

FORM NO. SEN001				
Study ID:				
Date source form completed (mm/dd/yyyy):/				
Screening Form				
A screening form should be completed for EVERY potential participant that is: ≥ 18 and < 80 years of age (inclusion criterion #1) AND a cancer survivor with diagnosis of AIC (inclusion criterion #2).				
Date screened (mm/dd/yyyy):/				
Sex: Male				
Age: (years)				
Hispanic, Latino or Spanish Origin: Yes No				
Race (check all that apply): White Black or African American Asian Native Hawaiian or Other Pacific Islander American Indian or Alaska Native Other How did the subject first find out about this study? Please choose the closest answer. Cardiologist or other physician Research nurse or other non-physician medical personnel Clinicaltrials.gov website Internet (not including clinicaltrials.gov) Facebook or Twitter Newspaper/magazine Hospital flyer or other print advertisement Radio/TV				
Referred by a friend or other non-medical person				
Other (please specify):				
☐ No response				
Inclusion Criteria				
1 Is the subject ≥ 18 and < 80 years of age?				
2 Is the subject a cancer survivor with diagnosis of AIC?				
• • • • • • • • • •	□ Not ailable			
	□ Not ailable			



FOF	RM NO. SEN001					
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	Screening Form					
5	Has the subject received the initial diagnosis of AIC at least six months earlier and be on stable, optimally-tolerated therapy with beta-blockers, ACE inhibitors/ARBs, and/or aldosterone antagonists for 3 months, unless contraindicated?	\prec	z	□ Not Available		
6	Does the subject have a period of at least two years of clinical cancer-free state* and low likelihood of recurrence (a five-year risk of recurrence estimated at 30% or less), as determined by an oncologist, based on tumor type, response to therapy, and negative metastatic work-up at the time of diagnosis? *exceptions to this are carcinoma in situ or fully resected basal and squamous cell cancer of the skin	_>	Z	Not Available		
7	Is the subject a candidate for cardiac catheterization?	Y	Z	Not Available		
8	Does the subject agree to participate in this trial (if subject is not approached, select "Not Available" or leave blank)? Declined (includes if subject does not respond to coordinator outreach) Does not want placebo Does not want cell therapy Could not decide Too far / Transportation issues Family issues or concerns Unwilling to participate in study procedures and/or follow-up Too busy / Too much going on Other reason not listed above (please specify): (Do NOT include protocol-related reasons for ineligibility here)			Not Available		
Excl	usion Criteria	of ar	n exc	lusion		
If bo	x above is checked, the rest can be blank, or select 1 or more criteria below fo	or a s	creer	n failure.		
1	Does the subject have a life expectancy <12 months?	Y	Z	Not Available		
2	Does the subject have a CT scan or baseline cardiac MRI showing new tumor or suspicious lymphadenopathy raising concern of malignancy?	□ >	z	☐ Not Available		
3	Does the subject have presence of obstructive CAD as determined via imaging within 5 years prior to study enrollment provided there have been no symptoms or evidence of CAD since the test (see Section 4.1 for imaging guidance)?		z	Not Available		
4	Has the subject had a previous myocardial infarction?	Y	Z	Not Available		



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5	Does the subject have a history of radiation therapy AND evidence of constrictive physiology and/or evidence of other patterns of non-ischemic cardiomyopathy on cardiac MRI (e.g., amyloidoisis, sarcoidosis, hemochromatosis, pure radiation-induced cardiomyopathy, etc.) not consistent with AIC being the dominant etiology of heart failure?	□>	□z	☐ Not Available	
6	Does the subject have severe valvular heart disease including mechanical or bioprosthetic heart valve; or 2) severe valvular (any valve) insufficiency/regurgitation within 12 months of consent?	Y	Z	Not Available	
7	Does the subject have aortic stenosis with valve area ≤ 1.5cm ² ?	_>	Z	Not Available	
8	Does the subject have a history of LV reduction surgery or cardiomyoplasty?	≺ □	z	□ Not Available	
9	Does the subject have evidence of cardiogenic shock?	□ >	Z	Not Available	
10	Does the subject have a history of ischemic or hemorrhagic stroke within 90 days of baseline testing?	≺	z	☐ Not Available	
11	Does the subject have liver dysfunction during baseline testing, as evidenced by enzymes (e.g., AST, ALT, alkaline phosphatase) greater than 3 times upper limit of normal?	Y	Z	Not Available	
12	Does the subject have diabetes with poorly controlled blood glucose levels (HbA1c > 8.5%)?	≺	z	☐ Not Available	
Does the subject have an underlying autoimmune disorder or current immunosuppressive therapy (e.g., chronic corticosteroid, rheumatologic or immune modulating therapy) or likelihood of use of immunosuppressive therapy during participation in the trial (medications will be considered on a case by case basis)?		□ ×	Z	Not Available	
14	Does the subject have a baseline eGFR < 35 ml/min/1.73m ² ?	□ >	z	□ Not Available	
15	Does the subject have a contrast allergy that cannot adequately be managed by premedication?		□z	Not Available	
16	Has the subject received gene or cell-based therapy from any source within the previous 12 months?	Y	Z	Not Available	



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17	Does the subject have a hematologic abnormality during baseline testing as evidenced by hemoglobin < 9 g/dl; hematocrit < 30%; absolute neutrophil count < 2,000 or total WBC count more than 2 times upper limit of normal; or platelet values < 100,000/ul?		□ z	Not Available
18	Does the subject have evidence of active systemic infection at time of study product delivery?	□ ≻	□z	□ Not Available
19	Does the subject have HIV, and/or active HBV or HCV?		□z	Not Available
20	Does the subject have coagulopathy (INR > 1.5) not due to a reversible cause (e.g., warfarin and/or Factor Xa inhibitors) (see Section 6.4 re: injection procedure and anticoagulation therapy)? Note: Subjects who cannot be withdrawn from anticoagulation will be excluded.	□ >	Z	Not Available
21	Does the subject have presence of LV thrombus (see guidance in Section 6.6.3)?	≺	z	Not Available
22	Does the subject have presence of a pacemaker and/or ICD generator with any of the following limitations/conditions? If yes, please check the relevant limitation(s)/condition(s) below (required): manufactured before the year 2000 leads implanted < 6 weeks prior to consent non-transvenous epicardial, or abandoned leads subcutaneous ICDs leadless pacemakers any other condition that, in the judgement of device-trained staff, would deem an MRI contraindicated?		Z	Not Available
23	ls the subject pacemaker-dependent with an ICD? (Note: pacemaker-dependent candidates without an ICD are not excluded)		Z	Not Available
24	Does the subject have a CRT device implanted < 3 months prior to consent?		□z	Not Available
25	Does the subject have other MRI contraindications (e.g. subject body habitus incompatible with MRI)?	Y	N	□ Not Available
26	Has the subject had an appropriate ICD firing or ATP for ventricular fibrillation or ventricular tachycardia within 30 days of consent?		□z	Not Available
27	Has the subject had ventricular tachycardia ≥ 20 consecutive beats without an ICD within 3 months of consent, or symptomatic Mobitz II or higher degree atrioventricular block without a functioning pacemaker within 3 months of consent?	□	Z	Not Available



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28	Does the subject have a history of drug abuse (illegal "street" drugs except marijuana, or prescription medications not being used appropriately for a pre-existing medical condition) or alcohol abuse (≥ 5 drinks/day for > 3 months), or documented medical, occupational, or legal problems arising from the use of alcohol or drugs within the past 24 months?	>	Z	Not Available	
29	Does the subject have cognitive or language barriers that prohibit obtaining informed consent or any study elements (interpreter permitted)?	□ ≻	Z	☐ Not Available	
30	Is the subject participating (currently or within the previous 30 days) in a cardiac related investigational therapeutic (including stem cell based therapies) or device trial?		□z	Not Available	
31	Is the subject pregnant or lactating or planning to become pregnant in the next 12 months, or is unwilling to use acceptable forms of birth control during study participation?	→	Z	Not Available/ Not Applicable	
32	Is there presence of any other condition that, in the judgment of the Investigator or Sponsor, would impair enrollment, study product administration, or follow-up?	□ ≻	□z	Not Available	
	nments:				
Ente	red to eCRF Initials				

Workbooks Version 5 -- 09/05/2017 Screening (5 pages)



FORM NO. SEN002		
Date source form completed (mm/dd/yyyy):/_	<u></u>	
Demo	ographics	
First Name:		
Middle Name:		
Last Name:		
Has the participant signed the consent form?	Biorepository Consents s	signed:
Yes No No	Blood samples	Y 🔲 N 🖂
If yes, Date of Consent (mm/dd/yyyy):	Explanted heart	$Y \square N \square$
	Samples for future CV research	$Y \square N \square$
If no, please check a reason below:	Samples for genetic CV research	Y D N D
Declined	Inclusion of de-identified information	Y N
	inclusion of de-identified information	i 📋 in 🗀
Does not want placebo		
Does not want cell therapy		
Could not decide		
☐ Too far / Transportation issues		
☐ Family issues or concerns		
 Unwilling to participate in study procedures and/or follow-up 		
☐ Too busy / Too much going on		
Other (specify):		
Date of Birth (mm/dd/yyyy):/		
Gender: Male	Female	
Hispanic, Latino, or Spanish Origin: Yes	No ☐ No response ☐	
Race (check all that apply):	ite 🗀 ite isopense 🗀	
White		
Black or African American		
Asian		
Native Hawaiian or Other Pacific Islander		
American Indian or Alaska Native		
Other		
No response		
Marital Status (choose one): Married		
Living with a partner		
Single/never married		
Widowed		
Divorced		
Separated	H	
No response	H	



Highest Education Level (choose one):		
Unknown		
Some schooling (no diploma)		
High School Diploma or GED		
Some college or Associate's Degree (2 year	ars)	
Bachelor's Degree (4 years)		
Master's Degree		
Doctorate Degree		
Professional Degree (MD, DDS, DVM, JD,	etc.)	
No response		
Comments:		
Entered to eCRF	Initials	



FORM NO. SEN003				
Acrostic I	dentifier:			
Study ID:				
Date sou	rce form o	completed (mm/dd/yyyy):/		
		Protocol Deviation/Violation Report		
		n/dd/yyyy):/ Event has not yet occurred (exemption request)		
Date the s	ite study te	am had knowledge of the Event (mm/dd/yyyy) ://		
This Event	t meets the	criteria for a protocol deviation/violation because :		
	1	The event resulted in an accidental or unintentional change to the IRB approved protocol and procedures with or without prior sponsor approval.		
	2	The event affected the participant's rights, safety, or welfare, or the integrity of the resultant data.		
Note: The	event mus	meet at least one of the above criteria to be considered a protocol deviation/violation.		
Describe	the proto	col deviation/violation: Reminder: Include visit type if applicable		
Explain w	hy or hov	the deviation/violation occurred:		
Indicate t	he outcor	ne (PI's assessment of the outcome, comments, or determinations):		
Describe	what activ	on you have taken to prevent recurrence:		
Describe	what activ	on you have taken to prevent recuirence.		
PI Signat	ure	Date:/		
RNC Sia	nature	Date:/		
Entered to	eckf	Initials		
		CCTRN Exemption/Waiver Documentation (DCC only)		
CCTRN Medical Officer or Designee Review :				
Exemption Granted Deviation Acknowledged				
Report	able per s	ite's IRB policies: Yes-immediate reporting Yes-continuing review No-not reportable		
		Yes No if Yes, Date Received:		
IRB o	document	ation received? If No, explain:		
DCC Sign	nature	Date:/		
DOO OIGI	iatule	Date		



FORM N	O. SENO	04		
Is this un	anticipate	ed problem specific to an individual subject?	☐ Yes	□No
Acrostic	ldentifier:	(fill in if answer to above is "Yes")		
Study ID:	: (fill in if	answer to above is "Yes")		
Site: (fill	in if answ	ver to above is "No")		
(Note: If the	e UP does i	not apply to an individual subject, the Acrostic Identifier and S	tudy ID remain b	lank)
		completed (mm/dd/yyyy)://	<u> </u>	,
		Unanticipated Problem (UP) Report		
		y problem or event which in the opinion of the local researcher o the research procedures.	was unanticipate	ed, serious and at
These shou	uld be repor	ted to the IRB within 10 working days.		
Date of the	e Event (m	m/dd/yyyy):/		
Date the s	ite study te	eam had knowledge of the Event (mm/dd/yyyy):/_	/	
This Even	t meets the	e criteria for an unanticipated problem because:		
	1	Unanticipated: The event is unexpected in terms of nature research procedures described in the protocol, consent, etc. population being studied.		, ,
	2	Related: The event is related or possibly related to participal reasonable possibility that the incident, experience, event, o by the procedures involved in research.		
	3	Serious: The event placed subjects or others at greater risl economic, or social harm) that was previously known or reconsubject or others.		
		t meet all of the above criteria to be considered an unant	icipated probler	n.
	he type of	event:		
	he type of			
	Accidental recur.	event: or unintentional change to the IRB-approved protocol that reson in the literature, safety monitoring report, or other findings in	sulted in risk or h	as the potential to
	he type of Accidental recur. Publication the risks o	event: or unintentional change to the IRB-approved protocol that reson in the literature, safety monitoring report, or other findings in rotential benefits of the research.	sulted in risk or h	as the potential to
	he type of Accidental recur. Publication the risks o	event: or unintentional change to the IRB-approved protocol that reson in the literature, safety monitoring report, or other findings in	sulted in risk or h	as the potential to
	Accidental recur. Publication the risks o Complaint staff.	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in potential benefits of the research. of a participant that indicates an unanticipated risk or which on confidentiality that may involve risk to that individual or other	sulted in risk or h dicating an unex	as the potential to pected change to ed by the research
	Accidental recur. Publication the risks o Complaint staff. A breach in computer)	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in potential benefits of the research. of a participant that indicates an unanticipated risk or which on confidentiality that may involve risk to that individual or other	sulted in risk or h dicating an unex	as the potential to pected change to ed by the research
	Accidental recur. Publication the risks o Complaint staff. A breach in computer)	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in repotential benefits of the research. of a participant that indicates an unanticipated risk or which concentrated that individual or other confidentiality that may involve risk to that individual or other confidence of the research staff.	sulted in risk or h dicating an unexp annot be resolve rs (e.g. comprom	as the potential to pected change to ed by the research
Describe t	Accidental recur. Publication the risks o Complaint staff. A breach is computer) Incarcerati	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in potential benefits of the research. of a participant that indicates an unanticipated risk or which concentrates the confidentiality that may involve risk to that individual or other.	sulted in risk or h dicating an unexp annot be resolve rs (e.g. comprom	as the potential to pected change to ed by the research
Describe t	Accidental recur. Publication the risks o Complaint staff. A breach is computer) Incarcerati	event: or unintentional change to the IRB-approved protocol that reson in the literature, safety monitoring report, or other findings in potential benefits of the research. of a participant that indicates an unanticipated risk or which concentrated that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individu	sulted in risk or h dicating an unexp annot be resolve rs (e.g. comprom	as the potential to pected change to ed by the research
Describe t	Accidental recur. Publication the risks o Complaint staff. A breach in computer) Incarceration of the unputer plan to pre-	event: or unintentional change to the IRB-approved protocol that reson in the literature, safety monitoring report, or other findings in potential benefits of the research. of a participant that indicates an unanticipated risk or which concentrated that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individual or other confidentiality that may involve risk to that individu	sulted in risk or hedicating an unexplannot be resolvents (e.g. compromed risk.	as the potential to pected change to ed by the research rised/stolen
Describe t	Accidental recur. Publication the risks of Complaint staff. A breach in computer) Incarceration of the unit plan to precons are reconstruction.	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in repotential benefits of the research. of a participant that indicates an unanticipated risk or which conconfidentiality that may involve risk to that individual or other conconfidentiality that research staff. event that, in the opinion of the PI, constitutes an unanticipated nanticipated problem: event the problem from reoccurring in the future (indicated quired due to the event): Date:	sulted in risk or hedicating an unexplannot be resolved and risk.	as the potential to pected change to ed by the research rised/stolen
Describe t	Accidental recur. Publication the risks of Complaint staff. A breach in computer) Incarceration of the unit plan to proons are resurre.	event: or unintentional change to the IRB-approved protocol that resonant in the literature, safety monitoring report, or other findings in a potential benefits of the research. of a participant that indicates an unanticipated risk or which on confidentiality that may involve risk to that individual or other in one of a member of the research staff. event that, in the opinion of the PI, constitutes an unanticipated manticipated problem: event the problem from reoccurring in the future (indicated quired due to the event):	sulted in risk or hedicating an unexplannot be resolved and risk.	as the potential to pected change to ed by the research rised/stolen



FORM NO. SEN005				
Acrostic Identifier:				
Study ID:				
Date source form complete	d (mm/dd/yyyy): _	/		
	Tre	atment Checklist		
If eligible, proposed date fo	r SPI (mm/dd/yyyy	<u>'):/</u>		
Screening LVEF (from MRI Core Lab report) Must be ≤ 45%				
The following variables are Physical Exam, Baseline La	•		• ·	ine
Variable	Value	Criter	ia to Proceed	
Subject age		Must be ≥ 18 and < 80 year	ars old at consent date	
NYHA class		Must be class II or III		
eGFR		Must be ≥ 35		
HbA1C		Must be ≤ 8.5		
Hemoglobin		Must be ≥ 9		
Hematocrit		Must be ≥ 30		
Platelets		Must be ≥ 100 K		
INR		Must be ≤ 1.5 or taking an	ticoagulation therapy	
Pregnancy Test		Must be "Negative" if femal not of childbearing potentia	<u> </u>	al or N/A if
Myocardial infarction		Must be "No"		
Aortic Stenosis		Must be "Yes" to valve area N/A if not aortic stenosis or		
Temperature		Must be < 100.4 °F		
If any of the variables above Tests and a more recent exthe re-check.	am or test has bee	en done, please enter the u	updated value, date, an	-
Variable	Value	Date	Time	
NYHA class		/		
eGFR		/		
HbA1C		/		
Hemoglobin		/		
Hematocrit		/		
Platelets		/		
INR		/		
Temperature		/		



FORM NO. SEN005			
Acrostic Identifier:			
Study ID:			
Date source form completed (mm/dd/yyyy):/_	/		
Treatment	Checklist		
Please answer the following questions:			
1. Since the baseline exam and tests, has there been a ch that would prohibit continuation in the study? (If yes, please	•	Yes 🗌	No 🗆
2. Is there any other reason you think this subject should not continue in the study? (If yes, please explain in the Comments)		Yes 🗌	No 🗌
Comments:			
☐ Investigator reviewed Treatment Checklist worksheet	Date Investigator reviewed (mm.	/dd/yyyy):	<i></i>
Investigator Signature	Date:		
RNC Signature	Date:		_
Entered to aCRE Initials			



FORM NO. SEN007	
Acrostic Identifier:	
Study ID:	
Date source form completed (mm/dd/yyyy):/	
Randomization	
Confirmed date for SPI (mm/dd/yyyy):/	Reminder: This form must be submitted ≥ 3 days and ≤ 7 days prior to the scheduled injection procedure
Comments:	
Entered to eCRF Initials	



FORM NO. SEN008							
Date source form completed (mm/dd/yyyy):/	/						
Stre	ss Echo						
This form only to be entered when a subject has not had imaging to rule-out CAD in the specified timeframe and standard of care imagining is not clinically indicated.							
Date of stress echo (mm/dd/yyyy)://	_						
Was a stress echo performed and CAD ruled-out?	Yes 🗌	No 🗌	If CAD is <u>not</u> ruled out, subject is excluded.				
Comments:							
Entered to eCRF Initials							



FORM NO. SEN009								
Acrostic Identifier:								
Study ID:								
Date source form completed (mm/dd/yyyy):		/						
Minnesota Living With Heart Failure Qu	uestion	naire (ML	HFQ) - I	Baseline	, Month	6, and Month 12		
Visit Type:								
Patient did not respond to survey								
The following questions ask how much your heart failure (heart condition) affected your life during the past month (4 weeks). After each question, circle the 0, 1, 2, 3, 4 or 5 to show how much your life was affected. If a question does not apply to you, circle the 0 after that question.								
Did your heart failure prevent you from living as you wanted during								
the past month (4 weeks) by -		Very				Very		
	No	Little				Much		
1. causing swelling in your ankles or legs?	□ 0	1	_ 2	□ 3	□ 4	☐ 5		
2. making you sit or lie down to rest during the day?	□ 0	□ 1	□ 2	□ 3	<u> </u>	<u> </u>		
making your walking about or climbing stairs difficult?	□ 0	□ 1	□ 2	□ 3	☐ 4	<u> </u>		
4. making your working around the house or yard difficult?	□ 0	□ 1	□ 2	□ 3	☐ 4	<u> </u>		
5. making your going places away from home difficult?	□ 0	□ 1	□ 2	□ 3	□ 4	<u> </u>		
6. making your sleeping well at night difficult?	□ o	□ 1	□ 2	□ 3	□ 4	<u> </u>		
7. making your relating to or doing things with your friends or family difficult?	□ 0	□ 1	□ 2	□ 3	<u> </u>	<u> </u>		
8. making your working to earn a living difficult?	□ o	□ 1	□ 2	□ 3	☐ 4	□ 5		
making your recreational pastimes, sports or hobbies difficult?	□ 0	□ 1	□ 2	□ 3	□ 4	□ 5		
10. making your sexual activities difficult?	□ 0	□ 1	□ 2	□ 3	☐ 4	□ 5		
11. making you eat less of the foods you like?	□ 0	<u> </u>	□ 2	□ 3	□ 4	□ 5		
12. making you short of breath?	□ 0	□ 1	□ 2	□ 3	□ 4	□ 5		



FORM NO. SEN009									
Acrostic Identifier:									
Study ID:									
Date source form completed (mm/dd/yyyy):		//_							
Minnesota Living With Heart Failure Questionnaire (MLHFQ) - Baseline, Month 6, and Month 12									
	No	Very Little				Very Much			
13. making you tired, fatigued, or low on energy?	□ 0	□ 1	□ 2	□ 3	□ 4	<u> </u>			
14. making you stay in a hospital?	□ 0	☐ 1	□ 2	□ 3	□ 4	□ 5			
15. costing you money for medical care?	□ 0	□ 1	_ 2	□ 3	□ 4	□ 5			
16. giving you side effects from treatments?	□ 0	□ 1	_ 2	□ 3	☐ 4	□ 5			
17. making you feel you are a burden to your family or friends?	□ 0	□ 1	□ 2	□ 3	☐ 4	□ 5			
18. making you feel a loss of self-control in your life?	□ 0	□ 1	□ 2	□ 3	<u> </u>	□ 5			
19. making you worry?	□ 0	<u> </u>	□ 2	□ 3	□ 4	□ 5			
20. making it difficult for you to concentrate or remember things?	□ o	□ 1	□ 2	□ 3	□ 4	□ 5			
21. making you feel depressed?	□ 0	□ 1	□ 2	□ 3	□ 4	<u> </u>			
Comments:									
Entered to eCRF Initials									



FORM NO. SEN011				
Acrostic Identifier:				
Study ID:				
Date source form completed (mm/dd/yyyy):	//	<u> </u>	_	
	Basel	ine R	isk	
Non-CV History - Responses should reflect	past med	dical	history of	ever having any of the following
Diabetes	No		Yes	; <u> </u>
Hypertension	No		Yes	
Hyperlipidemia	No		Yes	
Hypercholesterolemia	No		Yes	
Hypertriglyceridemia	No		Yes	
ВМІ	Ent	er val	ue:	
Smoking	Never		Previous	
	s/Current,	years	smoked:	_ packs/day:
Thyroid disease	No		Yes	;
			If yes	specify: Hyper Hypo Unknown
Liver disease	No		Yes	
Autoimmune disorder	No		Yes	
			If yes, spe	cify type:
			If yes, spe	cify therapy:
CV History - Responses should reflect past	medical	histo	ry of ever	having any of the following
Myocardial infarction	No		Yes	: 🗆
Atrial fibrillation	No		Yes	: 🗆
			-	of onset:
Ventricular arrhythmia	No		Yes	
			If yes, date	of late episode:
Hemorrhagic stroke	No		Ye	
	If yes, spe	ecify: I		Completely resolved Unknown U
			-	e of most recent:
Ischemic stroke	No		Yes	<u> </u>
	it yes, spe	есіту: і		Completely resolved Unknown Unknown
TIAC	NI.			e of most recent:
TIAs	No	<u> </u>	Yes	_ <u>_</u>
Angina No	Stable		Unstable	
CAR	N I -			nstable, date of most recent:
CAD	No		Yes	5



FORM NO. SEN011						
Acrostic Identifier:						
Study ID:						
Date source form completed (mm/dd/yyyy):	/	<u></u>	-			
	Basel	ine Ri	sk			
Valvular heart disease If yes, specify the following for each a (check all valves that apply; for each checked indicate Insufficiency or Stenosis)				rity	(If any severe, subject exclude	
☐ Mitral valve:	Trace		If trace, specify:	Insufficiency	Stenosis [<u>-</u>
	Mild		If mild, specify:	Insufficiency	Stenosis [
	Moderate		If mod, specify:	Insufficiency	Stenosis	
	Severe	\Box	If severe, specify:	Insufficiency	Stenosis	
☐ Pulmonic valve:	Trace	<u> </u>	If trace, specify:	Insufficiency	Stenosis	
	Mild		If mild, specify:	Insufficiency	Stenosis	П
	Moderate		If mod, specify:	Insufficiency	Stenosis	
	Severe		If severe, specify:	Insufficiency	Stenosis	
☐ Tricuspid valve:	Trace		If trace, specify:	Insufficiency	Stenosis	
	Mild		If mild, specify:	Insufficiency	Stenosis [
	Moderate		If mod, specify:	Insufficiency	Stenosis	
	Severe		If severe, specify:	Insufficiency	Stenosis	
Aortic valve:	Trace		If trace, specify:	Insufficiency	Stenosis	
	Mild		If mild, specify:	Insufficiency	Stenosis	
	Moderate		If mod, specify:	Insufficiency	Stenosis	
	Severe		If severe, specify:	Insufficiency 🗌	Stenosis	
If <u>Aortic Stenosis</u> , is valve area > 1.5 cm ² ?	Yes [No [(If No to	o AS > 1.5 cm², su	bject is exclude	ed)
Hospitalization for heart failure	No		Yes 🗌			
			If yes, how many tir	nes in the past 12 m	onths?	
ED visits for heart failure	No		Yes 🗌			
				nes in the past 12 m	onths?	
Peripheral vascular disease	No		Yes 🗆			
Asymptomatic carotid disease	No		Yes 🗌			
Date of diagnosis of Anthracycline Induce	ed Cardi	omyc	pathy:			
Procedure and Repair History						
CABG	No		Yes 🗌			
		•	now many operation	·	ned?	
		If yes,	date of most recent:			



FORM NO. SEN011	
Acrostic Identifier:	
Study ID:	
Date source form completed (mm/dd/yyyy):	_//
	Baseline Risk
PCI	No 🗆 Yes 🗆
	If yes, specify: Balloon only Stent Unknown U
	If yes, date of most recent:
Valve repair	No Yes
	If yes, check all that apply:
	AV
	TV
	Pulmonic 🗍
Valve replacement	No Yes
	If yes, check all that apply:
	AV
	MV ∐ TV □
	Pulmonic
	If yes, specify: Artificial Bioprosthesis Unknown
Oncologic Disease	
Acute lymphatic leukemia	No Yes
	If yes, date of diagnosis:
Breast cancer	No Yes
	If yes, date of diagnosis:
Hodgkin's disease	No Yes
	If yes, date of diagnosis:
Non-Hodgkin's lymphoma	No Yes
	If yes, date of diagnosis:
Sarcomas	No ☐ Yes ☐
	If you date of diagnosis:
	If yes, date of diagnosis:
Other cancers (only include malignant forms of	No □ Yes □
cancer that require treatment, do not mention skin cancer unless melanoma)	If yes, specify type:
	If yes, date of diagnosis:
Date of completion of most recent treatm	ent:



Entered to eCRF

Cardiovascular Cell Therapy Research Network SENECA Protocol Workbook

FORM NO. SEN011					
Acrostic Identifier:					
Study ID:					
Date source form completed (mm/dd/yyyy): _	/				
	Baseline Risk				
Antineoplastic Treatment					
Anthracyclines (check all that apply):					
☐ Doxorubicin	Cumulative dose (mg/m²):	Every attempt s	hould be made		
☐ Epirubicin	Cumulative dose (mg/m²):	to obtain the AIC			
☐ Daunorubicin	Cumulative dose (mg/m²):	and report here as mg/m ² . Leave dose blank only if records are irretrievable.			
∐ Idarubicin	Cumulative dose (mg/m²):				
☐ Liposomal doxorubicin	Cumulative dose (mg/m²):				
U Other (specify):	Cumulative dose (mg/m²):				
Other potentially cardiotoxic agents (ch Her2 directed therapy	eck all that apply):				
Tyrosine kinase inhibitors					
Other (specify):					
Other chemotherapies (check all that apply	/):				
☐ Cyclophosphamide	•				
☐ Cytoxan					
☐ Paclitaxel (taxol)					
☐ Taxotere					
Other (specify):					
Radiation	☐ Have never received ra	idiation therapy			
Check all that apply:					
	If checked, specify total grays: _				
☐ Partial breast	If checked, specify total grays: _				
☐ Post-mastectomy chest wall	If checked, specify total grays: _				
☐ Internal mammary field	If checked, specify total grays: _				
☐ Axillary	If checked, specify total grays: _				
☐ Mantle	If checked, specify total grays: _				
Other (specify):	If checked, specify total grays: _				
If radiation checked, please check here if left	chest was included in the field:				
Comments:					

Initials _____



FORM NO. SEN012									
Acrostic Identifier:									
Study ID:									
Date source form completed (mm/dd/yyyy):/									
		F	hysical E	xam - Base	eline				
Date of exam (mm/dd/yyyy)://									
Vital Signs NYHA Class:									
Height:		inches	centim	neters					
Weight:		pounds	kilogra	ams	II		Subjects with a NYHA Class of I and IV will be		
Temperature:	°F						ineligible for the study.		
Respirations:	breath	ns/minute			□ IV				
Heart rate:	bea	ats/minute							
Blood Pressure:	/ SBP								
Exam: If "Abnormal" is checked, please "Describe" the condition and also check if "Clinically Significant"									
<u>Organs</u>		Not Examined	Normal	Abnormal	Clinically Significant		<u>Describe</u>		
Skin									
HEENT									
Lungs									
CV									
Abdomen									
Lymph Nodes									
Musculoskeletal									
Neurological									
Renal									
Other:									
Device:									
Does subject have an implantable cardiac device? If yes, complete the following: Check the option that applies to the subject's device (check only 1 response): Pacemaker only ICD only Pacemaker plus ICD Biventricular pacing alone (CRT-P) Biventricular pacing with ICD (CRT-D)									
Date of last device implantation (mm/yyyy): Make/model of device:									



FORM NO. SEN012					
Acrostic Identifier:					
Study ID:					
Date source form co	mpleted (mm/dd/yyyy)://				
	Physical Exam - Bas	eline			
Questions:					
	ced any reportable (grade 2 or higher) adverse ned? (If yes, complete AE form)	Yes 🗌 No 🗌			
Was an ECG completed explain in Comments)	? (If no or results clinically significant, please	Yes No No	Please review AE reporting criteria to determine if an		
If yes, wer	re there clinically significant findings on the ECG?	Yes 🔲 No 🗌	AE should also be submitted.		
Infectious Disease labMRI completed to send	llowing tasks were completed: panel drawn and sent for analysis I to the Core Lab Deted before and after the MRI (if applicable)	If a task was not (and will not be) completed, please note details in the Comments.			
Comments:					
Investigator Signature	Initials	_ D	ate:/		



EODM NO CENOAS)							
FORM NO. SEN012								
Acrostic Identifier:								
Study ID:								
Date source form completed (mm/dd/yyyy):/								
Physical Exam - Day 0 (Day of Injection)								
Date of exam (mm/dd/y			_					
	Vital S	Signs						
Weight:		pounds	kilogra	ams				
Temperature:	°F							
Respirations:	breath	ns/minute						
Heart rate:	be	ats/minute						
Blood Pressure:	/ SBP	 DBP	mmHg (su	pine)				
Exam: If "Abnormal" is	checked, p	lease "Desc	ribe" the c	ondition an	d also check if	"Clinically Sig	nificant"	
Have changes occurred	since previo	us visit?	∕es	□ No ex	am done 🔲 🏻 If	no or no exam	done, table is complete.	
<u>Organs</u>		Not Examined	<u>Normal</u>	Abnormal	Clinically Significant		<u>Describe</u>	
Skin								
HEENT								
Lungs								
CV								
Abdomen								
Lymph Nodes								
Musculoskeletal								
Neurological								
Renal								
Other:								
Questions:								
Has the subject experient adverse events since the	•	. ,	_	•	Yes No			
Have there been any changes to medications? (If yes, update Medications form)					Yes 🗌 No	Medicatio	member to update ns form with inter- ges to medications.	
If subject was on anticoagulation therapy, was the INR checked per institutional guidelines and confirmed to be < 1.6 prior to the SPI procedure?					Yes No	□ N/A □	Check N/A if @ BSL pt not on ACT requiring INR checks.	



FORM NO. SEN012	2					
Acrostic Identifier:						
Study ID:						
Date source form co	ompleted (mm/dd/yyyy)://					
	Physical Exam - Day 0 (Day	of Injecti	ion)			
	ted within 6 hours of SPI procedure? v significant, please explain in Comments)	Yes 🗌	No 🗌			
If yes, were the	ere clinically significant findings on the 2D Echo?	Yes 🗌	No 🗌			
	d within 6 hours following the SPI procedure? v significant, please explain in Comments)	Yes 🗌	No 🗌	Please review AE reporting criteria to		
If yes, were	e there clinically significant findings on the ECG?	Yes 🗌	No 🗌	determine if an AE should also be submitted.		
Please make sure the following tasks were completed: ICD interrogation completed before SPI (if applicable) 20ml of peripheral blood collected and prepared for shipment to the Core Lab (if applicable) If a task was not (and will not be) completed, please note details in the Comments.						
Comments:						
Investigator Signature	9	_	[Date://		
Entered to eCRF	Initials					



FORM NO. SEN012								
Acrostic Identifier:								
Study ID:								
Date source form completed (mm/dd/yyyy):/								
		Physical	Exam - Da	y 1 (Day af	ter Injection)			
Date of exam (mm/dd/y	ууу):	!!	-					
Weight:		pounds	kilograr	ns				
Temperature:	°F					n't forget to provide the subject ature log. Temperature should be		
Respirations:	breath	ns/minute				ce a day for 1 week. Log can be all or brought back at the 1 week		
Heart rate:	be	ats/minute			visit.			
Blood Pressure:	/ SBP	 DBP	mmHg (sup	ine)				
Exam: If "Abnormal" is checked, please "Describe" the condition and also check if "Clinically Significant"								
Have changes occurred	since previou	us visit? Y	es No	☐ No exam	n done 🔲 If no	o or no exam done, table is complete.		
<u>Organs</u>		Not Examined	<u>Normal</u>	<u>Abnormal</u>	Clinically Significant	<u>Describe</u>		
Skin								
HEENT								
Lungs								
CV								
Abdomen								
Lymph Nodes								
Musculoskeletal								
Neurological								
Renal								
Other:								
Telemetry (If intervention	was required,	select up to 3 rh	nythms that re	quired interver	ntion and describe	intervention)		
Intervention required?	Yes 🗌 I	No 🗌			to the Question n section below	s section. If Yes, enter at least 1 v.		
If intervention was required, select arrhythmia that required intervention: Sinus tachycardia Supraventricular tachycardia					Describe intervention:			
Atrial fibrillation/flu	al fibrillation/flutter							
Accelerated idiove	Accelerated idioventricular rhythm Ventricular fibrillation							
☐ Multifocal atrial tachycardia ☐ Ventricular tachycardia								



FORM NO. SEN012				
Acrostic Identifier:				
Study ID:				
Date source form co	mpleted (mm/dd/yyyy	/):/		
		Exam - Day 1 (Day af	ter Injection)	
If intervention was required Sinus tachycardia	ed, select arrhythmia that	required intervention: Supraventricular tae	chycardia	Describe intervention:
Atrial fibrillation/flut	tter	Junctional tachycar	dia/rhythm	
Accelerated idiove	ntricular rhythm	☐ Ventricular fibrillation	on	
Multifocal atrial tac	chycardia	☐ Ventricular tachyca	rdia	
If intervention was require Sinus tachycardia	ed, select arrhythmia that	required intervention: Supraventricular tac	chycardia	Describe intervention:
Atrial fibrillation/flu	tter	Junctional tachycar	dia/rhythm	
Accelerated idiove	ntricular rhythm	☐ Ventricular fibrillation	on	
Multifocal atrial tac	chycardia	☐ Ventricular tachyca	rdia	
Questions:				
	ced any new reportable (geprevious visit? (If yes, co		Yes 🗌 No	
Have there been any cha (If yes, update Medication	•		Yes No	Please remember to update Medications form with intervisit changes to medications.
significant, please explai	before discharge? (If no on in Comments) ere there clinically significations.)	•	Yes ☐ No Yes ☐ No	Please review AE reporting criteria to determine if an AE should also be submitted.
Please make sure the followard of peripheral block Core Lab (if applicable)	od collected and prepared			(and will not be) completed, tails in the Comments.
Comments:				
Investigator Signature			_	Date://
Entered to eCRF	Initials			



FORM NO. SEN012							
Acrostic Identifier:							
Study ID:							
Date source form completed (mm/dd/yyyy):/							
			Physical E	Exam - We	ek 1		
Date of exam (mm/dd/y	Date of exam (mm/dd/yyyy):/						
	Vital S	Signs					
Weight:		pounds	kilograr	ns			
Temperature:	°F						
Respirations:	breath	ns/minute					
Heart rate:	be	ats/minute					
Blood Pressure:	/ SBP	 DBP	mmHg (sup	ine)			
Exam: If "Abnormal" is	checked, p	lease "Desc	ribe" the co	ndition and	l also check if "	Clinically Significant"	
Have changes occurred	since previou	us visit?	res No	☐ No exa	m done 🔲 If n	no or no exam done, table is complete.	
<u>Organs</u>		Not Examined	<u>Normal</u>	Abnormal	Clinically Significant	<u>Describe</u>	
Skin							
HEENT							
Lungs							
CV							
Abdomen							
Lymph Nodes							
Musculoskeletal							
Neurological							
Renal							
Other:							
Questions:							
Has the subject experien adverse events since the	-		•	• ,	Yes No		
Have there been any changes to medications? (If yes, update Medications form)					Yes 🗌 No	visit changes to medications.	
Was an ECG completed explain in Comments)	·	•			Yes No	criteria to determine if an	
If yes, were there clinically significant findings on the ECG?					Yes No	AE should also be submitted.	



FORM NO. SEN012		
Acrostic Identifier:		
Study ID:		
Date source form co	mpleted (mm/dd/yyyy)://_	-
	Physical Exam - W	/eek 1
		If a task was not (and will not be) completed, please note details in the Comments.
Investigator Signature	Initials	Date:/



FORM NO. SEN012									
Acrostic Identifier:									
Study ID:									
Date source form completed (mm/dd/yyyy):/									
Physical Exam - Month 1									
Date of exam (mm/dd/yyyy):/									
	Vital	Signs			NYHA Cla	ss:			
Weight:		pounds	kilogran	ns					
Temperature:	°F								
Respirations:	breath	ns/minute							
Heart rate:	be	ats/minute			□ IV				
Blood Pressure:	/ SBP	 DBP	mmHg (sup	ine)	☐ Not ass (If not asses explain in Con	sed,			
Exam: If "Abnormal" is	checked, pl	ease "Desc	ribe" the co	ndition and			Significant"		
Have changes occurred	since previou	us visit?	∕es No	☐ No exan	n done 🔲 🏻 If no	or no ex	am done, table is complete.		
<u>Organs</u>		Not Examined	<u>Normal</u>	<u>Abnormal</u>	Clinically Significant		<u>Describe</u>		
Skin									
HEENT									
Lungs									
cv									
Abdomen									
Lymph Nodes									
Musculoskeletal									
Neurological									
Renal									
Other:									
Questions:									
Has the subject experien adverse events since the	•	. ,	-	• ,	Yes 🗌 No				
Have there been any cha (If yes, update Medicatio	ns form)				Yes 🗌 No	Med	ase remember to update dications form with inter-it changes to medications.		
Please make sure the following task was completed: 20ml of peripheral blood collected and prepared for shipment to the Core Lab (if applicable)					lf task was not please note de	-	I not be) completed, he Comments.		



FORM NO. SEN012									
Acrostic Identifier:									
Study ID:									
Date source form co	Date source form completed (mm/dd/yyyy)://								
	Physical Exam - Month 1								
Comments:									
Investigator Signature	Initials	Date:	/	_/					



FORM NO. SEN012									
Acrostic Identifier:									
Study ID:									
Date source form completed (mm/dd/yyyy):/									
	Physical Exam - Month 6								
Date of exam (mm/dd/yyyy):/									
	Vital S	igns			NYHA CI	ass:			
Weight:		pounds	s kilogra	ams					
Temperature:	°F								
Respirations:	breath	ns/minute							
Heart rate:	bea	ats/minute			□ IV				
5	,		,		☐ Not ass	essed			
Blood Pressure:	SBP	DBP	mmHg (sup	ine)	(If not asse				
Exam: If "Abnormal" is	checked, pl	lease "Desc	cribe" the co	ondition an	explain in Cor d also check if		ly Significant"		
Have changes occurred	since previou	us visit?	Yes No	No exa	am done If	no or no e	exam done, table is complete.		
<u>Organs</u>		Not Examined	<u>Normal</u>	Abnormal	Clinically Significant		<u>Describe</u>		
Skin									
HEENT									
Lungs									
cv									
Abdomen									
Lymph Nodes									
Musculoskeletal									
Neurological									
Renal									
Other:									
Questions:									
Has the subject experien adverse events since the					Yes 🗌 No				
Have there been any cha (If yes, update Medicatio		lications?			Yes 🗌 No	Med	ase remember to update dications form with inter- it changes to medications.		



FORM NO. SEN012					
Acrostic Identifier:					
Study ID:					
Date source form co	mpleted (mm/dd/yyyy)://				
	Physical Exam - Mo	onth 6			
Was an ECG completed explain in Comments)	? (If no or results clinically significant, please	Yes 🗌 No 🗌	Please review AE reporting criteria to determine if an		
If yes, were	there clinically significant findings on the ECG?	Yes 🔲 No 🗌	AE should also be submitted.		
 MRI completed to send ICD interrogation comp 	oleted before and after the MRI (if applicable) od collected and prepared for shipment to the	If a task was not (and will not be) completed, please note details in the Comments.			
Comments:					
Investigator Signature	Initials		Date:/		



FORM NO. SEN012							
Acrostic Identifier:							
Study ID:							
Date source form co	mpleted (n	nm/dd/yyyy):/_	/			
		Р	hysical E	xam - Mon	th 12		
Date of exam (mm/dd/y	ууу):/						
	Vital S	Signs			NYHA C	lass:	
Weight:		pounds	kilogra	ams	I		
Temperature:	°F				II		
Respirations:	breath	ns/minute					
Heart rate:	bea	ats/minute			□ IV		
Dland Drane.	/			nin a)	☐ Not ass	sessed	
Blood Pressure:	SBP	DBP	mmHg (su	pine)	(If not assessed, explain in Comments)		
Exam: If "Abnormal" is	checked, pl	ease "Descri	be" the co	ndition and	_		Significant"
Have changes occurred	since previou	ıs visit? Yo	es No	☐ No exar	m done 🔲 🏻 If I	no or no ex	kam done, table is complete.
<u>Organs</u>		Not Examined	Normal	Abnormal	Clinically Significant		<u>Describe</u>
Skin							
HEENT							
Lungs							
CV							
Abdomen							
Lymph Nodes							
Musculoskeletal							
Neurological							
Renal							
Other:							
Questions:							
Has the subject experien adverse events since the					Yes 🗌 No		
Have there been any cha (If yes, update Medicatio		lications?			Yes 🗌 No	Med Med	ase remember to update lications form with inter- t changes to medications.



FORM NO. SEN012) -	
Acrostic Identifier:		
Study ID:		
Date source form co	ompleted (mm/dd/yyyy)://	
	Physical Exam - Mor	nth 12
Was an ECG completed explain in Comments)	1? (If no or results clinically significant, please	Yes No Please review AE reporting criteria to determine if an
	ere there clinically significant findings on the ECG	? Yes No AE should also be submitted.
the subject? (If no, plea If yes, what was the date	station requested to assess the cancer status of use explain in Comments) se of the evaluation (mm/dd/yyyy)? st saw oncologist or post-cancer f/up care provide addressed by end)	Yes
Reminder: If the subject	ct has not yet had their SOC visit, please be s	ure to click the "Save Incomplete" button.
If yes, pleas	· · · · · · · · · · · · · · · · · · ·	active cancer or recurrence is suspected acertain if any active cancer or recurrence is present attive cancer or recurrence was detected
If B selected, please ent	er date of test(s) indicating possible active diseas	se (mm/dd/yyyy):/
If B selected, please incl	lude any pending tests/scans/biopsies:	
-	icate detection date (mm/dd/yyyy):// lude tests/scans/biopsies that led to detection:	
 MRI completed to sen 	ollowing tasks were completed: d to the Core Lab pleted before and after the MRI (if appliacble)	If a task was not (and will not be) completed, please note details in the Comments.
Comments:		
Investigator Signature	e Initials	Date:/



FORM NO. SEN012							
Acrostic Identifier:							
Study ID:							
Date source form co	mpleted (n	nm/dd/yyyy):/				
				Exam - Inte	rim		
Date of exam (mm/dd/y	ууу):/	'/_					
	Vital	Signs			NYHA Cla	ss:	
Weight:		pounds	kilogra	ams	П		
Temperature:	°F				П		
Respirations:	breath	ns/minute					
Heart rate:	be	ats/minute			□ IV		
Blood Pressure:	/ SBP	——— / ——— mmHg (supine) SBP DBP			☐ Not asses	sed,	
Exam: If "Abnormal" is	checked, pl	ease "Descri	ibe" the co	ndition and			/ Significant"
<u>Organs</u>		<u>Not</u> Examined	Normal	Abnormal	Clinically Significant		<u>Describe</u>
Skin							
HEENT							
Lungs							
CV							
Abdomen							
Lymph Nodes							
Musculoskeletal							
Neurological							
Renal		Ш					
Other:							
Questions:							
Has the subject experien adverse events since the	•			• ,	Yes 🗌 No[
Have there been any cha (If yes, update medicatio		lications?			Yes 🗌 No	Med	nse remember to update lication form with inter- t changes to medications.
Comments:							
Investigator Signature		ıls			_	Date:	/



FORM	1 NO. SEN01	4								
Acros	tic Identifier:									
Study	ID:									
medicat informat INR che	Medications Enter or update medication information here. To add a medication, click the "Add New Medication" button, enter medication information, and click "Add". Repeat for each medication. Medications will be listed in a table below as they are entered. To modify medication information, click "Select" to the right of the medication in the table, edit the information and click 'Update'. On the first form entered, a response must be given to the "At baseline, is subject on an anticoagulation medication that requires an institutional INR check?" question.									
At		ubject on an anticoagulation	on medica	ation that r	equires an		onal INR c	heck?	No Yes	
	Date Source Form Completed	Medication Name	Dose	Unit	Frequency	Prior to Study Start	Start Date	Stop Date	Comments	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
Comm	nents:									



FORM NO. SEN015		
Acrostic Identifier:		
Study ID:		
Date source form completed (m	n/dd/yyyy):/	
	Medication Allergies	
Drug Allergies: NKDA ☐	Yes	
Comments:		
Entered to eCRE Initials		



FORM NO. SEN016						
Acrostic Identifier:						
Study ID:	Study ID:					
Ad	verse Events					
Date source form completed (mm/dd/yyyy):/_	_/					
Date of onset (mm/dd/yyyy)://	Resolved date (mm/dd/yyyy):/					
Date site learned of the event (mm/dd/yyyy):/_						
Report all AEs rated as severity grade 2 or higher (per reporting/recording per protocol. (CTCAE=Common	·					
1. Adverse event:						
2. Severity: Grade 1 - Mild (not entered in decorate) Grade 2 - Moderate Grade 3 - Severe Grade 4 - Life Threatening or D Grade 5 - Death	, and the second					
3. Was this event expected?	Please refer to the Investigators Brochure/Informed Consent Form. Medical Monitor will be making final determination of expectedness for the purposes of reporting to the DSMB and FDA.					
4. Was the patient hospitalized ☐ Yes ☐ No > 24 hours?						
4a. Admission date (mm/dd/yyyy):/_						
4b. Admission diagnosis:						
4c. Date of discharge (mm/dd/yyyy):	<u></u>					
4d. Discharge diagnosis:						
5. Related to study procedure: (Check only one)	Study product injection MRI 6 minute walk test Not related to study procedure					
6. Relationship to study treatment/procedure: (Check only one)	Unrelated Unlikely Possibly Probably Definitely related					
	Resolved or stabilized without sequelae Resolved or stabilized with sequelae Ongoing Death: AE present at death, but not cause Death: death due to AE					



FORM NO. SEN016					
Acrostic Identifier:					
Study ID:					
4	Adverse Ev	ents			
8. Was this a Serious Adverse Event (SAE)? (see #9 below)	□Yes	□No	If yes to #8 and yes or no to #8a, rest of form is required.		
a. Was this event a Clinical Endpoint (CE)?	□Yes	□No	If no to #8 & yes to #8a, skip to number 10. If no to #8 and #8a, skip to "PI review AE".		
Complete for Serious Adverse Event Only:					
Date AE progressed to SAE (mm/dd/yyyy):/_	/		Note: If event starts as a SAE, enter		
Date site learned AE progressed to SAE (mm/dd/y	/yyy):/_	/	"Date of onset" in these date fields		
9. Indicate the outcome or nature of the event that defines it as a Serious Adverse Event (SAE): (Check all that apply)	9.a.1 I	/	r the date (mm/dd/yyyy) of death:		
	☐ Was life-☐ Required hospitaliz ☐ Resulted ☐ Resulted	Yes No threatening hospitalization in persistent	on or prolongation of existing or significant disability/incapacity tal anomaly/birth defect		
10. Describe the clinical history of the SAE/CE:					
11. Describe the associated signs and symptoms of	of the SAE/C	E:			
12. Specify what the event is related to if not the si	tudy product	(e.g. study pr	ocedure, other conditions/illness):		
13. Describe relevant past medical history:					
14. Describe the medical management for the SAE/CE:					
15. Record abnormal diagnostic studies relevant to Note: If not applicable, enter "none"	SAE/CE:				
16. Is the patient currently taking medication in response to SAE/CE?If Yes, confirm that all medications have been report	☐ Yes	☐ No edications form	n.		



Cardiovascular Cell Therapy Research Network

SENECA Protocol Workbook

FORM NO. SEN016	
Acrostic Identifier:	
Study ID:	
	Adverse Events
Comments:	
☐ PI reviewed AE	Date PI reviewed AE (mm/dd/yyyy):/
☐ PI reviewed SAE/CE	Date PI reviewed SAE/CE (mm/dd/yyyy):/
Note: Only required if event is a SAE/CE or	if AE progressed to SAE/CE
PI Signature	/Date://
Entered to eCRF Initials	

- Major adverse cardiac events (MACE) including: death, hospitalization for worsening heart failure (HF), and/or other exacerbation of HF (non-hospitalization)
- Other significant clinical events including: non-fatal stroke, non-fatal myocardial
 infarction, coronary artery revascularization, ventricular tachycardia/fibrillation,
 pericardial tamponade, infectious myocarditis, hypersensitivity reaction, neoplasm,
 and/or any other potential deleterious late effects detected and corroborated by clinical
 presentation, laboratory investigations, image analysis, and when necessary with biopsy
 from suspected target sites in the body



FORM NO. SEN016	
Acrostic Identifier:	
Study ID:	
A	dverse Events
Date source form completed (mm/dd/yyyy):/_	
Date of onset (mm/dd/yyyy)://	Resolved date (mm/dd/yyyy)://
Date site learned of the event (mm/dd/yyyy):/_	
Report all AEs rated as severity grade 2 or higher (preporting/recording per protocol. (CTCAE=Common	,
1. Adverse event:	
2. Severity: Grade 1 - Mild (not entered in o Grade 2 - Moderate Grade 3 - Severe Grade 4 - Life Threatening or I Grade 5 - Death	, and the second
3. Was this event expected?	Please refer to the Investigators Brochure/Informed Consent Form. Medical Monitor will be making final determination of expectedness for the purposes of reporting to the DSMB and FDA.
4. Was the patient hospitalized ☐ Yes ☐ No > 24 hours?	
4a. Admission date (mm/dd/yyyy):/_	/
4b. Admission diagnosis:	
4c. Date of discharge (mm/dd/yyyy):	<i></i>
4d. Discharge diagnosis:	
5. Related to study procedure: (Check only one)	Study product injection MRI 6 minute walk test Not related to study procedure
6. Relationship to study treatment/procedure: (Check only one)	☐ Unrelated ☐ Unlikely ☐ Possibly ☐ Probably ☐ Definitely related
7. Outcome: (Check only one)	Resolved or stabilized without sequelae Resolved or stabilized with sequelae Ongoing Death: AE present at death, but not cause Death: death due to AE



FORM NO. SEN016					
Acrostic Identifier:					
Study ID:					
Adverse Events					
8. Was this a Serious Adverse Event (SAE)? (see #9 below) Yes No	If yes to #8 and yes or no to #8a, rest of form is required. If no to #8 & yes to #8a, skip to number 10.				
a. Was this event a <i>possible</i> Clinical Endpoint (CE)? Yes No	If no to #8 and #8a, skip to "PI review AE".				
Note: Selecting yes to a possible CE is a flag that sends the event for adjudical mean the event is indeed a clinical endpo	- · · · · · · · · · · · · · · · · · · ·				
Complete for Serious Adverse Event Only:					
Date AE progressed to SAE (mm/dd/yyyy):/ Date site learned AE progressed to SAE (mm/dd/yyyy):/	Note: If event starts as a SAE, enter "Date of onset" in these date fields				
9. Indicate the outcome or nature of the event that defines it as a Serious Adverse Event (SAE): (Check all that apply) Resulted in death 9.a.1 If death, enter //	the date (mm/dd/yyyy) of death:				
9.a.2 Was an autopsy performed? Yes No Unknown Was life-threatening Required hospitalization or prolongation of existing hospitalization Resulted in persistent or significant disability/incapacity Resulted in a congenital anomaly/birth defect Other important medical event					
10. Describe the clinical history of the SAE/CE:					
11. Describe the associated signs and symptoms of the SAE/CE:					
12. Specify what the event is related to if not the study product (e.g. study pro	cedure, other conditions/illness):				
13. Describe relevant past medical history:					
14. Describe the medical management for the SAE/CE:					



Cardiovascular Cell Therapy Research Network

SENECA Protocol Workbook

FORM NO. SEN016	
Acrostic Identifier:	
Study ID:	
	Adverse Events
15. Record abnormal diagnostic studies rel Note: If not applicable, enter "none"	evant to SAE/CE:
16. Is the patient currently taking medication response to SAE/CE? If Yes, confirm that all medications have been	
Comments:	
☐ PI reviewed AE	Date PI reviewed AE (mm/dd/yyyy):/
☐ PI reviewed SAE/CE	Date PI reviewed SAE/CE (mm/dd/yyyy):/
Note: Only required if event is a SAE/CE or it	FAE progressed to SAE/CE
PI Signature	Date:/
Entered to eCRF	

- Major adverse cardiac events (MACE) including: death, hospitalization for worsening heart failure (HF), and/or other exacerbation of HF (non-hospitalization)
- 2. Other significant clinical events including: non-fatal stroke, non-fatal myocardial infarction, coronary artery revascularization, ventricular tachycardia/fibrillation, pericardial tamponade, infectious myocarditis, hypersensitivity reaction, neoplasm, and/or any other potential deleterious late effects detected and corroborated by clinical presentation, laboratory investigations, image analysis, and when necessary with biopsy from suspected target sites in the body



FORM NO. SEN017						
Acrostic Identifier:						
Study ID:						
Date source form con	npleted (mm/dd/yyy)	/):/_				
	Labor	atory Tests - Base	eline			
Date specimen obtained (mm/dd/yyyy):/						
CBC with Differentia	ıl Result	Unit	Normal Range	">" or "<"		
WBC		K/mm ³	3.6-11.0 K/mm ³			
RBC		M/mm ³	3.71-5.9 M/mm ³			
Hgb		gm/dL	11-17.7 gm/dL			
Hct		%	33-54%			
MCV		fL	78-100 fL			
Platelets		K/mm ³	140-450 K/mm ³			
WBC Differential						
Neutrophilis		%	35-85%			
Lymphocytes		%	10-65%			
Monocytes		%	0-13%			
Eosinophils		%	0-8%			
Basophils		%	0-3.0%	<		
Chemistry Tests						
Na+		mmol/L	135-148 mmol/L			
K+		mmol/L	3.3-5.5 mmol/L			
Chloride		mmol/L	96-109 mmol/L			
CO ₂		mmol/L	19-34 mmol/L			
Glucose		mg/dL	40-200 mg/dL			
BUN		mg/dL	5-26 mg/dL			
Creatinine		mg/dL	0.4-1.27 mg/dL	<		
eGFR		ml/min/1.73m ²	60-180	>		
Liver Functions						
Bilirubin-Total		mg/dL	0.0-1.2 mg/dL	<		
Bilirubin-Direct		mg/dL	0.0-0.5 mg/dL	<		
Total Protein		g/dL	5.4-9.0 g/dL			
Albumin		g/dL	3.3-5.2 g/dL			
ALT		U/L	0.0-60 U/L	<		
AST		U/L	0.0-40 U/L	<		
Alkaline Phosphatase		U/L	20-136 U/L	<		



FORM NO. SEN017							
Acrostic Identifier:							
Study ID:							
Date source form con	Date source form completed (mm/dd/yyyy):/						
	La	boratory Tests - B	Baseline				
Cardiac Markers (Either Troponin T or Troponin I should be completed, NOT both)							
Troponin T		ng/ml	0.0-10 ng/ml	<			
Troponin I		ng/ml	0.0-100 ng/ml	<			
Other Tests		·	·				
NT-proBNP		pg/ml	0-2,000 pg/ml				
HbA1c		%	4.0-6.9 %	<			
INR		seconds	< 1.2	< and >			
PTT		seconds	23-42.2 secs				
PRA		%	0-99%				
PT		seconds	0.9-14.9	<			
Pregnancy Test (wor			Negative (urine)				
childbearing potential	<i>'</i>		< 5.0 mU/ml (quanti	tative blood)			
Not applicable/Not do	one						
Infectious Diseases							
Infectious disease tes	sts collected						
Comments:							
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy):/							
Entered to eCRF		Initials					



FORM NO. SEN01	7					
Acrostic Identifier:						
Study ID:						
Date source form of	ompleted (m	m/dd/yyyy):/			
	Lab	oratory Te	ests - Day 0 (Day	of Injection)		
Pre-NOGA	Date (mm/	Date (mm/dd/yyyy):/ Time (hhmm):				
CBC with Differen	BC with Differential Result Unit Normal Range ">" or "<"					
WBC			K/mm ³	3.6-11.0 K/mm ³		
RBC			M/mm ³	3.71-5.9 M/mm ³		
Hgb			gm/dL	11-17.7 gm/dL		
Hct			%	33-54%		
MCV			fL	78-100 fL		
Platelets			K/mm ³	140-450 K/mm ³		
WBC Differential						
Neutrophilis			%	35-85%		
Lymphocytes			%	10-65%		
Monocytes			%	0-13%		
Eosinophils			%	0-8%		
Basophils %			%	0-3.0%	<	
Chemistry Tests						
Na+			mmol/L	135-148 mmol/L		
K+			mmol/L	3.3-5.5 mmol/L		
Chloride			mmol/L	96-109 mmol/L		
CO ₂			mmol/L	19-34 mmol/L		
Glucose			mg/dL	40-200 mg/dL		
BUN			mg/dL	5-26 mg/dL		
Creatinine			mg/dL	0.4-1.27 mg/dL	<	
eGFR			ml/min/1.73m ²	60-180	>	
Cardiac Markers (Either Troponi	in T or Trop	onin I should be con	npleted, NOT both)		
Troponin T			ng/ml	0.0-10 ng/ml		
Troponin I			ng/ml	0.0-100 ng/ml		
Post-NOGA	Post-NOGA					
CBC with Differen	itial	Result	Unit	Normal Range	">" or "<"	
WBC			K/mm ³	3.6-11.0 K/mm ³		
RBC			M/mm ³	3.71-5.9 M/mm ³		
Hgb			gm/dL	11-17.7 gm/dL		
Hct			%	33-54%		
MCV			fL	78-100 fL		
Platelets			K/mm ³	140-450 K/mm ³		



FORM NO. SEN017					
Acrostic Identifier:					
Study ID:					
Date source form completed (r	mm/dd/yyyy):				
Lal	boratory Tests - I	Day 0 (Day of In	jection)		
WBC Differential					
Neutrophilis	%	35	-85%		
Lymphocytes	%	10-	-65%		
Monocytes	%	0-1	13%		
Eosinophils	%	3-0	3%		
Basophils	%	0-3	3.0%	<	
Cardiac Markers (Either Tropol	nin T or Troponin I s	hould be complete	ed, NOT both)		
Troponin T	ng/n	nl 0.0)-10 ng/ml		
Troponin I	ng/n	nl 0.0	0-100 ng/ml		
Other Tests					
Pregnancy Test (women of childbearing potential) Not applicable/Not done Negative (urine) < 5.0 mU/ml (quantitative blood)					
Comments:					
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy):/					
Entered to eCRF	Initials				



FORM NO. SEN017						
Acrostic Identifier:						
Study ID:						
Date source form completed (mm/dd/yyyy):/						
	Labora	atory Test	s - Day 1 (Day af	ter Injection)		
Date specimen obtained (mm/dd/yyyy):/						
CBC with Differentia	ıl	Result	Unit	Normal Range	">" or "<"	
WBC			K/mm ³	3.6-11.0 K/mm ³		
RBC			M/mm ³	3.71-5.9 M/mm ³		
Hgb			gm/dL	11-17.7 gm/dL		
Hct			%	33-54%		
MCV			fL	78-100 fL		
Platelets			K/mm ³	140-450 K/mm ³		
WBC Differential						
Neutrophilis			%	35-85%		
Lymphocytes			%	10-65%		
Monocytes			%	0-13%		
Eosinophils			%	0-8%		
Basophils			%	0-3.0%	<	
Chemistry Tests						
Na+			mmol/L	135-148 mmol/L		
K+			mmol/L	3.3-5.5 mmol/L		
Chloride			mmol/L	96-109 mmol/L		
CO ₂			mmol/L	19-34 mmol/L		
Glucose			mg/dL	40-200 mg/dL		
BUN			mg/dL	5-26 mg/dL		
Creatinine			mg/dL	0.4-1.27 mg/dL	<	
eGFR			ml/min/1.73m ²	60-180	>	
Cardiac Markers (Eitl	her Troponin	T or Tropo	nin I should be com	pleted, NOT both)		
Prior to discharge	Date (mm/c	dd/yyyy):	//	Гіте (hhmm):		
Troponin T			ng/ml	0.0-10 ng/ml	<	
Troponin I ng/ml 0.0-100 ng/ml <			<			
Comments:						
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy)://						



FORM NO. SEN017							
Acrostic Identifier:							
Study ID:							
Date source form completed (mm/dd/yyyy):/							
	Labor	atory Tests - We	ek 1				
Date specimen obta	Date specimen obtained (mm/dd/yyyy):/						
CBC with Differentia	l Result	Unit	Normal Range	">" or "<"			
WBC		K/mm ³	3.6-11.0 K/mm ³				
RBC		M/mm ³	3.71-5.9 M/mm ³				
Hgb		gm/dL	11-17.7 gm/dL				
Hct		%	33-54%				
MCV		fL	78-100 fL				
Platelets		K/mm ³	140-450 K/mm ³				
WBC Differential							
Neutrophilis		%	35-85%				
Lymphocytes		%	10-65%				
Monocytes		%	0-13%				
Eosinophils		%	0-8%				
Basophils		%	0-3.0%	<			
Chemistry Tests							
Na+		mmol/L	135-148 mmol/L				
K+		mmol/L	3.3-5.5 mmol/L				
Chloride		mmol/L	96-109 mmol/L				
CO ₂		mmol/L	19-34 mmol/L				
Glucose		mg/dL	40-200 mg/dL				
BUN		mg/dL	5-26 mg/dL				
Creatinine		mg/dL	0.4-1.27 mg/dL	<			
eGFR		ml/min/1.73m ²	60-180	>			
Cardiac Markers (Eit	her Troponin T or Trop	onin I should be con	npleted, NOT both)				
Troponin T		ng/ml	0.0-10 ng/ml	<			
Troponin I		ng/ml	0.0-100 ng/ml	<			
Comments:							
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy):/							
Entered to eCRF Initials							



FORM NO. SEN017							
Acrostic Identifier:							
Study ID:							
Date source form completed (mm/dd/yyyy):/							
	Labor	atory Tests - Mor	nth 1				
Date specimen obta	ined (mm/dd/yyyy): _	//					
CBC with Differentia	l Result	Unit	Normal Range	">" or "<"			
WBC		K/mm ³	3.6-11.0 K/mm ³				
RBC		M/mm ³	3.71-5.9 M/mm ³				
Hgb		gm/dL	11-17.7 gm/dL				
Hct		%	33-54%				
MCV		fL	78-100 fL				
Platelets		K/mm ³	140-450 K/mm ³				
WBC Differential	•	-	•	•			
Neutrophilis		%	35-85%				
Lymphocytes		%	10-65%				
Monocytes		%	0-13%				
Eosinophils		%	0-8%				
Basophils		%	0-3.0%	<			
Chemistry Tests							
Na+		mmol/L	135-148 mmol/L				
K+		mmol/L	3.3-5.5 mmol/L				
Chloride		mmol/L	96-109 mmol/L				
CO ₂		mmol/L	19-34 mmol/L				
Glucose		mg/dL	40-200 mg/dL				
BUN		mg/dL	5-26 mg/dL				
Creatinine		mg/dL	0.4-1.27 mg/dL	<			
eGFR		ml/min/1.73m ²	60-180	>			
Other Tests							
PRA		%	0-99%				
Comments:	•						
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy):/							
Entered to eCRF Initials							



FORM NO. SEN017				
Acrostic Identifier:				
Study ID:				
Date source form con	npleted (mm/dd/yyyy	/):/		
	Laboratory T	ests - Month 6 an	d Month 12	
Date specimen obta	ined (mm/dd/yyyy): _	//	Visit Type:	
CBC with Differentia	ıl Result	Unit	Normal Range	">" or "<"
WBC		K/mm ³	3.6-11.0 K/mm ³	
RBC		M/mm ³	3.71-5.9 M/mm ³	
Hgb		gm/dL	11-17.7 gm/dL	
Hct		%	33-54%	
MCV		fL	78-100 fL	
Platelets		K/mm ³	140-450 K/mm ³	
WBC Differential				
Neutrophilis		%	35-85%	
Lymphocytes		%	10-65%	
Monocytes		%	0-13%	
Eosinophils		%	0-8%	
Basophils		%	0-3.0%	<
Chemistry Tests				
Na+		mmol/L	135-148 mmol/L	
K+		mmol/L	3.3-5.5 mmol/L	
Chloride		mmol/L	96-109 mmol/L	
CO ₂		mmol/L	19-34 mmol/L	
Glucose		mg/dL	40-200 mg/dL	
BUN		mg/dL	5-26 mg/dL	
Creatinine		mg/dL	0.4-1.27 mg/dL	<
eGFR		ml/min/1.73m ²	60-180	>
Liver Functions				
Bilirubin-Total		mg/dL	0.0-1.2 mg/dL	<
Bilirubin-Direct		mg/dL	0.0-0.5 mg/dL	<
Total Protein		g/dL	5.4-9.0 g/dL	
Albumin		g/dL	3.3-5.2 g/dL	
ALT		U/L	0.0-60 U/L	<
AST		U/L	0.0-40 U/L	<
Alkaline Phosphatase)	U/L	20-136 U/L	<



FORM NO. SEN017					
Acrostic Identifier:					
Study ID:					
Date source form con	npleted (mm/dd/y	yyyy):/	_/		
	Laborator	ry Tests - Month	6 and Month 12		
Other Tests					
NT-proBNP		pg/ml	0-2,000 pg/ml		
HbA1c		%	4.0-6.9 %	<	
PRA		%	0-99%		
Pregnancy Test (women of childbearing potential) Not applicable/Not done			Negative (urine) < 5.0 mU/ml (quar	ititative blood)	
Comments:					
☐ Investigator reviewed Lab report Date Investigator reviewed (mm/dd/yyyy):/					
Entered to eCRF		Initials	_		



FORM NO. SEN017				
Acrostic Identifier:				
Study ID:				
Date source form cor	npleted (mm/dd/yyyy	r):/		
	Labo	ratory Tests - Inte	erim	
Date specimen obta	ined (mm/dd/yyyy): _	/		
CBC with Differentia	al Result	Unit	Normal Range	">" or "<"
WBC		K/mm ³	3.6-11.0 K/mm ³	
RBC		M/mm ³	3.71-5.9 M/mm ³	
Hgb		gm/dL	11-17.7 gm/dL	
Hct		%	33-54%	
MCV		fL	78-100 fL	
Platelets		K/mm ³	140-450 K/mm ³	
WBC Differential	•		•	
Neutrophilis		%	35-85%	
Lymphocytes		%	10-65%	
Monocytes		%	0-13%	
Eosinophils		%	0-8%	
Basophils		%	0-3.0%	<
Chemistry Tests				
Na+		mmol/L	135-148 mmol/L	
K+		mmol/L	3.3-5.5 mmol/L	
Chloride		mmol/L	96-109 mmol/L	
CO ₂		mmol/L	19-34 mmol/L	
Glucose		mg/dL	40-200 mg/dL	
BUN		mg/dL	5-26 mg/dL	
Creatinine		mg/dL	0.4-1.27 mg/dL	<
eGFR		ml/min/1.73m ²	60-180	>
Liver Functions				
Bilirubin-Total		mg/dL	0.0-1.2 mg/dL	<
Bilirubin-Direct		mg/dL	0.0-0.5 mg/dL	<
Total Protein		g/dL	5.4-9.0 g/dL	
Albumin		g/dL	3.3-5.2 g/dL	
ALT		U/L	0.0-60 U/L	<
AST		U/L	0.0-40 U/L	<
Alkaline Phosphatase)	U/L	20-136 U/L	<



FORM NO. SEN017						
Acrostic Identifier:						
Study ID:						
Date source form con	npleted (mm/d	ld/yyyy):/	<i></i>			
		Laboratory Tests - I	Interim			
Cardiac Markers (Eit	her Troponin T	or Troponin I should be	completed, NOT both)			
Troponin T		ng/ml	0.0-10 ng/ml	<		
Troponin I		ng/ml	0.0-100 ng/ml	<		
Other Tests						
NT-proBNP		pg/ml	0-2,000 pg/ml			
HbA1c		%	4.0-6.9 %	<		
INR		seconds	< 1.2	< and >		
PTT		seconds	23-42.2 secs			
PRA		%	0-99%			
PT		seconds	0.9-14.9	<		
Pregnancy Test (women of childbearing potential) Not applicable/Not done			Negative (urine) < 5.0 mU/ml (quantita	ative blood)		
Comments:						
☐ Investigator review	wed Lab repor	t Date Investig	ator reviewed (mm/dd/yyyy):	:/		
Entered to eCRF		Initials				



FORM	1 NO. SEN018			
Acros	tic Identifier:			
Study	ID:			
			Missing Form	
	Form Miss	sing:	Reason/Comment:	Date of this Report:
	Baseline - Physic	cal Exam		
	Baseline - Labs			
	Baseline - Risk			
	Baseline - MLHF	-Q		
	Baseline - 6 Min	Walk		
	Medication Aller	gies		
	Medications			
	Eligibility			
	Treatment Chec	klist		
	Day 0 - Physical	Exam		
	Day 0 - Labs			
	Day 0 - Study Product Injection			
	Day 1 - Physical Exam			
	Day 1 - Labs			
	Wk 1 - Physical	Exam		
	Wk 1 - Labs			
	Mo 1 - Physical I	Exam		
	Mo 1 - Labs			
	Mo 6 - Physical I	Exam		
	Mo 6 - Labs			
	Mo 6 - MLHFQ			
	Mo 6 - 6 Minute Walk			
	Mo 12 - Physical Exam			
	Mo 12 - Labs			
	Mo 12 - MLHFQ			
	Mo 12 - 6 Minute	e Walk		
	Mo 24 - F/U Pho	ne Contact		
	End of Study			



FORM NO. SEN020			
Acrostic Identifier:			
Study ID:			
Six Minute Walk Test - Base	line, Mon	th 6, and Month 12	
Date source form completed (mm/dd/yyyy):	_//_		
Visit Type:	ī		
Date of walk test (mm/dd/yyyy):// Tests performed by:		If date of tests and/or who performs the tests differ, please put a note in the Comments.	
Heart rate: beats/minute			
Blood pressure: / mmHg (sup	oine)		
TEST 1 START OF TEST		TEST 1 END OF TEST	
Borg rating of shortness of breath:	Borg ratin	g of shortness of breath:	
Borg rating of overall fatigue:	Borg rating of overall fatigue:		
Start time (hhmm):	Stop time	Stop time (hhmm):	
Stopped or paused?	If yes, see	e next.	
What if anything, kept the subject from walking fu	urther?		
Total distance walked meters (T1)	Enter 0	if subject unable to attempt; explain in Comments box for T1.	
Comments for T1:			
TEST 2 START OF TEST		TEST 2 END OF TEST	
Borg rating of shortness of breath:	Borg rating of shortness of breath:		
Borg rating of overall fatigue:	Borg rating of overall fatigue:		
Start time (hhmm):	Stop time (hhmm):		
Stopped or paused?	If yes, see	e next.	
What if anything, kept the subject from walking fu	urther?		



FORM NO. SEN020					
Acrostic Identifier:					
Study ID:					
Six Minute Walk Test - Base	line, Mon	th 6, and Month 12			
Total distance walked meters (T2)	Enter 0	if subject unable to attempt; explain in Comments box for T2.			
Comments for T2:					
After T2, calculate the % change between T1 and total distance walked. If > 10%, Test 3 is required.	T2 for	<i>Calculation:</i> [T1-T2 / Max(T1, T2)] * 100			
% change: %		Shaded fields are filled in by 6 MWT eCRF programming.			
TEST 3 START OF TEST		TEST 3 END OF TEST			
Borg rating of shortness of breath:	Borg ratir	ng of shortness of breath:			
Borg rating of overall fatigue:	Borg rating of overall fatigue:				
Start time (hhmm):	Stop time (hhmm):				
Stopped or paused?	If yes, se	e next.			
What if anything, kept the subject from walking further?					
Total distance walked meters (T3)	Enter 0	if subject unable to attempt; explain in Comments box for T3.			
Comments for T3:					
Comments:					
Entered to eCRF Initials					



FOF	RM NO.	SEN02	3
Acrostic Identifier:			
Stu	dy ID:		
Date source form completed (mm/dd/yyyy):/			
			Eligibility Criteria
	Υ	N	Inclusion Criteria (Must answer Yes to be eligible)
1			Subject is ≥ 18 and < 80 years of age.
2			Be a cancer survivor with diagnosis of AIC.
3			Have an LVEF ≤ 45% by cMRI.
4			Be in NYHA class II-III.
5			Have received the initial diagnosis of AIC at least six months earlier and be on stable, optimally tolerated therapy with beta-blockers, ACE inhibitors/ARBs, and/or aldosterone antagonists for 3 months, unless contraindicated.
6			Have a period of at least two years of clinical cancer-free state* and low likelihood of recurrence (a five-year risk of recurrence estimated at 30% or less), as determined by an oncologist, based on tumor type, response to therapy, and negative metastatic work-up at the time of diagnosis. *exceptions to this are carcinoma in situ or fully resected basal and squamous cell cancer of the skin
7			Be a candidate for cardiac catheterization.
	Υ	N	Exclusion Criteria (Must answer No to all questions to be eligible)
1			A life expectancy <12 months.
2			A CT scan or baseline cardiac MRI showing new tumor or suspicious lymphadenopathy raising concern of malignancy.
3			Presence of obstructive CAD as determined via imaging within 5 years prior to study enrollment provided there have been no symptoms or evidence of CAD since the test (see Section 4.1 for imaging guidance).
4			Had a previous myocardial infarction.
5			A history of radiation therapy AND evidence of constrictive physiology and/or evidence of other patterns of non-ischemic cardiomyopathy on cardiac MRI (e.g. amyloidosis, sarcoidosis, hemochromatosis, pure radiation-induced cardiomyopathy, etc.) not consistent with AIC being the dominant etiology of heart failure.
6			Severe valvular heart disease including mechanical or bioprosthetic heart valve; or 2) severe valvular (any valve) insufficiency/regurgitation within 12 months of consent.
7			Aortic stenosis with valve area ≤ 1.5cm ² .
8			A history of LV reduction surgery or cardiomyoplasty.
9			Evidence of cardiogenic shock.
10			A history of ischemic or hemorrhagic stroke within 90 days of baseline testing.
11			Liver dysfunction during baseline testing, as evidenced by enzymes (e.g., AST, ALT, alkaline phosphatase) greater than 3 times upper limit of normal.
12			Diabetes with poorly controlled blood glucose levels (HbA1c > 8.5%).
13			An underlying autoimmune disorder or current immunosuppressive therapy (e.g., chronic corticosteroid, rheumatologic or immune modulating therapy) or likelihood of use of immunosuppressive therapy during participation in the trial (medications will be considered on a case by case basis).
14			A baseline eGFR < 35 ml/min/1.73m ² .
15			A contrast allergy that cannot adequately be managed by premedication.
16			Received gene or cell-based therapy from any source within the previous 12 months.



FORM NO. SEN023						
Acrostic Identifier:		ntifier:				
Study ID:						
Date	Date source form completed (mm/dd/yyyy):/					
			Eligibility Criteria			
17			A hematologic abnormality during baseline testing as evidenced by hemoglobin < 9 g/dl; hematocrit < 30%; absolute neutrophil count < 2,000 or total WBC count more than 2 times upper limit of normal; or platelet values < 100,000/ul.			
18			Evidence of active systemic infection at time of study product delivery.			
19			HIV, and/or active HBV or HCV.			
20			Coagulopathy (INR > 1.5) not due to a reversible cause (e.g., warfarin and/or Factor Xa inhibitors) (see Section 6.4 re: injection procedure and anticoagulation therapy) Note: Subjects who cannot be withdrawn from anticoagulation will be excluded.			
21			Presence of LV thrombus (see guidance in Section 6.6.3).			
22			Presence of a pacemaker and/or ICD generator with any of the following limitations/conditions: If yes, please check the relevant limitation(s)/condition(s) below (required): manufactured before the year 2000 leads implanted < 6 weeks prior to consent non-transvenous epicardial, or abandoned leads subcutaneous ICDs leadless pacemakers any other condition that, in the judgement of device-trained staff, would deem an MRI contraindicated			
23			Pacemaker-dependence with an ICD (Note: pacemaker-dependent candidates without an ICD are not excluded).			
24			A cardiac resynchronization therapy (CRT) device implanted less than 3 months prior to consent.			
25			Other MRI contraindications (e.g. patient body habitus incompatible with MRI).			
26			An appropriate ICD firing or anti-tachycardia pacing (ATP) for ventricular fibrillation or ventricular tachycardia within 30 days of consent.			
27			Ventricular tachycardia ≥ 20 consecutive beats without an ICD within 3 months of consent, or symptomatic Mobitz II or higher degree atrioventricular block without a functioning pacemaker within 3 months of consent.			
28			A history of drug abuse (use of illegal "street" drugs except marijuana, or prescription medications not being used appropriately for a pre-existing medical condition) or alcohol abuse (≥ 5 drinks/day for > 3 months), or documented medical, occupational, or legal problems arising from the use of alcohol or drugs within the past 24 months.			
29			Cognitive or language barriers that prohibit obtaining informed consent or any study elements (interpreter permitted).			
30			Participation (currently or within the previous 30 days) in a cardiac related investigational therapeutic (including stem cell based therapies) or device trial.			
31			Pregnancy, lactation, plans to become pregnant in the next 12 months, or is unwilling to use acceptable forms of birth control during study participation.			
32			Any other condition that, in the judgment of the Investigator or Sponsor, would be a contraindication to enrollment, study product administration, or follow-up.			
			bject became ineligible during the screening process; not all data were collected to answer every n; all questions addressed with the patient have been answered.			



FORM NO. SEN02	3		
Acrostic Identifier:			
Study ID:			
Date source form of	ompleted (mm/dd/yyyy):/_	/	
	E	ligibility Criteria	
Comments:			
☐ Investigator rev	iewed Eligibility Criteria workshe	et Date Inve	stigator reviewed (mm/dd/yyyy)://
PI Signature		Da	te:/
RNC Signature		Da	te:/
Entered to eCRF		Initials	



FORM NO. SEN025	5	
Acrostic Identifier:		
Study ID:		
Date source form co	ompleted (mm/dd/yyyy)://	_
	Study Product Injection	n (SPI)
Vital Signs Pre-Pro	ocedure (Pre-Study Product Injection)	
Date (mm/dd/yyyy):	/ Time (hhmm):	
Temperature:	°F	
Respirations:	breaths/min	
Heart rate:	beats/min	
Blood pressure:	/ mmHg (supine)	
Study Product Inje	ction Period	
Procedure start date	e (mm/dd/yyyy):/	
Catheterization prod	cedure Start time (hhmm):	Stop time (hhmm):
Mapping procedure	Start time (hhmm):	Stop time (hhmm):
Injection procedure	Start time (hhmm):	Stop time (hhmm):
Antero- septal Infero- septal PDA	7 6 lateral 13 12 11 5 11 5 Infero-	Anterior Anterior Anterior Anterior Infero- Septal PDA Inferior
	17 segment (TX)	12 segment (all others)



FORM NO. SEN025								
Acrostic Identifier:								
Study ID:								
Date source form completed (mm/dd/yyyy)://								
Injection Information								
Injection Points	Segment Number	Loop Stability	UPV	Presence of PVCs	Volume of Injection	Not Done		
1		mm	mV	Yes 🗌 No 🔲	ml			
2		mm	mV	Yes 🗌 No 🗌	ml			
3		mm	mV	Yes 🗌 No 🔲	ml			
4		mm	mV	Yes No	ml			
5		mm	mV	Yes 🗌 No 🔲	ml			
6		mm	mV	Yes 🗌 No 🔲	ml			
7		mm	mV	Yes 🗌 No 🗌	ml			
8		mm	mV	Yes 🗌 No 🔲	ml			
9		mm	mV	Yes 🗌 No 🔲	ml			
10		mm	mV	Yes 🗌 No 🔲	ml			
11		mm	mV	Yes 🗌 No 🔲	ml			
12		mm	mV	Yes 🗌 No 🔲	ml			
13		mm	mV	Yes 🗌 No 🗌	ml			
14		mm	mV	Yes 🗌 No 🔲	ml			
15		mm	mV	Yes 🗌 No 🔲	ml			
16		mm	mV	Yes 🗌 No 🔲	ml			
17		mm	mV	Yes 🗌 No 🗌	ml			
18		mm	mV	Yes 🗌 No 🗌	ml			
19		mm	mV	Yes 🗌 No 🗌	ml			
20		mm	mV	Yes 🗌 No 🔲	ml			
Total Injections: Total Volume: Shaded fields are filled eCRF programming								



FORM NO. SEN025	5							
Acrostic Identifier:								
Study ID:								
Date source form co	ompleted (mm/dd/yyyy):/							
Vital Signs Post-Procedure (Post-Study Product Injection)								
Date (mm/dd/yyyy):/ Time (hhmm):								
Temperature:	°F							
Respirations:	breaths/minute							
Heart rate:	beats/minute							
Blood pressure:	——— / ——— mmHg (supine) SBP DBP							
Questions								
1. Did the patient ex (If yes, please comp	sperience an adverse event during mapping? Dlete AE form)	Yes 🗌	No 🗌					
2. Were all 20 inject (If no, please explai	Yes 🗌	No 🗌						
-	procedure prematurely stopped due to any reason , complete AE and/or UP form)	Yes 🗌	No 🗌					
4. Was the procedu	re restarted?	Yes 🗌	No 🗌	N/A 🗌				
5. Did the patient ex procedure? (If yes,	sperience an adverse event during the injection complete AE form)	Yes 🗌	No 🗌					
6. Were concomitar (If yes, please upda	Yes 🗌	No 🗌						
Comments:	·							
Entered to eCRF	Initials							



Cardiovascular Cell Therapy Research Network

SENECA Protocol Workbook

FORM NO. SEN025	
Acrostic Identifier:	
Study ID:	
Date source form completed (mm/dd/yyyy):/	

5.5 Circumstances That May Affect Study Product Delivery

If any of the following symptoms occur before or during SPI, they could indicate a serious clinical deterioration. If any of the following events/symptoms occurs, the procedure should be temporarily halted and the patient should be reevaluated for suitability to continue with the treatment under investigation:

- Hypotensive episode defined as a sustained drop in blood pressure exceeding 20 mmHg not responsive to fluid administration
- 2. Hemodynamically significant arrhythmia requiring antiarrhythmic therapy
- Two episodes of sustained ventricular tachycardia/ventricular fibrillation requiring cardioversion
- 4. Hemodynamically unstable
- Fever (temperature increase to ≥100.4°F)
- Cardiac perforation
- 7. Clinical signs and symptoms indicating a cerebrovascular accident



FORM NO. SEN027						
Acrostic Identifier:						
Study ID:						
Date source form completed:/		_				
Follow	/-Up	Telephone C	onta	act		
Date of Call/Contact://						
Contact Initiated by (check one):		Site		Subject		
Questions being answered by:		Patient		Family Member		
Vital Status						
a. What is the patient's vital status?		Living		Deceased		
If deceased, provid	e est	imated date:				
If deceased, what is the known	n cau	se of death?				
b. Does the patient have an ICD?		Yes		No		Unknown
If yes, estimate the	ne da	te last fired?				
c. Is the patient on an assist device?		Yes		No		Unknown
d. Has the patient had a heart transplant?		Yes		No		Unknown
Hospitalizations and Diagnoses						
Since the last time we spoke, have you had	any	of the followir	ng?			
a. Heart attack (myocardial infarction)		Yes		No		Unknown
If yes, provid	e est	imated date:				
b. Bypass surgery (CABG)		Yes		No		Unknown
If yes, provide estimated date:						
c. Stroke		Yes		No		Unknown
If yes, provid	e est	imated date:				
d. Other heart procedures (caths, stents, balloons, etc.)				Yes	□No	Unknown
If yes, provide up to 3 procedures and estimated dates:						
1) Describe:		Date	e:			
2) Describe:			Date	e:		
3) Describe:			Date) :		
-, 200020				- -		



FORM NO. SEN027					
Acrostic Identifier:					
Study ID:					
Date source form co	empleted:/				
	Follow-Up Telephone Contact				
e. Any new cancer diagnoses (including skin) 🗌 Yes 🔲 No 🔲 Unknown					
	If yes, provide estimated date:				
	Indicate type of cancer(s):				
Comments:					
Name of person collecting information:					
Entered to eCRF	Initials				



FORM NO. S	EN077						
Acrostic Identifier:							
Study ID:							
Date source form completed (mm/dd/yyyy):/							
End of Study							
Date of final follow-up study visit (mm/dd/yyyy):/							
Reason for o	discharg	e from the study:					
		Completed study					
		Withdrawn Date of discharge from study (mm/dd/yyyy):					
		Lost to follow-up	/				
		Screen Failure					
If "Withdraw	n", plea	se check the primary reason for withd	rawal:				
Reasons	that req	uire follow-up:					
		Serious Adverse Event (until resolved)	Event Number:				
		Pregnancy (1 year post birth)	Event Number:				
		Other	Describe:				
Reasons	that DO	NOT require follow-up:					
		Death	Event Number:				
		Adverse Event	Event Number:				
		Withdrawal of consent					
		Protocol Deviation/Violation	Dagariha				
		Investigator Discretion	Describe:				
		Sponsor Discretion Other	Describe: Describe:				
Please verify	the following	lowing tasks are complete:	Describe.				
			and available				
		Consents forms are properly signed/date					
	Hard copy workbooks are signed, dated and present in the CCTRN source document patient binder; workbooks may be grouped by a visit with one signature per visit						
☐ All s	All source document data have been entered into the electronic CRF database						
☐ All electronic CRFs have been submitted to the DCC							
I have reviewed all case report forms for this patient and found them to be in complete							
agreement with the source documents							
If any questions arise from the DCC data review (due to missing, unclear, or incorrect entries),							
the authorized staff will supply appropriate corrections Comments:							
Comments.							
PI Signature			Date:/				
RNC Signature			Date:/				
Entered to eCRI	F 🗌	Initials	Workbooks Version 1 07/15/201				