caffeine in the past **6** hours? ₁ Yes ₀ No (1000)
Examples: Pepsi, Coke, Coffee, Mountain Dew, Tea, Rootbeer, Red Bull
2. Have you used medications with caffeine in the past **6** hours? ₁ Yes ₀ No (1010)
Examples: Anacin, Darvon compound, Esgic, Excedrin, Fiorinal, Fioricet, No Doz, Norgesic, Vivarin
3. Have you used any weight loss medications in the past **6** hours? ₁ Yes ₀ No (1020)
Examples: bitter orange, Xenadrine EFX, Thermorexin
4. Have you consumed any food containing alcohol or beverages containing alcohol in the past **6** hours? ₁ Yes ₀ No (1030)
5. Have you used any oral antihistamines in the past **48** hours? ₁ Yes ₀ No (1040)
Examples: Allegra, Chlor-Trimeton, Claritin, Tylenol PM
6. Have you used any nasal antihistamines in the past **6** hours? ₁ Yes ₀ No (1045)
Examples: Astelin, Livostin, Patanase
7. Have you used any oral decongestants or cold remedies in the past **48** hours? ₁ Yes ₀ No (1050)
Examples: pseudoephedrine (Sudafed), Tylenol Allergy
8. Have you used any nasal decongestants in the past **6** hours? ₁ Yes ₀ No (1060)
Examples: oxymetazoline (Afrin)
9. Have you used any cough medicines, anti-tussives, or expectorants in the past **48** hours? ₁ Yes ₀ No (1070)
Examples: guaifenesin, dextromethorphan, Duratuss, Benlyn, Triaminic expectorant, Dayquil Anti-Cough
10. Have you used a rescue intermediate-acting inhaled beta-agonist in the past **6** hours? ₁ Yes ₀ No (1080)
Example: albuterol (Ventolin or Proventil), study RESCUE
11. Have you used any nasal steroids in the past **48** hours? ₁ Yes ₀ No (1090)
Examples: Flonase, Rhinocort, Nasonex



**PULMONARY PROCEDURE
CHECKLIST**

Subject ID: 1 7 - _____ - _____

Visit Number: _____

12. Have you used any smokeless tobacco products today? ₁ Yes ₀ No (1095)
Examples: chewing tobacco, snuff

13. At this time, is your asthma worse because of recent exposure to triggers? ₁ Yes ₀ No (1100)
Examples: cold air, smoke, allergens, recent exercise, a recent respiratory tract infection, or other pulmonary infection

14. Is there any other reason you should not proceed with spirometry testing? ₁ Yes ₀ No (1110)

If **YES**, explain _____

15. Is the subject eligible to proceed with the spirometry testing? ₁ Yes ₀ No (1120)

If any of the shaded boxes are filled in, the subject is ineligible for spirometry and exhaled nitric oxide testing.

➔ *If YES, proceed to Question #16 or the next form/procedure listed on the visit procedure checklist.*

If subject is less than 21 years old, complete Question #16 at each visit.

16. Height (*without shoes*) _____ cm (1130)



**BASALT
SIGNIFICANT ASTHMA
EXACERBATION**

Subject ID: 1 7 - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____/____/____
 Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

This form must be completed each time a subject experiences an asthma exacerbation according to the definition below.

1. Did the subject experience an increase in symptoms of cough, phlegm/mucus, chest tightness, wheezing, or shortness of breath along with any of the following conditions?
 - 1a. An increase in rescue inhaler use of > 8 puffs per 24 hours over baseline rescue inhaler use for a period of 48 hours? ₁ Yes ₀ No (1000)
 - 1b. Use of rescue inhaler > 16 total puffs per 24 hours for a period of 48 hours? ₁ Yes ₀ No (1010)
 - 1c. A fall in pre-bronchodilator PEFR to < 65% of baseline on 2 consecutive scheduled morning measurements? ₁ Yes ₀ No (1020)
 - 1d. A fall in post-bronchodilator PEFR (any time of day) to < 80% of baseline despite 60 minutes of rescue beta-agonist treatment (≥ 6 puffs of albuterol in one hour)? ₁ Yes ₀ No ₉ N/A (1030)
 - 1di. If **YES**, record the post-bronchodilator PEFR value that qualified the subject as a treatment failure. _____ L/min (1040)
 - 1e. A fall in pre-bronchodilator FEV₁ to < 80% of baseline? ₁ Yes ₀ No ₉ N/A (1050)
2. Did the subject require an urgent medical care visit for asthma in an office setting or emergency room? ₁ Yes ₀ No (1060)
3. Were systemic corticosteroids (oral, IM, or IV), given to the subject for his/her asthma as a result of rescue intervention or by the opinion of the treating physician? ₁ Yes ₀ No (1070)

➔ ***If YES, please complete the CMED form.***
4. Was the subject hospitalized for his/her asthma? ₁ Yes ₀ No (1080)

5. Did the subject experience a significant asthma exacerbation? ₁ Yes ₀ No (1090)
If any of the shaded boxes are completed, the subject experienced a significant asthma exacerbation.

➔ ***If NO, STOP HERE. DO NOT SUBMIT THIS FORM TO THE DCC.***
 ➔ ***If YES, complete the rest of this form. Also, complete BASALT Treatment Failure Assessment (P17_TF) form.***



**SIGNIFICANT ASTHMA
EXACERBATION**

Subject ID: 1 7 - _____ - _____

Visit Number: _____

6. Date significant asthma exacerbation occurred _____ / _____ / _____
month day year (1100)
7. Did the subject seek care for the asthma exacerbation? ₁ Yes ₀ No (1110)
→ **If NO, skip to Question #14.**
8. What type of care was sought?
- 8a. Study Investigator or Clinic Coordinator? ₁ Yes ₀ No (1120)
If **YES**, indicate type of contact.
₁ Scheduled clinic visit
₂ Unscheduled/urgent clinic visit
₃ Scheduled phone contact
₄ Unscheduled/urgent phone contact (1130)
- 8b. Primary Care or Other Physician? ₁ Yes ₀ No (1140)
Name of physician: _____
If **YES**, indicate type of contact.
₁ Scheduled clinic visit
₂ Unscheduled/urgent clinic visit
₃ Scheduled phone contact
₄ Unscheduled/urgent phone contact (1150)
- 8c. Emergency Room visit? ₁ Yes ₀ No (1160)
Name of hospital: _____
9. Was spirometry performed at the visit? ₁ Yes ₀ No (1170)
10. Was peak flow measured at the visit? ₁ Yes ₀ No (1180)
11. Were any treatments given during visit? ₁ Yes ₀ No (1190)
→ **If NO, skip to Question #12.**
→ **If YES, please complete the CMED form, if needed.**
- 11a. Nebulizer (i.e., breathing) treatment ₁ Yes ₀ No (1200)
- 11b. IM steroids ₁ Yes ₀ No (1210)
- 11c. IV steroids ₁ Yes ₀ No (1220)
- 11d. IV aminophylline ₁ Yes ₀ No (1230)
- 11e. Other _____ ₁ Yes ₀ No (1240)



**SIGNIFICANT ASTHMA
EXACERBATION**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

12. Were any medications prescribed at discharge?

➔ *If NO, skip to Question #13.*

➔ *If YES, please complete the CMED form, if needed.*

₁ Yes ₀ No (1250)

12a. Oral steroids

₁ Yes ₀ No (1260)

12b. Antibiotics

₁ Yes ₀ No (1270)

13. Was the subject hospitalized?

➔ *If YES, please complete Serious Adverse Event Reporting (SERIOUS) and BASALT Hospitalization Summary Report (P17_HOSPITAL) Forms.*

₁ Yes ₀ No (1280)

14. Was the asthma exacerbation resolved solely by increasing PRN use of the rescue inhaler?

₁ Yes ₀ No (1290)

15. Was the asthma exacerbation treated as outlined in the protocol?

If *NO*, describe _____

₁ Yes ₀ No (1300)

16. Was budesonide prescribed for management of the significant exacerbation?

➔ *If YES, please complete CMED form.*

₁ Yes ₀ No (1305)

17. Was the significant asthma exacerbation related to the routine pulmonary function testing, including the collection of exhaled nitric oxide? (*Check one box only*)

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1310)

18. Was the significant asthma exacerbation related to the methacholine challenge testing? (*Check one box only*)

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1320)



**SIGNIFICANT ASTHMA
EXACERBATION**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

19. Was the significant asthma exacerbation related to the sputum induction procedure? (*Check one box only*)

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1330)

20. Was the significant asthma exacerbation related to the collection of exhaled breath condensate? (*Check one box only*)

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1340)



**BASALT
SUBJECT
STUDY TREATMENT
QUESTIONNAIRE**

Subject ID: 1 7 - _____ - _____
Subject Initials: _____
Visit Number: _____
Visit Date: _____ / _____ / _____
 Month Day Year
Coordinator ID: _____

(Subject completed)

This questionnaire is to be completed by the BASALT subject at the end of Visit 12. If a randomized subject terminates prior to Visit 12, please ask him or her to complete this form during the termination visit.

1. Scheduled Inhalers (1000)/(1010)

As a BASALT study participant you were randomized to receive three inhalers A, B, and C where one was an active (i.e. real) inhaled steroid inhaler and two were a look-alike placebo (i.e. inactive) inhalers. Please choose the statement that more closely represents you feelings about the scheduled inhalers.

(Choose one statement that represents your feelings and choose one set of inhalers for the statement.)

- | | |
|--|---|
| <input type="checkbox"/> ₁ I am certain the inhaler that contained active drug is: | <input type="checkbox"/> ₁ Inhaler A |
| | <input type="checkbox"/> ₂ Inhaler B |
| | <input type="checkbox"/> ₃ Inhaler C |
|
 | |
| <input type="checkbox"/> ₂ I think the inhaler that contained active drug is: | <input type="checkbox"/> ₁ Inhaler A |
| | <input type="checkbox"/> ₂ Inhaler B |
| | <input type="checkbox"/> ₃ Inhaler C |
|
 | |
| <input type="checkbox"/> ₃ I have no idea which inhaler contained active drug however my best guess would be: | <input type="checkbox"/> ₁ Inhaler A |
| | <input type="checkbox"/> ₂ Inhaler B |
| | <input type="checkbox"/> ₃ Inhaler C |



**SUBJECT
STUDY TREATMENT
QUESTIONNAIRE**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

2. Please comment with respect to the taste of the medication you received from your scheduled...

Inhaler A (1020)	Inhaler B (1030)	Inhaler C (1040)
<input type="checkbox"/> ₁ Tasted good (Describe) _____	<input type="checkbox"/> ₁ Tasted good (Describe) _____	<input type="checkbox"/> ₁ Tasted good (Describe) _____
<input type="checkbox"/> ₂ No noticeable taste	<input type="checkbox"/> ₂ No noticeable taste	<input type="checkbox"/> ₂ No noticeable taste
<input type="checkbox"/> ₃ Tasted bad (Describe) _____	<input type="checkbox"/> ₃ Tasted bad (Describe) _____	<input type="checkbox"/> ₃ Tasted bad (Describe) _____

3. Please comment with respect to the smell of the medication you received from your scheduled...

Inhaler A (1050)	Inhaler B (1060)	Inhaler C (1070)
<input type="checkbox"/> ₁ Smelled good (Describe) _____	<input type="checkbox"/> ₁ Smelled good (Describe) _____	<input type="checkbox"/> ₁ Smelled good (Describe) _____
<input type="checkbox"/> ₂ No noticeable smell	<input type="checkbox"/> ₂ No noticeable smell	<input type="checkbox"/> ₂ No noticeable smell
<input type="checkbox"/> ₃ Smelled bad (Describe) _____	<input type="checkbox"/> ₃ Smelled bad (Describe) _____	<input type="checkbox"/> ₃ Smelled bad (Describe) _____

4. Please comment with respect to the physical sensations of the medication you received from your scheduled...

Inhaler A (1080)	Inhaler B (1090)	Inhaler C (1100)
<input type="checkbox"/> ₁ Pleasant sensations (Describe) _____	<input type="checkbox"/> ₁ Pleasant sensations (Describe) _____	<input type="checkbox"/> ₁ Pleasant sensations (Describe) _____
<input type="checkbox"/> ₂ No noticeable sensations	<input type="checkbox"/> ₂ No noticeable sensations	<input type="checkbox"/> ₂ No noticeable sensations
<input type="checkbox"/> ₃ Unpleasant sensations (Describe) _____	<input type="checkbox"/> ₃ Unpleasant sensations (Describe) _____	<input type="checkbox"/> ₃ Unpleasant sensations (Describe) _____



**SUBJECT
STUDY TREATMENT
QUESTIONNAIRE**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

5. Please comment with respect to any other observations you have made regarding your scheduled...

Inhaler A (1110)	Inhaler B (1120)	Inhaler C (1130)
<input type="checkbox"/> ₁ I have no further comments <input type="checkbox"/> ₂ I observed the following: <i>(Describe below)</i> <hr/> <hr/> <hr/> <hr/>	<input type="checkbox"/> ₁ I have no further comments <input type="checkbox"/> ₂ I observed the following: <i>(Describe below)</i> <hr/> <hr/> <hr/> <hr/>	<input type="checkbox"/> ₁ I have no further comments <input type="checkbox"/> ₂ I observed the following: <i>(Describe below)</i> <hr/> <hr/> <hr/> <hr/>

Subject Source Documentation

Subject's Initials: ____ (1140)

Date: ____ / ____ / ____ (1150)



**BASALT
SCHOOL/WORK
ABSENTEEISM**

Subject ID: 1 7 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____ / ____ / ____
 Month Day Year
 Coordinator ID: ____

(Clinic Coordinator completed)

1. How many full or half days of school/work/housework did the subject miss because of his/her health? *(do not count time missed due to study visits)*
(Indicate full or half days in increments of 0.5 days)

____ . ____ day(s) (1000)

→ IF LESS THAN 0.5, STOP HERE. DO NOT SUBMIT THIS FORM TO THE DCC.

2. Primary activity missed. *(Check one box only)*

- ₁ Work
₂ School
₃ Housework (1010)

3. Was the activity missed due to...
(Check one box only)

- ₁ Asthma
₂ Other _____ (1020)

If asthma, was it...

3a. due to worsening symptoms caused by your asthma?

- ₁ Yes ₀ No (1030)

→ If YES, please complete Clinical and Laboratory Adverse Events (AECLIN) form.

3b. to see an MD or health-care provider about your asthma (does not apply to time off for study-related visits)?

- ₁ Yes ₀ No (1040)

3c. due to side effects related to asthma medication?

- ₁ Yes ₀ No (1050)

→ If YES, please complete Clinical and Laboratory Adverse Events (AECLIN) form.

3d. Other _____

- ₁ Yes ₀ No (1060)



**BASALT
TERMINATION OF
STUDY PARTICIPATION**

Subject ID: 1 7 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____ / ____ / ____
 Month Day Year
 Coordinator ID: ____

(Clinic Coordinator completed)

Complete this form only for those subjects who have been allocated to BASALT study and have been terminated or deemed ineligible.

1. Has the subject completed the study through Visit 12? ₁ Yes ₀ No (1000)
 → *If YES, skip to the SIGNATURES section.*

2. Who initiated termination of the subject? ₁ Subject
 → *If subject withdrew due to impending clinical staff termination, please indicate termination by clinical staff.* ₂ Clinical Staff (1010)
 → *If Clinical Staff, skip to Question #4.*

3. Indicate the **primary** reason the subject has withdrawn from the study.
₁ no longer interested in participating *
₂ no longer willing to follow protocol *
₃ difficult access to clinic (location, transportation, parking)
₄ unable to make visits during clinic hours
₅ moving out of the area
₆ unable to continue due to personal constraints *
₇ unable to continue due to medical condition unrelated to asthma *
₈ side effects of study medications *
₉ dissatisfied with asthma control*
₁₀ other * (1020)

*** Additional explanation required:**

→ *Skip to the SIGNATURES section.*

(1030)



TERMINATION OF STUDY PARTICIPATION

Subject ID: 1 7 - _____ - _____

Visit Number: _____

4. Did clinical staff terminate the subject due to ...
- | | | | |
|---|---|--|---|
| 4a. pregnancy?
<i>(Check N/A if the subject is male.)</i> | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | <input type="checkbox"/> ₉ N/A
(1040) |
| 4b. ineligibility during the adherence period (Visits 3-4) *
other than compliance | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1050) |
| 4c. loss to follow-up? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1060) |
| 4d. an asthma-related adverse event? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1070) |
| 4e. a medication-related adverse event? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1080) |
| 4f. an adverse event not related to asthma or medications? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1090) |
| 4g. non-compliance with dosing of inhalers? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1100) |
| 4h. non-compliance with diary completion? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1110) |
| 4i. non-compliance with visit attendance? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1120) |
| 4j. non-compliance with peak flow monitoring? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1130) |
| 4k. subject experienced 3 treatment failures that required
prednisone treatments? | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1140) |
| 4l. allocated to BASALT in error | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1145) |
| 4m. other reason? * | <input type="checkbox"/> ₁ Yes | <input type="checkbox"/> ₀ No | (1150) |

*** If YES, additional explanation required:**

_____ (1160)

- 4n. Indicate the letter corresponding to the primary reason the subject was terminated. _____ (1170)

SIGNATURES

Please complete the following section regardless of the reason for termination of study participation.

I verify that all information collected on the ACRN BASALT data collection forms for this subject is correct to the best of my knowledge and was collected in accordance with the procedures outlined in the ACRN BASALT Protocol.

_____ (1180) ____ / ____ / ____ (1190)
Clinic Coordinator Signature month day year

_____ (1200) ____ / ____ / ____ (1210)
ACRN Investigator Signature month day year



**BASALT
TREATMENT FAILURE
ASSESSMENT**

Subject ID: 1 7 - ____ - ____
 Subject Initials: ____
 Visit Number: ____
 Visit Date: ____/____/____
 Month Day Year
 Coordinator ID: ____

(Clinic Coordinator completed)

1. **(Visits 90-99 Only)** Complete the number of the last regular visit completed ____ (995)

2. Did the subject experience any of the following conditions WITHOUT increase in symptoms (e.g., cough, phlegm/mucus, chest tightness, wheezing, or shortness of breath)?
 - 2a. An increase in rescue inhaler use of > 8 puffs per 24 hours over baseline rescue inhaler use for a period of 48 hours? ₁ Yes ₀ No (1000)
 - 2b. Use of rescue inhaler > 16 total puffs per 24 hours for a period of 48 hours? ₁ Yes ₀ No (1010)
 - 2c. A fall in pre-bronchodilator AM PEFR to < 65% of baseline on two consecutive scheduled morning measurements? ₁ Yes ₀ No (1020)
 - 2d. A fall in post-bronchodilator PEFR (any time of day) to 80% of baseline despite 60 minutes of rescue beta-agonist treatment (≥ 6 puffs of albuterol in one hour)? ₁ Yes ₀ No ₉ N/A (1030)
 - 2di. If **YES**, record the post-bronchodilator PEFR value that qualified the subject as a treatment failure. ____ L/min (1040)
 - 2e. A fall in pre-bronchodilator FEV₁ to < 80% of baseline on two consecutive spirometric determinations measured 24-72 hours apart? ₁ Yes ₀ No ₉ N/A (1050)

3. Did the subject experience a significant asthma exacerbation? ₁ Yes ₀ No (1060)
 → **If YES, please complete the *BASALT Significant Asthma Exacerbation (P17_SIGEX)* form.**

4. Were open-label inhaled corticosteroids or another (non-systemic corticosteroid) new asthma medication (e.g., montelukast) given to the subject for his/her asthma as a result of rescue intervention or by the opinion of the treating physician? ₁ Yes ₀ No (1065)
 → **If YES, please complete the *CMED* form.**

5. Based on clinical judgement, did the physician deem this subject a treatment failure for safety reasons? ₁ Yes ₀ No (1070)

6. Was the subject dissatisfied with asthma control achieved with study regimen? *(Check N/A if it is not the subject's last visit.)* ₁ Yes ₀ No ₉ N/A (1080)

- 7. Is the subject a treatment failure? **If any of the shaded boxes are completed, the subject is a treatment failure.** ₁ Yes ₀ No (1090)
 → **If YES, please complete the rest of this form. Also, complete the *BASALT Healthcare Utilization Review (P17_HUR)* form.**
 → **If NO, STOP HERE and continue with remaining visit procedures.**



**TREATMENT FAILURE
ASSESSMENT**

Subject ID: 1 7 - _____ - _____

Visit Number: _____

8. Date treatment failure conditions were met

____ / ____ / _____
month day year (1100)

(Physician completed)

9. From a clinical perspective, would you have considered this subject to be a 'treatment failure' if he/she were not participating in BASALT trial and, instead, you were seeing him/her in your outpatient clinic?

₁ Yes ₀ No (1110)

10. Based on the subject's clinical status at the time he/she met one of the treatment failure criteria, when do you think the subject reached this status?

- ₁ Too early (asthma not that bad)
- ₂ At the right time (asthma would be considered clinically unstable, but the subject not in jeopardy)
- ₃ Too late (concerned about the subject's safety) (1120)

11. What was the subject's opinion of his/her asthma at the time he/she reached treatment failure?

- ₁ Rescued too soon
- ₂ Rescued at the right time
- ₃ Waited too long before being rescued (1130)

12. Based on your experience with this subject, are you satisfied with the BASALT treatment failure criteria?

₁ Yes ₀ No (1140)

If **NO**, explain _____

13. Physician Narrative Assessment

(1150)

Physician Source Documentation

Physician's signature: _____ (1160)

Date: ____ / ____ / _____ (1170)

Time: _____ (based on 24-hour clock) (1180)



**TREATMENT FAILURE
ASSESSMENT**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

Complete Questions #14 - #22 only for subjects who did not meet Treatment Failure status by experiencing a significant asthma exacerbation (i.e., Question #3 is No).

14. Did the subject seek care for treatment failure conditions? ₁ Yes ₀ No (1190)

➔ **If NO, skip to Question #17.**

15. Did the subject require an urgent medical care visit for asthma in an office setting or emergency room? ₁ Yes ₀ No (1200)

➔ **If YES, STOP HERE. Complete the BASALT Significant Asthma Exacerbation (P17_SIGEX) form and continue according to the protocol.**

16. What type of care was sought?

16a. Study Investigator or Clinic Coordinator? ₁ Yes ₀ No (1210)

If **YES**, indicate type of contact.

₁ Scheduled clinic visit

₂ Unscheduled clinic visit

₃ Scheduled phone contact

₄ Unscheduled phone contact
(1220)

16b. Primary Care or Other Physician? ₁ Yes ₀ No (1230)

Name of physician: _____

If **YES**, indicate type of contact.

₁ Scheduled clinic visit

₂ Unscheduled clinic visit

₃ Scheduled phone contact

₄ Unscheduled phone contact
(1240)

17. Were the subject's treatment failure conditions treated as outlined in the protocol? ₁ Yes ₀ No (1250)

If **NO**, describe _____

18. Was budesonide prescribed for management of the treatment failure? ₁ Yes ₀ No (1255)

➔ **If YES, please complete the CMED form.**



**TREATMENT FAILURE
ASSESSMENT**

Subject ID: 1 7 - ____ - ____

Visit Number: ____

19. Was the treatment failure related to the routine pulmonary function testing, including the collection of exhaled nitric oxide? *(Check one box only)*

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1260)

20. Was the treatment failure related to the methacholine challenge testing? *(Check one box only)*

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1270)

21. Was the treatment failure related to the sputum induction procedure? *(Check one box only)*

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1280)

22. Was the treatment failure related to the collection of exhaled breath condensate? *(Check one box only)*

- ₁ Definitely related
- ₂ Probably related
- ₃ Relationship undetermined
- ₄ Probably not related
- ₅ Definitely not related (1290)



**POST-ALBUTEROL
(4 puffs)
SPIROMETRY TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedure Checklist form and successfully completed baseline spirometry session(s).

➔ **Administer 4 puffs of albuterol and wait 15 minutes, then perform spirometry.**

1. Time albuterol administered (*based on 24-hour clock*) _____ (1000)

2. Time post-albuterol spirometry started _____ (1010)
(*based on 24-hour clock*)

The best effort reflects the trial where the sum of FEV₁ and FVC is maximized.

3. Results of best effort post-albuterol:

3a. FVC _____ L (1020)

3b. FEV₁ _____ L (1030)

3c. FEV₁ (% predicted) _____ % predicted (1040)

3d. PEF_R _____ L/S (1050)

3e. FEF₂₅₋₇₅ _____ L/S (1060)

4. In your judgment, was the subject's spirometry technique acceptable? ₁ Yes ₀ No (1070)

4a. If **NO**, why was it unacceptable?

Inadequate inspiratory effort ₁ Yes ₀ No (1080)

Inadequate expiratory effort ₁ Yes ₀ No (1090)

Inadequate duration of expiration ₁ Yes ₀ No (1100)

Cough during procedures ₁ Yes ₀ No (1110)

Other (*specify*) _____ ₁ Yes ₀ No (1120)



**POST-IPRATROPIUM
(4 Puffs)
SPIROMETRY TESTING**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedure Checklist form and successfully completed baseline spirometry session(s).

Note: Ipratropium should NOT be administered to subjects who have a hypersensitivity/allergy to soy or peanuts.

→ **Administer 4 puffs of ipratropium and wait 30 minutes, then perform spirometry.**

1. Time ipratropium administered (based on 24-hour clock) _____ (1000)
2. Time post-ipratropium spirometry started _____ (1010)
(based on 24-hour clock)

The best effort reflects the trial where the sum of FEV₁ and FVC is maximized.

3. Results of best effort post-ipratropium:
- 3a. FVC _____ L (1020)
- 3b. FEV₁ _____ L (1030)
- 3c. FEV₁ (% predicted) _____ % predicted (1040)
- 3d. PEF_R _____ L/S (1050)
- 3e. FEF₂₅₋₇₅ _____ L/S (1060)
4. In your judgment, was the subject's spirometry technique acceptable? ₁ Yes ₀ No (1070)
- 4a. If **NO**, why was it unacceptable?
- Inadequate inspiratory effort ₁ Yes ₀ No (1080)
- Inadequate expiratory effort ₁ Yes ₀ No (1090)
- Inadequate duration of expiration ₁ Yes ₀ No (1100)
- Cough during procedures ₁ Yes ₀ No (1110)
- Other (specify) _____ ₁ Yes ₀ No (1120)



URINE
PREGNANCY
TEST

Subject ID: _____ - _____ - _____
Subject Initials: _____
Visit Number: _____
Visit Date: ____ / ____ / ____
 Month Day Year
Coordinator ID: _____

(Clinic Coordinator Completed)

Complete this form for female subjects only.

1. Is the subject unable to bear children due to any of the following reasons?

1a. Post-menopausal (at least one year since last menses) ₁ Yes ₀ No (1000)

1b. Hysterectomy ₁ Yes ₀ No (1010)

1c. Tubal ligation ₁ Yes ₀ No (1020)

➔ *If any of the shaded boxes are filled in, a pregnancy test is not required. Proceed to the source documentation box.*

2. Pregnancy test results

➔ *If pregnancy test results are positive, the subject must be terminated from study participation. Complete the appropriate Termination of Study Participation form and follow study termination procedures.*

₁ Positive
₂ Negative (1030)

Subject Source Documentation

Subject's Initials: _____ (1040)

Date: ____ / ____ / _____ (1050)



"Attach Registry Form Label Here"

ACRN REGISTRY

Subject's Last Name: _____

Subject's First Name: _____

Subject's Initials: _____

Social Security Number: _____
(Last 4 digits)

Coordinator ID: _____

(Clinic Coordinator/Subject Interview Completed)

Search the ACRN Registry. If the subject is either incomplete or not found in the Registry, complete the Registry form and enter/update the subject's information appropriately.

ADMINISTRATIVE

1. Did the subject sign an ACRN Protocol Informed Consent and HIPAA Authorization form? ₁ Yes ₀ No (1000)

If **NO**, stop here. Data cannot be entered into the ACRN Registry.

If **YES**, record the signature date.

____ / ____ / ____ (1010)
Month Day Year

DEMOGRAPHICS

2. Subject's date of birth (1020)
(Ask the subject his/her date of birth.)
____ / ____ / ____
Month Day Year

3. Subject's gender ₁ Male ₂ Female (1030)

4. Subject's Race and Ethnicity

4a. Subject's ethnic background ₁ Hispanic or Latino ₂ Not Hispanic or Latino (1040)
(Ask the subject to identify his/her ethnic background.)

4b. Subject's racial background ₁ Yes ₀ No (1050)
(Ask the subject to identify all that apply.)

American Indian or Alaskan Native ₁ Yes ₀ No (1050)

Asian ₁ Yes ₀ No (1060)

Black or African American ₁ Yes ₀ No (1070)

White ₁ Yes ₀ No (1080)

Native Hawaiian or Other Pacific Islander ₁ Yes ₀ No (1090)

Other *(specify)* _____ ₁ Yes ₀ No (1100)



REGISTRY

Subject's Initials: _____

5. Subject's primary racial identification
(This identification will be used for spirometry testing. Ask the subject which category best describes him or her and check only one box.)

- ₁ American Indian or Alaskan Native
- ₂ Asian or Pacific Islander
- ₃ Black, not of Hispanic Origin
- ₄ White, not of Hispanic Origin
- ₅ Hispanic
- ₆ Other _____ (1110)

Subject Source Documentation

Subject's Initials: _____

Date: ____ / ____ / _____

Administrative Use Only

Does the subject recall participating in any of the ACRN I protocols? *(Circle all that apply)*

- | | | | | |
|-----------|------------|---------------|--------------|------------|
| BAGS (1) | CIMA (2) | SOCS/SLIC (3) | DICE (6) | MICE (7) |
| BARGE (8) | IMPACT (9) | SMOG (10) | SLiMSIT (11) | PRICE (12) |

Registry Form Storage Instructions:

Upon printing the subject's label sheet, print the subject's name on the upper right hand label. Attach the Registry form label to the upper left hand corner of the form. Lastly, attach the Registry Log label to the next available row on the Registry Log and complete the required fields. The Registry form should be stored alphabetically by subject's last name in the ACRN Registry Binder. The label sheet should then be filed directly behind the Registry form.

REGISTRY FORMS SHOULD NOT BE SENT TO THE DCC.



**SLEEP AND DAYTIME
ALERTNESS
QUESTIONNAIRE**

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____/____/____
 Month Day Year
 Coordinator ID: _____

(Subject completed)

ABOUT YOUR SLEEP

The questions below apply to the last 6 months.

Some people work the night shift or rotating shifts. Other people have a bedtime that changes a lot. If these apply to you, then questions about the time of day refer to the time when you awaken from your longest sleep and become active. Questions about time of night refer to the time when you have your longest sleep.

Please check only one box for each question.

	Never	Rarely	Sometimes	Usually	Always
1. I am told I snore loudly and bother others.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1000)
2. I am told I stop breathing ("hold my breath") in sleep.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1010)
3. I awake suddenly gasping for breath, unable to breathe.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1020)
→ If this <i>never</i> happens to you, please skip to question #4.					
→ If this happens to you <i>even rarely</i> , please answer questions #3a and 3b.					
3a. It takes just a couple of breaths to fully recover.	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₀ No	(1030)		
3b. It happens when I have chest tightness, wheezing, or cough and takes more than a couple of breaths to fully recover.	<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₀ No	(1040)		
4. I sweat a great deal at night.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1050)
5. I have high blood pressure (or once had it).	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1060)
6. I have a problem with my nose blocking up when I am trying to sleep.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1070)
7. My snoring or my breathing problem is much worse if I sleep on my back.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1080)
8. My snoring or my breathing problem is much worse if I fall asleep right after drinking alcohol.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅ (1090)



SLEEP AND DAYTIME ALERTNESS

Subject ID: _____ - _____ - _____

Visit Number: _____

ABOUT YOUR DAYTIME ALERTNESS

9. Do you feel that you are excessively (overly) sleepy during the day? ₁ Yes ₀ No (1100)

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired? This refers to your usual way of life in recent times. Even if you have not done some of these things recently, try to work out how they would have affected you.

Please check one box that best represents the likelihood of your dozing off in each situation.

	Likelihood of Dozing			
	Never	Slight	Moderate	High
10. Sitting and reading	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1120)
11. Watching TV	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1130)
12. Sitting, inactive in a public place (for example, a theater or a meeting)	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1140)
13. As a passenger in a car for an hour without a break	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1150)
14. Lying down to rest in the afternoon when circumstances permit	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1160)
15. Sitting and talking to someone	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1170)
16. Sitting quietly after a lunch without alcohol	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1180)
17. In a car, while stopped for a few minutes in traffic	<input type="checkbox"/> ₀	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃ (1190)
18. During the past 2 months, on average, how many hours of <i>actual sleep</i> (including daytime naps) did you get in a 24-hour period? This may be different than the number of hours you spent in bed.				_____ hours (1200)

CURRENT WEIGHT

19. What is your current weight in pounds? _____ pounds (1205)

Subject Source Documentation

Subject's Initials: _____ (1210)

Date: ____ / ____ / _____ (1220)



SERIOUS ADVERSE EVENT

Subject ID: _____ - _____ - _____

Visit Number: _____

6. What, in your opinion, caused the event?

6a. Toxicity of study drug(s)

₁ Yes

₀ No (1160)

6b. Withdrawal of study drug(s)

₁ Yes

₀ No (1170)

6c. Concurrent medication

₁ Yes

₀ No (1180)

If **YES**, describe _____

6d. Concurrent disorder

₁ Yes

₀ No (1190)

If **YES**, describe _____

6e. Other event

₁ Yes

₀ No (1200)

If **YES**, describe _____

DO NOT ENTER QUESTIONS #7 - 8: FOR REPORTING PURPOSES ONLY.

7. If subject died, cause of death: _____

8. Was an autopsy performed?

₁ Yes

₀ No

If YES, attach report or send as soon as possible.

REPORTING INVESTIGATOR:

Comments (discuss any relevant laboratory data or other assessments which help explain the event):

Name: _____

Signature: _____

Date: ___ / ___ / _____



**SYMPTOM-FREE
DAY
QUESTIONNAIRE**

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: _____ / _____ / _____
Month Day Year
 Interviewer ID: _____

(Subject Interview completed)

1. In the past 14 days, how many days did you have wheezing, chest tightness, cough, or shortness of breath? _____ day(s) **(1000)**

2. In the past 14 days, how many days did you have to slow down or stop activities because of asthma, wheezing, chest tightness, cough, or shortness of breath? _____ day(s) **(1010)**

3. In the past 14 days, how many nights did you wake up because of asthma, wheezing, chest tightness, cough, or shortness of breath? _____ day(s) **(1020)**

4. Thinking about all three asthma signs or symptoms (wheezing, chest tightness, cough, or shortness of breath; slowing down or stopping activities; nights awakened), in the past 14 days, how many days did you have any of these day-time or night-time symptoms? _____ day(s) **(1030)**

5. In the past 14 days, how many days did you experience any day with NO day-time and night-time symptoms of asthma (including no wheezing, no cough, no chest tightness, or no shortness of breath)? _____ day(s) **(1040)**

Subject Source Documentation

Subject's Initials: _____ **(1050)**

Date: _____ / _____ / _____ **(1060)**

Time: _____ *(based on a 24-hour clock)* **(1070)**



**ALLERGY SKIN
TEST RESULTS**

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____ / ____ / ____
Month Day Year
 Coordinator ID: _____

(Clinic Coordinator completed)

1. Since August 2004, has the subject had an acceptable skin test for an ACRN protocol within three years of the visit date?

₁ Yes ₀ No (1000)

→ If **NO**, proceed to Question #2.

1a. Date of previous skin test

____ / ____ / ____ (1010)
month day year

1b. Coordinator ID who performed the skin test

____ (1020)

1c. Time test sites pricked/punctured *(based on 24-hour clock)*

____ (1030)

1d. Time test sites evaluated *(based on 24-hour clock)*

____ (1040)

→ **STOP HERE** and attach a photocopy of pages 3 and 4 from the previous Allergy Skin Test Results (SKIN) form to this page for data entry purposes.

2. Has the subject had dermatographia **or** a significant adverse reaction to skin testing previously (e.g., anaphylaxis, angioedema, asthma, hypotension, etc.)?

₁ Yes ₀ No (1050)

→ If **YES**, do not proceed with allergy skin testing.

→ If **YES**, and the subject has acceptable ACRN skin testing results from a prior ACRN protocol (ACRN I or II), record Subject ID associated with the most recent acceptable test.

____ - ____ - ____
 (1052) (1054) (1060)

3. Has the subject taken any of the medications listed in the ACRN Skin Testing MOP within the exclusionary periods?

₁ Yes ₀ No (1070)

→ If **YES**, the allergy skin testing procedure should be rescheduled.



**ALLERGY SKIN
TEST RESULTS**

Subject ID: _____ - _____ - _____

Visit Number: _____

4. Was the subject's most recent FEV1 below 60% predicted? ₁ Yes ₀ No (1072)

→ If **NO**, proceed to Question #5.

4a. Has the subject received permission from the supervising physician to proceed with the skin testing? ₁ Yes ₀ No (1074)

→ If **YES**, obtain physician's signature:

_____ (1076)

→ If **NO**, allergy skin testing procedure should be rescheduled.

5. Is the subject eligible for allergy skin testing? ₁ Yes ₀ No (1080)

If any of the shaded boxes are completed, the subject is ineligible for allergy skin testing. STOP HERE.

→ Allergy Skin testing may be rescheduled for the next visit if the subject is ineligible due to Question #3 or Question #4a.

6. Time test sites pricked/punctured (based on 24-hour clock) _____ (1090)

7. Time test sites evaluated (based on 24-hour clock) _____ (1100)



ALLERGY SKIN TEST RESULTS

Subject ID: _____ - _____ - _____

Visit Number: _____

Transfer the tracing of each measurable wheal and record the longest diameter and the diameter at the perpendicular midpoint in mm. If the wheal is not measurable, record '0' for both diameters.

1. Positive Control	Largest Wheal Diameter: _____ mm (1110) Perpendicular Wheal Diameter: _____ mm (1120)	2. Negative Control	Largest Wheal Diameter: _____ mm (1130) Perpendicular Wheal Diameter: _____ mm (1140)
3. Mite Mix	Largest Wheal Diameter: _____ mm (1150) Perpendicular Wheal Diameter: _____ mm (1160)	4. Cockroach Mix	Largest Wheal Diameter: _____ mm (1170) Perpendicular Wheal Diameter: _____ mm (1180)
5. Mouse	Largest Wheal Diameter: _____ mm (1190) Perpendicular Wheal Diameter: _____ mm (1200)	6. Rat	Largest Wheal Diameter: _____ mm (1210) Perpendicular Wheal Diameter: _____ mm (1220)
7. Penicillium	Largest Wheal Diameter: _____ mm (1230) Perpendicular Wheal Diameter: _____ mm (1240)	8. Alternaria	Largest Wheal Diameter: _____ mm (1250) Perpendicular Wheal Diameter: _____ mm (1260)



ALLERGY SKIN TEST RESULTS

Subject ID: _____ - _____ - _____

Visit Number: _____

9. Aspergillus	Largest Wheal Diameter: _____ mm (1270) Perpendicular Wheal Diameter: _____ mm (1280)	10. Cladosporium	Largest Wheal Diameter: _____ mm (1290) Perpendicular Wheal Diameter: _____ mm (1300)
11. Cat	Largest Wheal Diameter: _____ mm (1310) Perpendicular Wheal Diameter: _____ mm (1320)	12. Dog	Largest Wheal Diameter: _____ mm (1330) Perpendicular Wheal Diameter: _____ mm (1340)

13. Is the mean diameter for the 'Negative Control' < 3 mm? ₁ Yes ₀ No (1350)

➔ If **YES**, go to Question #14.

➔ If **NO**, administer the negative control on the opposite hand and complete Question #13a and #13b.

13a. Record the measurements for the 'Negative Control' administered on the opposite hand:

Largest Wheal Diameter: _____ mm (1352)

Perpendicular Wheal Diameter: _____ mm (1354)

13b. Is the mean diameter calculated from the measurements in Question #13a < 3 mm? ₁ Yes ₀ No (1360)

➔ If **NO**, go to Question #15. The subject has dermatographia and therefore, do not repeat skin testing on this subject.

14. Is the mean diameter for 'Positive Control' ≥ 3 mm more than the mean diameter from the 'Negative Control'? ₁ Yes ₀ No (1370)

15. Was this test acceptable? ₁ Yes ₀ No (1380)

If any of the gray shaded boxes are checked, this test was not acceptable.

➔ ***Allergy Skin testing may be rescheduled for the next visit if the subject's test was unacceptable due to the use of exclusionary medications.***



SPIROMETRY TESTING

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Visit Date: ____ / ____ / ____
Month Day Year
 Technician ID: _____

Supervisor ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the appropriate Pulmonary Procedure Checklist form.

1. Time spirometry started *(based on 24-hour clock)* _____ (1000)

The best effort reflects the trial where the sum of FEV₁ and FVC is maximized.

2. Results of best effort:

2a. FVC _____ L (1010)

2b. FEV₁ _____ L (1020)

2c. FEV₁ (% predicted) _____ % predicted (1030)

2d. PEFr _____ L/S (1040)

2e. FEF₂₅₋₇₅ _____ L/S (1050)

3. In your judgment, was the subject's spirometry technique acceptable? ₁ Yes ₀ No (1060)

3a. If **NO**, why was it unacceptable?

Inadequate inspiratory effort ₁ Yes ₀ No (1070)

Inadequate expiratory effort ₁ Yes ₀ No (1080)

Inadequate duration of expiration ₁ Yes ₀ No (1090)

Cough during procedures ₁ Yes ₀ No (1100)

Other *(specify)* _____ ₁ Yes ₀ No (1110)



**SPUTUM INDUCTION
LAB VALUES**

Subject ID: _____
 Subject Initials: _____
 Visit Number: _____
 Current Date: ____/____/____
Month Day Year
 Slide #: ____

(Technician completed)

Processing Sample

- 1. Technician ID _____ (1000)
- 2. Processing Date ____/____/____ (1010)
month day year
- 3. Time processing started *(based on 24-hour clock)* _____ (1020)
- 4. Total Cell Count _____ x 10⁴ cells/ml (1030)

Differential Cell Counts

- 5. Technician ID _____ (1040)
- 6. Read Date ____/____/____ (1050)
month day year
- 7. Squamous Cells _____ % (1060)

8. Did the subject's sputum sample reveal $\geq 80\%$ squamous cells? ₁ Yes ₀ No (1070)

➔ ***If NO, please complete Question #9 through Question #14 and send the sputum sample for overreading.***

➔ ***If YES, STOP HERE and mark the samples as excluded from shipment to San Francisco in the Sample Tracking Module.***

The parameters below are calculated following exclusion of squamous cells.

- 9. Total Cell Count _____ x 10⁴ cells/ml (1080)
- 10. Epithelial Cells _____ % (1090)
- 11. Macrophages _____ % (1100)
- 12. Neutrophils _____ % (1110)
- 13. Eosinophils _____ % (1120)
- 14. Lymphocytes _____ % (1130)



**SPUTUM INDUCTION
UCSF OVER-READ**

Subject ID: _____ - _____ - _____
 Subject Initials: _____
 Visit Number: _____
 Current Date: _____ / _____ / _____
Month Day Year
 Slide #: _____
 Technician ID: _____

(Technician completed)

1. Date of Over-Read _____ / _____ / _____ (1000)
month day year

2. Is the slide quality acceptable? ₁ Yes ₀ No (1010)
 → If **NO**, please comment below. If a back-up slide is required, update the Sample Tracking Module.

Differential Cell Counts

3. Squamous Cells _____ . _____ % (1020)

The parameters below are calculated following exclusion of squamous cells.

4. Epithelial Cells _____ . _____ % (1030)

5. Macrophages _____ . _____ % (1040)

6. Neutrophils _____ . _____ % (1050)

7. Eosinophils _____ . _____ % (1060)

8. Lymphocytes _____ . _____ % (1070)



SPUTUM INDUCTION

Supervisor ID: _____

Subject ID: _____

Subject Initials: _____

Visit Number: _____

Visit Date: ____ / ____ / ____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject is eligible according to the Sputum Induction Checklist (SPUTUMCHK) form.

1. *(If attempting sputum induction for the first time in this protocol or subject has not had an adequate sample at prior attempts, do not complete Question #1.)*

What was the duration of sputum induction the first time the subject's sample was processed and had < 80% squamous cells for this protocol?

_____ . _____ minutes (1000)

Duration of sputum induction at current visit should not exceed this.

2. Sputum induction start time *(based on 24-hour clock)*

_____ (1010)

3. Sputum induction stop time *(based on 24-hour clock)*

_____ (1020)

4. Duration of sputum induction collection phase at this visit

_____ . _____ minutes (1030)

- 4a. Was the duration \geq 4 minutes?

₁ Yes ₀ No (1040)

5. Volume of sputum sample at this visit

_____ . _____ ml (1050)

- 5a. Is the volume of the sample \geq 1 ml?

₁ Yes ₀ No (1060)

6. Is the sample adequate for laboratory analysis?

₁ Yes ₀ No (1070)

If either shaded box in Question #4a or #5a are completed, the sputum sample is not adequate and should not be sent for analysis of squamous cell counts.

→ If YES, the technician reading the slide should complete the Sputum Induction Lab Values (SPUTLAB) form.



SPUTUM INDUCTION

Subject ID: _____ - _____ - _____

Visit Number: _____

7. Subject's FEV₁ immediately after completion of sputum induction

7a. FEV₁ _____ . _____ L (1080)

7b. FEV₁ (% predicted) _____ % predicted (1090)

7c. Time of FEV₁ in Question #7a (*based on 24-hour clock*) _____ (1100)

7d. Percent difference in FEV₁ $\frac{(\text{Reference} - \text{Question \#7a})}{\text{Reference}} \times 100$ _____ . _____ % (1110)

Reference = FEV₁ used for assessment of eligibility for SI.

7e. Did the subject's FEV₁ drop > 10% (from post-albuterol baseline) as indicated in Question #7d? ₁ Yes ₀ No (1120)

→ **If NO, STOP HERE and continue with remaining visit procedures.**

→ **If YES, proceed to the Additional Treatment for Sputum Induction (SPUTUM_ADD_TRT) form.**



**ADDITIONAL TREATMENT
POST SPUTUM INDUCTION**

Supervisor ID: _____

Subject ID: _____

Subject Initials: _____

Visit Number: _____

Visit Date: ____ / ____ / ____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject has experienced > 10% fall in FEV₁ from post-albuterol baseline immediately after completion of sputum induction.

Clinic Use Only

Sputum Induction Reversal Reference Value: Reference x 0.90 = ____ . ____ L

Reference = FEV₁ used for assessment of eligibility for Sputum Induction.

➔ Administer 2 puffs of albuterol and wait 15 minutes, then perform spirometry.

1. Subject's FEV₁ after initial 2 puffs of albuterol

1a. FEV₁ ____ . ____ L (1000)

1b. FEV₁ (% predicted) ____ % predicted (1010)

1c. Time of FEV₁ from Question #1a (*based on 24-hour clock*) ____ (1020)

1d. Was the FEV₁ from Question #1a ≥ the sputum induction reversal reference value in the gray box above? ₁ Yes ₀ No (1030)

➔ ***If YES, stop here and continue with remaining visit procedures.***

➔ ***If NO, administer 2 puffs of albuterol and wait 15 minutes, then perform spirometry. Proceed to Question #2.***

2. Subject's FEV₁ after 2 additional puffs of albuterol

2a. FEV₁ ____ . ____ L (1040)

2b. FEV₁ (% predicted) ____ % predicted (1050)

2c. Time of FEV₁ from Question #2a (*based on 24-hour clock*) ____ (1060)

2d. Was the FEV₁ from Question #2a ≥ the sputum induction reversal reference value in the gray box above? ₁ Yes ₀ No (1070)

➔ ***If NO, complete the source documentation box below.***

Physician Source Documentation

Physician signature: _____ (1080)

Date: ____ / ____ / ____ (1090)

Time: ____ (based on 24-hour clock) (1100)



**SPUTUM INDUCTION
CHECKLIST**

Supervisor ID: _____

Subject ID: _____ - _____ - _____

Subject Initials: _____

Visit Number: _____

Visit Date: _____ / _____ / _____
Month Day Year

Technician ID: _____

(Technician completed)

Complete this form only if the subject successfully completed baseline spirometry session(s).

1. ***(If attempting Sputum Induction for the first time in this protocol, do not complete Question #1)***

Was the subject's sputum sample processed and had < 80% squamous cells the first time a sputum induction was attempted for this protocol?

₁ Yes ₀ No (1000)

2. ***(Only for subjects who completed a methacholine challenge at this visit.)***

Was the subject's FEV₁ after reversal from the methacholine challenge ≥ the methacholine reversal reference value (B) in the gray box on the Methacholine Challenge Testing (METHA) form?

₁ Yes ₀ No (1010)

2a. If **NO**, has the subject received permission from the supervising physician to proceed with sputum induction testing?

₁ Yes ₀ No (1020)

Physician's Signature: _____ (1030)

3. Subject's FEV₁ used for assessment of eligibility for sputum induction

____ . ____ ____ L (1040)

4. Subject's FEV₁ (% predicted) used for assessment of eligibility for sputum induction

____ ____ ____ % predicted (1050)

5. Was the subject's FEV₁ (% predicted) from Question #4 ≥ 60% predicted?

₁ Yes ₀ No (1060)

6. Is there any other reason the subject should not proceed with sputum induction?

₁ Yes ₀ No (1070)

If **YES**, explain _____

7. Is the subject eligible for sputum induction?

₁ Yes ₀ No (1080)

If any of the shaded boxes are completed, the subject is NOT eligible for sputum induction.

➔ If YES, proceed to the Sputum Induction (SPUTUM) form.

