

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 15, 2015

NEOSTEM, INC.
(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-33650
(Commission
File Number)

22-2343568
(IRS Employer
Identification No.)

420 Lexington Avenue, Suite 350, New York, New York 10170
(Address of Principal Executive Offices)(Zip Code)

(212) 584-4180
Registrant's Telephone Number

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 Regulation FD Disclosure.

On Monday, March 16, 2015, NeoStem, Inc., a Delaware corporation (the “Company” or “NeoStem”), issued a press release announcing that updated efficacy and safety results from the one-year follow-up for its Phase 2 PreSERVE AMI study and additional analyses of certain functional tests were presented at ACC.15, the American College of Cardiology’s 64th Annual Scientific Session and Expo, in San Diego, California. A copy of the press release is attached hereto as Exhibit 99.1. The data as presented by Dr. Arshed A. Quyyumi, the Lead Principal Investigator of our PreSERVE AMI Study, at the ACC Expo, is also attached hereto as Exhibit 99.2.

Additionally, NeoStem intends, from time to time, to present and/or distribute to the investment community and utilize at various industry and other conferences a slide presentation. The slide presentation is accessible on NeoStem’s website at www.neostem.com and is attached hereto as Exhibit 99.3. NeoStem undertakes no obligation to update, supplement or amend the materials attached hereto as Exhibit 99.3.

In accordance with General Instruction B.2 of Form 8-K, the information in this Item 7.01 of this Current Report on Form 8-K, including Exhibits 99.1, 99.2 and 99.3, shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Exchange Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by reference in such a filing.

Forward Looking Statements

This Current Report on Form 8-K, including Exhibits 99.1 and 99.3 hereto, contain “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are typically preceded by words such as “believes,” “expects,” “anticipates,” “intends,” “will,” “may,” “should,” or similar expressions, although some forward-looking statements are expressed differently. Forward-looking statements represent the Company’s management’s judgment regarding future events. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, the Company can give no assurance that such expectations will prove to be correct. All statement other than statements of historical fact included in the Current Report on Form 8-K are forward-looking statements. The Company cannot guarantee the accuracy of the forward-looking statements, and you should be aware that the Company’s actual results could differ materially from those contained in the forward-looking statements due to a number of factors, including the statements under “Risk Factors” contained in the Company’s reports filed with the Securities and Exchange Commission.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Description
99.1	Press Release dated March 16, 2015*
99.2	Pre-SERVE AMI ACC Expo Slide Presentation*
99.3	Slide presentation of NeoStem, Inc. dated March 2015*

*Exhibits 99.1, 99.2 and 99.3 are furnished as part of this Current Report on Form 8-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

NEOSTEM, INC.

By: /s/ Catherine M. Vaczy

Name: Catherine M. Vaczy, Esq.

Title: General Counsel

Dated: March 16, 2015

NeoStem Announces PreSERVE AMI Clinical Trial One-Year Follow-Up Results

Results support previous observation of dose-dependent signals across multiple endpoints

New York, NY (March 16, 2015) - NeoStem, Inc. (NASDAQ:NBS), a biopharmaceutical company developing novel cell based personalized medicine therapies, announced today the presentation of updated efficacy and safety results from the one-year follow-up for its Phase 2 PreSERVE study and additional analyses of certain functional tests at ACC.15, the American College of Cardiology's 64th Annual Scientific Session and Expo, in San Diego, California. The one-year follow-up results are defined as all data accumulated until the last patient enrolled completed 12 month follow-up. Thus, the results actually represent data from patients with a median follow-up of 18 months.

The PreSERVE study is NeoStem's clinical trial evaluating NBS10 which is being developed to treat damaged heart muscle following an acute myocardial infarction. One-year follow-up safety data collected thus far supports the trial's 6 month results presented at the American Heart Association's Scientific Sessions in November 2014. The ACC presentation contained updated safety and exploratory efficacy data and additional analyses conducted on left ventricular ejection fraction (LVEF) data. Clinical Endpoint Committee adjudication of major adverse cardiac events (MACE) was performed on the 6 month data reported previously and was not performed for new events (occurring between 6 and 12 months). The next prescribed adjudication of MACE is currently planned at the end of patient follow-up. At 12-month follow-up, no meaningful safety or tolerance differences were observed between treatment and control groups. In this updated analysis, no additional deaths were reported in the treatment or control groups beyond those previously reported in the six month analysis. In addition, in post hoc subset analyses based on the number of cells patients received, serious adverse event (SAE) frequency continues to show numerical improvement at all cell doses when compared to control.

No additional SPECT data were collected at one year follow-up. As an exploratory measure of efficacy, PreSERVE looked at reduction of infarct size at six months. Patients receiving 20 million cells or more experienced a decrease in infarct size of 41% vs 24% for patients in the control group.

Based on the one-year follow-up results, the company and its scientific advisors believe that the study results suggest:

- Intracoronary administration of autologous CD34+ cells appears safe and well-tolerated;
- A signal for a mortality benefit; and
- A signal for reduction in the frequency of serious adverse events (SAEs) in higher dose groups.

"We believe that these data, when coupled with the six month data on MACE and LVEF that we previously reported, are encouraging and show the possibility that higher doses of CD34 cells may provide benefit to patients post-STEMI," said Dr. Douglas Losordo, Chief Medical Officer of NeoStem. "Further consideration of these data, in consultation with our medical advisory board, should lead us to a determination of the next steps for the development of this program in the second half of 2015."

"While small in number, we are encouraged by the fewer mortality events observed for treated patients versus control patients as of the date of this 12 month follow-up. In addition, we are very encouraged by the persistence of reduced serious adverse event rates and evidence for improved infarct healing and left ventricular function," said Dr. Arshed A. Quyyumi, Professor of Medicine at Emory University and Lead Principal Investigator of the PreSERVE AMI study, who made the presentation at ACC.15. "In addition,

the failure of SPECT imaging to document changes at the 6 month interim analysis, despite signs of clinical benefit in multiple parameters, suggests that this technique is not applicable in this setting.”

These highlights should be read in conjunction with a full and complete copy of the data as contained in the ACC presentation, which data can be viewed by visiting the NeoStem website at www.Neostem.com/media/events/ and on the Securities and Exchange Commission website at www.sec.gov.

About NeoStem's Ischemic Repair Program

NeoStem is developing CD34 cell-based therapies to address damage to tissue caused by ischemia. Ischemia occurs when the supply of oxygenated blood in the body is restricted. The Company's Ischemic Repair Program seeks to reverse the damage caused by this restriction through the development and formation of new blood vessels. The Program's lead product candidate in this area is NBS10, a chemotactic hematopoietic stem cell product comprised of autologous bone marrow-derived CD34/CXCR4 cells selected to treat damaged heart muscle following AMI (severe heart attack). NBS10 is thought to work by increasing microvascular blood flow in the heart muscle via the development and formation of new blood vessels, thereby reversing the restriction of blood supply caused by a heart attack and rescuing at-risk cardiac tissue from eventual cell death.

About the PreSERVE AMI Clinical Trial

PreSERVE AMI is a randomized, double-blind, placebo-controlled clinical trial of intracoronary infusion of autologous CD34 cells in patients with left ventricular dysfunction post-ST elevation myocardial infarction (STEMI). The trial included 161 subjects at 60 sites in the United States, randomized 1:1 between treatment and placebo arms. Eligible patients presented with acute STEMI, had successful stenting of the infarct-related artery and had left ventricular dysfunction 4 days after AMI. Primary endpoints include occurrence of SAEs and MACE (defined as cardiovascular death, re-infarction, heart failure hospitalization, and coronary revascularization) through 3 year follow-up, and 6-month change in myocardial perfusion (RTSS) measured quantitatively by gated SPECT myocardial perfusion imaging. Secondary endpoints include cardiovascular magnetic imaging resonance (CMR) to measure left ventricular ejection fraction (LVEF), left ventricular end-systolic volume (LVESV), left ventricular end-systolic diameter (LVESD). Infarct size (baseline and six months) was an exploratory endpoint.

About NeoStem, Inc.

NeoStem is a biopharmaceutical company pursuing the preservation and enhancement of human health globally through the development of novel cell based personalized medicine therapeutics that prevent, treat or cure disease. The Company is developing therapies based on three platform technologies (immune-oncology, ischemic repair and immunomodulation) with a lead, late-stage (Phase 3, 2 and 2, respectively) clinical program for each. The combination of a rich therapeutics pipeline and an externally recognized in-house center for cell therapy process development and manufacturing has created an organization with unique capabilities for accelerated and efficient product development. www.neostem.com

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current expectations, as of the date of this press release, and involve certain risks and uncertainties. Forward-looking statements include statements herein with respect to the successful execution of the Company's business strategy, the Company's ability to develop and grow its business, the successful development of cellular therapies with respect to the Company's research and development and clinical evaluation efforts in connection with the Company's Targeted Immunotherapy Program, Ischemic Repair Program, Immune Modulation Program and other cell therapies, especially NBS10, the future of the regenerative medicine industry and the role of

stem cells and cellular therapy in that industry, and the performance and planned expansion of the Company's contract development and manufacturing business as well as its efforts to expand its capabilities into the cell therapy tools market. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors. Factors that could cause future results to materially differ from the recent results or those projected in forward-looking statements include the "Risk Factors" described in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 2, 2015, and in the Company's other periodic filings with the SEC. The Company's further development is highly dependent on future medical and research developments and market acceptance, which is outside of its control. While 6 month and 12 month data have been collected, those data are subject to ongoing analysis, and results reported at this time are preliminary. There can be no assurance that further analysis may not reveal negative, or less promising, results.

CONTACT: NeoStem, Inc.

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PreSERVE-AMI: A Randomized, Double-Blind, Placebo Controlled Clinical Trial of Intracoronary Infusion of Autologous CD34+ Cells (NBS10) in Patients with Left Ventricular Dysfunction Post STEMI

Arshed Quyyumi¹, Dean Kereiakes², David Shavelle³, Timothy Henry⁴, Ali Denktas⁵, Ahmed Abdel-Latif⁶, Catalin Toma⁷, Gregory Barsness⁸, Stephen Frohwein⁹, Richard Schatz¹⁰, Martin Cohen¹¹, Charles Davidson¹², Nabil Dib¹³, Marc Klapholz¹⁴, Gary Schaer¹⁵, Alejandro Vasquez¹⁶, Andrew Pecora¹⁷, Thomas Moss¹⁷, Pamela Hyde¹⁷, Anna Maria Kanakaraj¹⁷, Le Dich¹⁷, Vitaly Druker¹⁷, Candice Junge¹⁷, Robert Preti¹⁷, Douglas Losordo¹⁷

¹Emory Clinical Cardiovascular Research Institute, Cardiology Division, Emory University School of Medicine, Atlanta, GA ²The Christ Hospital Heart and Vascular Center, Cincinnati, OH ³University of Southern California, Los Angeles, CA ⁴Cedars-Sinai Heart Institute, Los Angeles, CA ⁵Baylor College of Medicine/Michael E DeBakey VA Medical Center, Houston, TX ⁶University of Kentucky, Lexington, KY ⁷University of Pittsburgh Medical Center, Pittsburgh, PA ⁸University of Pittsburgh Medical Center, Pittsburgh, PA ⁹Emory St. Josephs Hospital, Atlanta, GA ¹⁰Scripps Health, La Jolla, CA ¹¹Westchester Medical Center, Valhalla, NY ¹²Bluhm Cardiovascular Institute Northwestern Memorial Hospital, Chicago, IL ¹³Heart Sciences Center, Gilbert, AZ ¹⁴Rutgers University, New Jersey Medical School, Newark, NJ ¹⁵Rush University Medical Center, Chicago, IL ¹⁶Huntsville Hospital, Huntsville, AL ¹⁷Neostem Inc., New York, NY

www.clinicaltrials.gov Identifier: NCT01495364



The PreSERVE AMI Study: Funding Sources & Disclosures

Conflict of Interest Disclosures

- Quyyumi: NeoStem Advisory Board member

Funding Source

- Study funded by NeoStem, Inc.



Background

- Recent meta-analysis of unselected bone marrow mononuclear cell therapy after STEMI suggest that there may be no impact on LVEF changes and MACE¹
- Clinical studies evaluating the therapeutic potential of cells ***selected for CD34 expression*** have demonstrated a consistent favorable impact on outcomes²⁻⁵
- Phase 1 study of autologous CD34+ cells (NBS10) provided initial evidence of feasibility and safety and suggested a threshold dose of 10 million CD34 cells for bioactivity⁶

1. Gyongyosi M et al. *Circ Res* 2015; CIRCRESAHA.114.304346. 2. Vrtovec B et al *Circ Res*. 2013 Jan 4;112(1):165-73. 3. Lezaic L et al. *J Card Fail* 2015; 21: 145-152. 3. Losordo DW et al. *Circ Res*. 2011 Aug 5;109(4):428-36. 4. Losordo DW et al. *Circ Cardiovasc Interv*. 2012 Dec;5(6):821-30.5. Poglajen G et al. *Circ Cardiovasc Interv*. 2014 Aug;7(4):552-9. 6. Quyyumi AA et al; *Am Heart J*. 2011 Jan;161(1):98-105.



PreSERVE Study Design

DESIGN	Randomized (1:1), Phase 2, double blind, placebo controlled trial in patients with acute STEMI and low LVEF
PRIMARY ENDPOINTS	<ul style="list-style-type: none">• Incidence rates of SAEs and MACE• Change in myocardial perfusion (RTSS) measured quantitatively by gated SPECT MPI at 6 months
KEY SECONDARY ENDPOINTS	LVEF – change from baseline and preservation at 6 months
KEY EXPLORATORY ENDPOINTS	Change from baseline in infarct size; hospitalization
STUDY SIZE	161 patients, 60 centers in United States
TREATMENT	Single dose CD34+ cells via infarct related artery with minimum dose for release $\geq 10M$ (million) $\pm 20\%$
CONTROL	Matching infusion with placebo



PreSERVE: Eligibility

INCLUSION CRITERIA

- Acute ST elevation myocardial infarction.
- Stenting within 3 days of chest pain
- LVEF $\leq 48\%$ by CMR or $\leq 45\%$ by SPECT after 4 days
- Wall motion abnormality associated with the target lesion
- NYHA heart failure class I, II or III.

EXCLUSION CRITERIA

- STEMI > 4 days before stenting.
- Cardiogenic shock
- Severe aortic stenosis.
- Re-occlusion of the infarct related artery (IRA) prior to the infusion.
- Planned revascularization during the next 6 months.



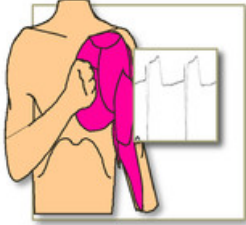
PreSERVE Sites

Investigator Name	Site
Arshed Quyyumi	Emory
Alejandro Vasquez	Heart Center Research
Dean Kereiakes	The Christ Hospital
Marc Klapholz	UMDNJ-Newark
Kenichi Fujise	Univ. Texas - Galveston
Nandish Thukral	Methodist San Antonio
Gary Schaer	Rush University Medical Center
Robert Iwaoka	Presbyterian CVI Research
Ahmed Abdel-Latif	U. of Kentucky, Gill Heart Institute
Vijaykumar Kasi	Orlando Health
Vernon Anderson	U. of Texas HSC - Houston
Roger Gammon	Austin Heart PLLC
Stephen Frohwein	St Joseph's Research Institute
Tim Henry	Minneapolis Heart
Richard Schatz	Scripps-La Jolla
Tanvir Bajwa	Aurora Health
Nabil Dib	Mercy Gilbert Medical Center
Catalin Toma	UPMC Presbyterian
Michael Tamberella	CaroMont Heart
Pradyumna Tummala	Northeast Georgia Heart Center
Charles Davidson	Northwestern University
Gregory Barsness	Mayo Clinic - Minnesota
Virender Sethi	Hackensack University
Tarek Helmy	University of Cincinnati
David Shavelle	Keck School of Medicine-USC
Fadi El-Ahdab	CV Group Central Lynchburg
Martin Cohen	Westchester Medical Center
Gerald Koenig	Henry Ford
Carl Pepine	University of Florida-Gainesville
Vincent Pompili	Ohio State University
Robert Frankel	Maimonides Medical Center-Brooklyn
Mark Vesely	University of Maryland

Investigator Name	Site
Theodore Schreiber	Detroit Receiving/Harper Hospital
Mazen Abu-Fadel	U. of Oklahoma HSC
Emerson Perin	Texas Heart Institute
David Fortuin	Mayo Clinic - Arizona
Luis Gruberg	Stony Brook University Hospital
Charles Lambert	Florida Hospital
Massoud Leesar	University of Alabama-Birmingham
Joseph Wu	Stanford University
Howard Eisen	Drexel University
Lawrence Barr	Advocate Health Elm Hurst
Buddhadeb Dawn	Kansas U. Medical Center
Amit Patel	University of Utah
Christopher Gange	MetroWest Medical Center
Paul Gordon	Miriam Hospital
Richard Rothschild	St. John's Regional Hospital
Peter Kerwin	Advocate Health Oakbrook
Hitinder Gurm	U. Michigan
Michael Imburgia	Louisville Cardiology
Kimberly Skelding	Geisinger Medical Center
Vijay Iyer	Buffalo General Hospital
Frank McGrew	Stern Cardiovascular Foundation/Baptist Hospital
Zachary Hodes	St. Vincent Medical Group
Augusto Prichard	Medstar Heart Institute
Michael Ragosta	UVA Health System Cardiology Research
Barry Bertolet	Cardiology Associates Research LLC
Majid Qazi	Detroit Clinical Research Center PC
Paul Huang	Swedish Medical Center

PreSERVE: Study Protocol

1. Patient presents with chest pain + STEMI



Day 1

2. Stenting and usual medical Rx



Day 1 - 3

3. Enrolled if EF \leq 48%
CMR



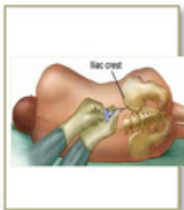
Day 4

4. Patient randomized to Treatment or Control



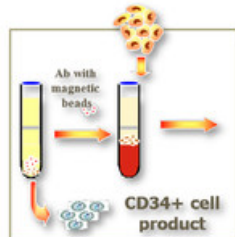
Day 4

5. Patient Bone Marrow Harvested



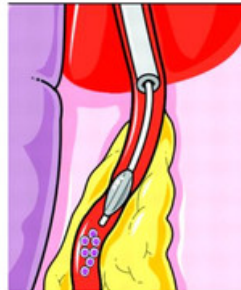
Day 4-9

6. CD34⁺CXCR4⁺ immunomagnetic separation



Day 5-10

7. Intracoronary injection: CD34⁺ Cells/Placebo



Day 6-11

8. MACE and Cardiac function measures

- SAE, MACE
- RTSS
- LVEF

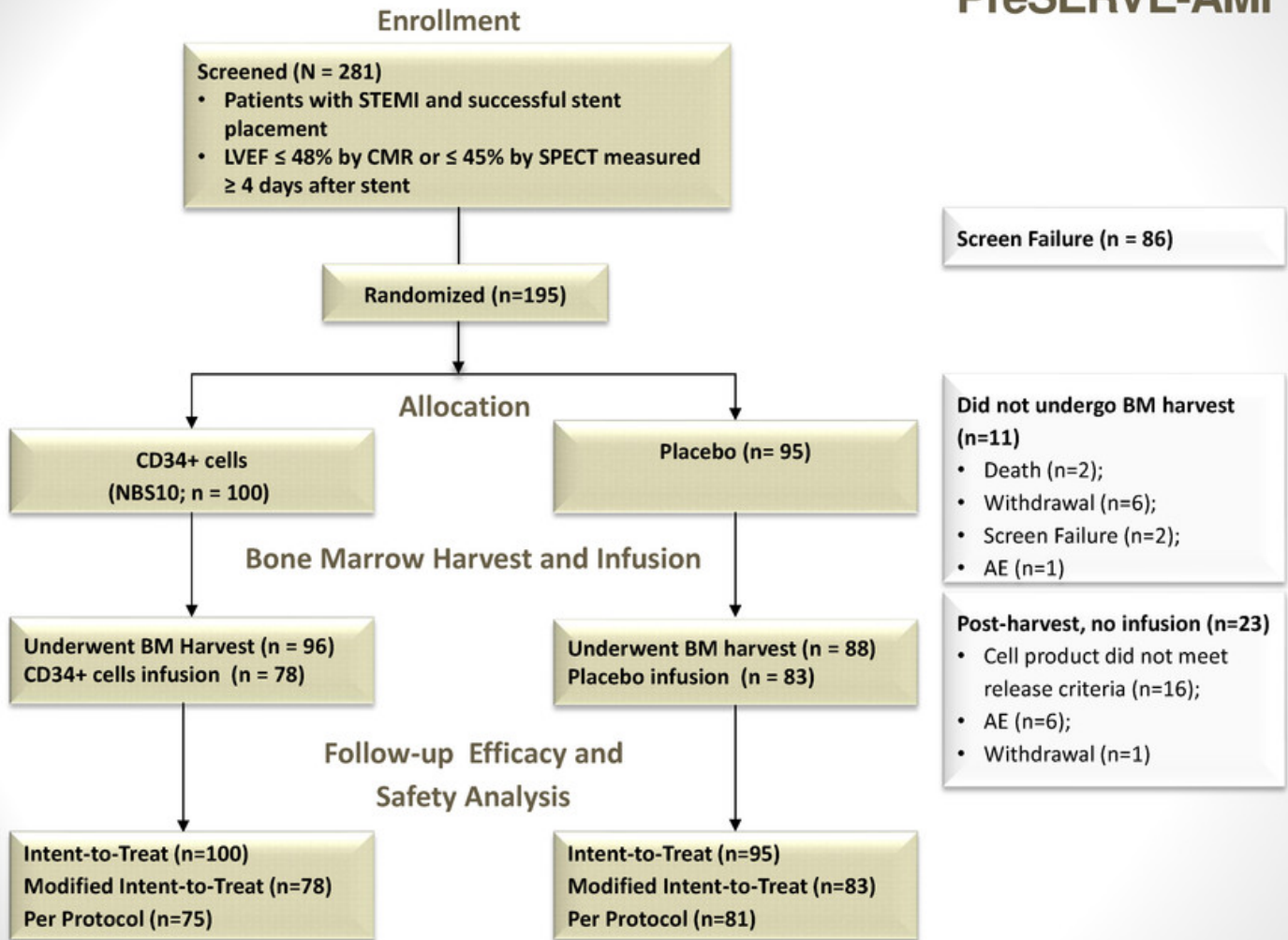
6 Months

9. MACE

- Mortality
- AMI
- Admission for CHF
- Vascular events

12, 18, 24, 36 Months





Baseline Characteristics

	Treated NBS10 (N=78)	Placebo (N=83)	P-value*
Demographics			
Age; mean \pm SD	57.1 \pm 10.1	56.4 \pm 10.1	0.65
Female; n (%)	12 (15%)	17 (20%)	0.4
Race; White, n (%)	56 (72%)	62 (75%)	0.87
CV Risk Factors			
Hypertension (%)	53 (68%)	56 (67%)	0.80
Diabetes (%)	27 (35%)	19 (23%)	0.1
Hyperlipidemia (%)	13 (17%)	17 (20%)	0.82
NYHA Class*; mean \pm SD	1.8 \pm 0.6	1.9 \pm 0.7	0.59
CV Medical History			
Prior CABG; n(%)	2 (3%)	2 (2%)	0.95
Prior PCI; n(%)	15 (19%)	15 (18%)	0.85
Prior CHF; n(%)	11 (14%)	11 (13%)	0.88
Prior MI; n(%)	13 (17%)	15 (18%)	0.34
Index AMI/PCI			
Infarct size (grams); mean \pm SD	33.8 \pm 17.4	38.6 \pm 19.5	0.16
Pre-discharge LVEF (%); mean \pm SD	34.3 \pm 7.3	34.1 \pm 8.4	0.90
LVEDV index; mean \pm SD	98.0 \pm 25.6	91.9 \pm 20.8	0.12
LVESV index; mean \pm SD	61.2 \pm 23.6	58.5 \pm 19.9	0.46
Time from symptoms to stent (min); mean \pm SD	931 \pm 1277	569 \pm 864	0.041
Time from stent to infusion (days); mean \pm SD	9.3 \pm 1.23	9.4 \pm 1.43	0.60

*P-values for quantitative characteristics are based on a t-test. P-values for categorical characteristics are based on a Chi-square test.



PreSERVE Status

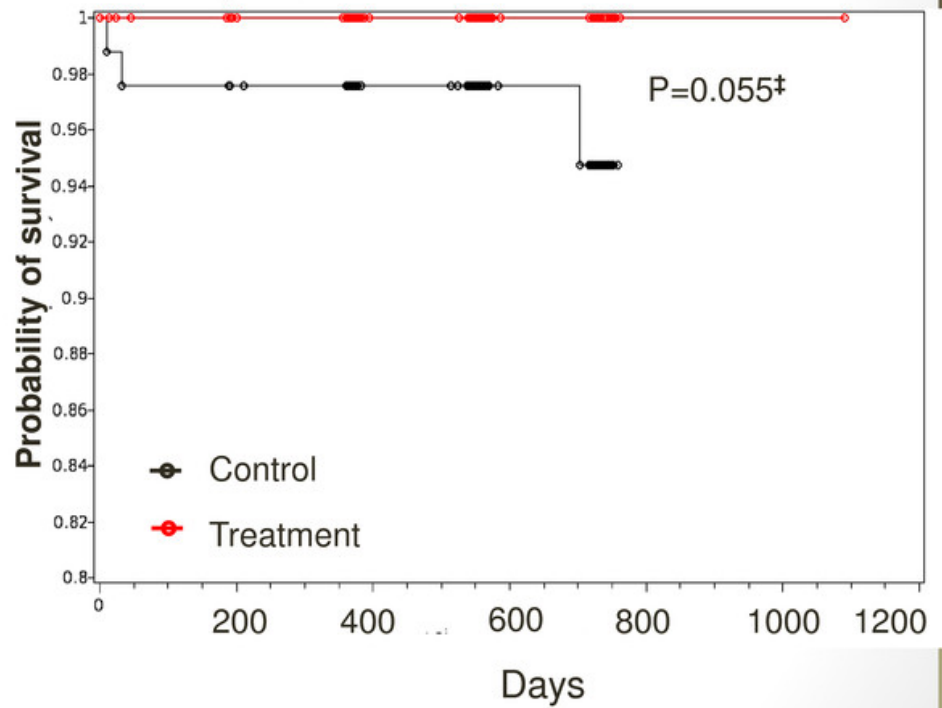
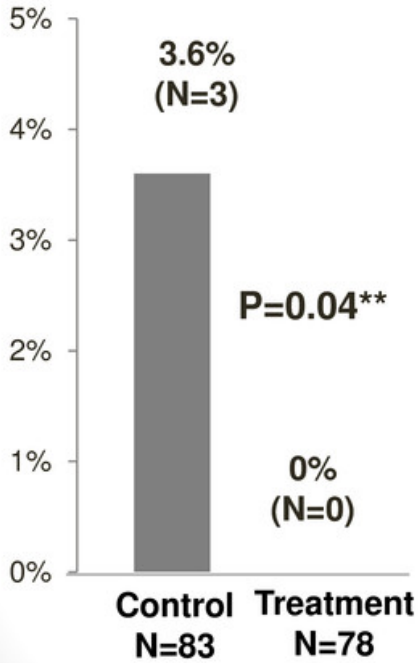
- One year follow-up completed for all subjects in December 2014
 - Median follow-up time: 18 months
- Primary endpoints and key secondary endpoints after all subjects completed 6 months follow-up (one year median follow-up) presented at AHA



Preserve: Cardiac Death

MEDIAN FOLLOW-UP: 18 MONTHS

No treatment group deaths to date*
mITT Population



**P-value calculated using a z-test.
‡P-value calculated using log rank test

* As of March 13, 2015

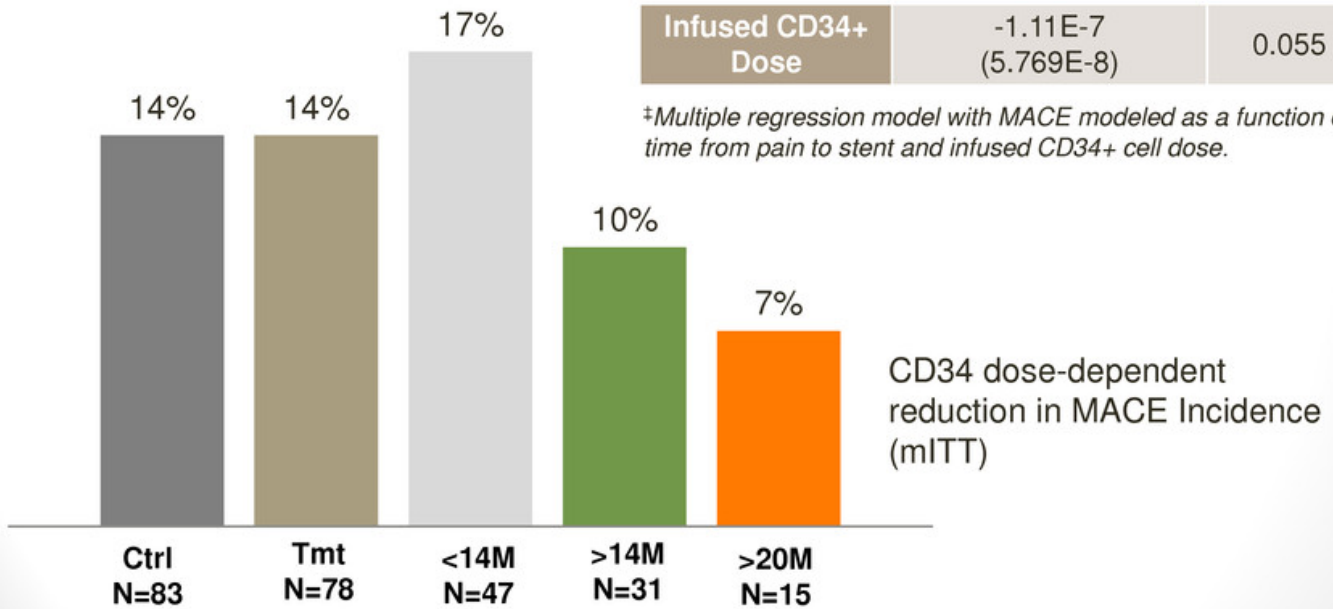
PreSERVE: Major Adverse Cardiovascular Events

MEDIAN FOLLOW-UP: 12 MONTHS

Influence of dose corrected for time to stent

Parameter	Parameter Estimate (SE)*	P-Value‡
Infused CD34+ Dose	-1.11E-7 (5.769E-8)	0.055

*Multiple regression model with MACE modeled as a function of time from pain to stent and infused CD34+ cell dose.



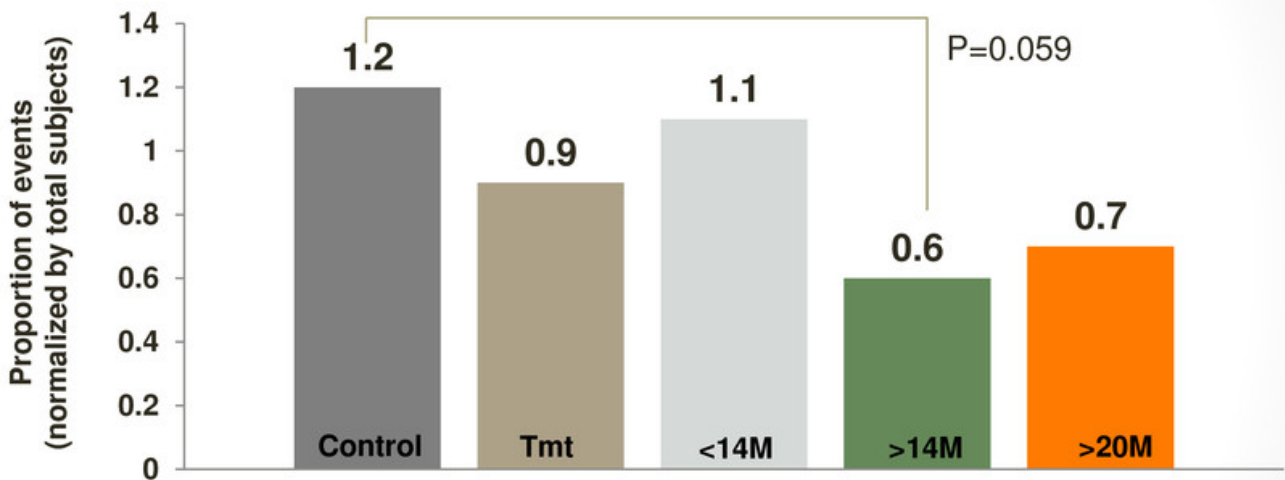
MACE= Death, MI, CHF Hospitalization, Revascularization



PreSERVE: Serious Adverse Events

MEDIAN FOLLOW-UP: 18 MONTHS (mITT)

SAE frequency normalized by total subjects per group



	Control (N=83)	Treatment (N=78)	<14M (N=47)	>14M (N=31)	>20M (N=15)
Any SAE	99	71	53	18	11

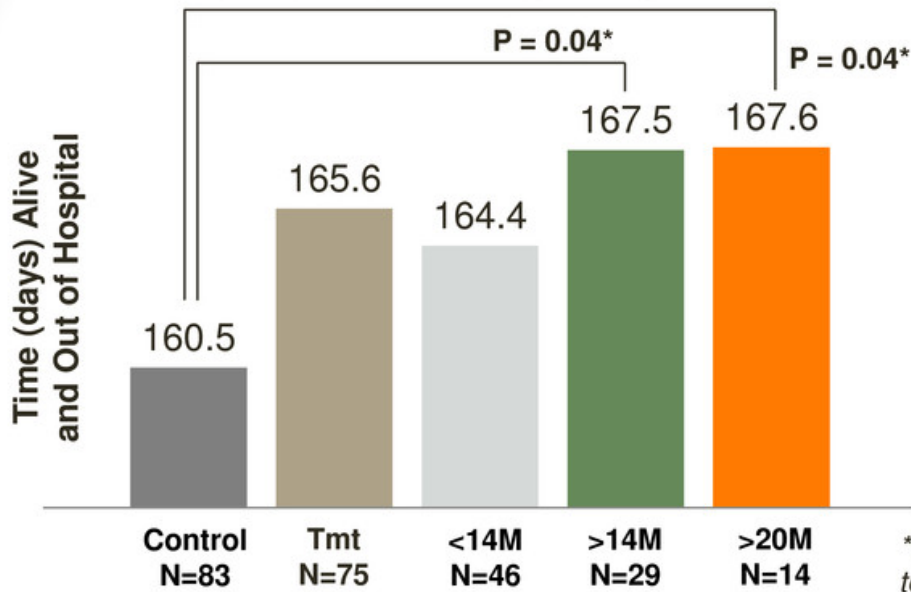
SAE = any untoward medical occurrence that results in death or is life-threatening

*P values based on two sample t-test using Satterthwaite method. P=NS for tmt, <14M and >20M vs control.



PreSERVE: Hospitalization during Follow-up

MEDIAN FOLLOW-UP: 12 MONTHS



*P values based on two sample t-test using Satterthwaite method

Parameter	Parameter Estimate (SE)*	P-Value*
CD34+ Cell Dose	1.6E-7(8.0E-7)	0.053
Time to Stent	1.3E-4(5.2E-4)	0.8

ANCOVA with time alive and out of hospital as outcome, cell dose, and time to stent as covariate

PreSERVE: Myocardial Perfusion

SPECT Resting Total Severity Score (RTSS)
Change from Baseline to 6 months (mITT)

	Placebo	CD34	P-value
RTSS Mean Change from Baseline (\pm SD)	-149.6 \pm 221.1	-142.7 \pm 257.8	NS

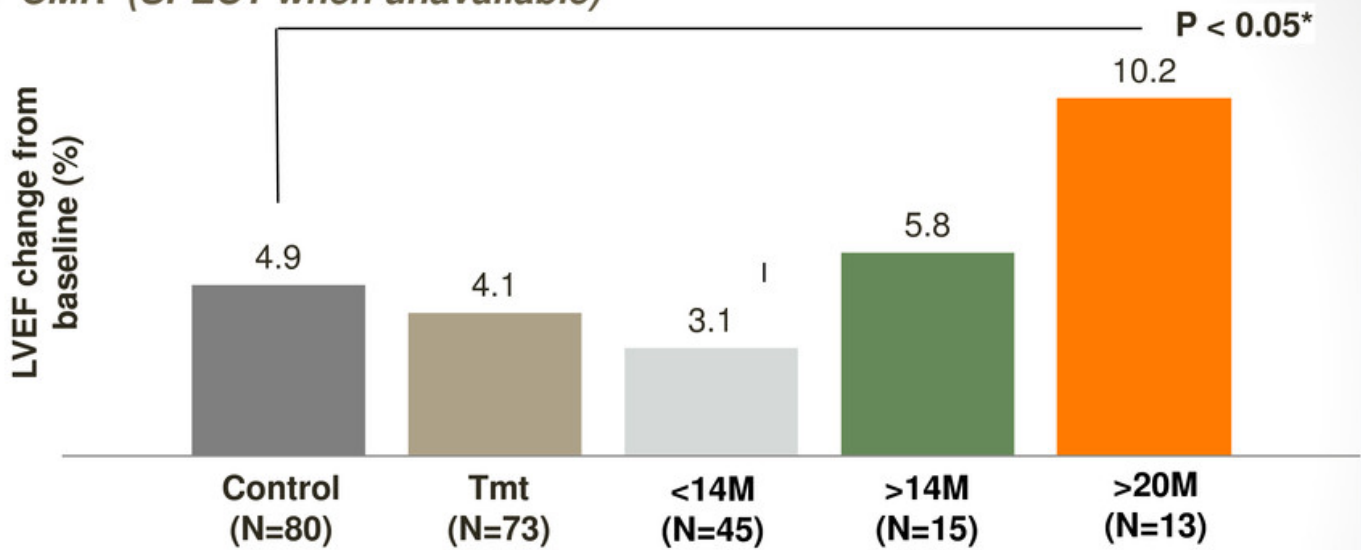
- Improvement in clinically relevant endpoints not mirrored by change in SPECT perfusion
- Results indicate that SPECT myocardial perfusion is not a suitable surrogate



PreSERVE: Left Ventricular Ejection Fraction

Change from Baseline to 6 months (mITT)

CMR (SPECT when unavailable)



*P-values are based on a t-test of the means

Influence of dose corrected for time to stent

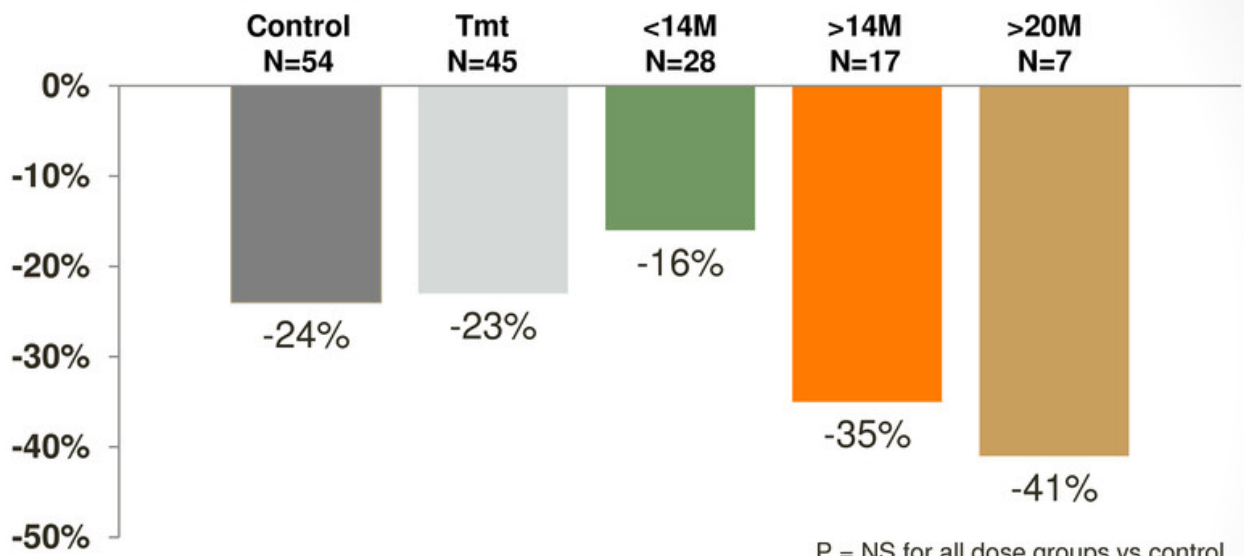
Parameter	Parameter Estimate (SE)	P-Value
CD34+ Cell Dose	2.21 (1.084)	0.045 [†]
CD34+ CXCR4+ cell Dose	4.8E-7 (2.1E-7)	0.062 [‡]

Multiple regression[†] and ANOVA[‡] models



PreSERVE: Infarct Size

Change from Baseline to 6 months(CMR only; mITT)



P = NS for all dose groups vs control

Influence of dose corrected for time to stent

Parameter	Parameter Estimate (SE)	P-Value
CD34+ cell Dose	-1.4E-6 (5.9E-7)	0.02

ANCOVA with infarct size change from baseline as outcome, infarct size at baseline, cell dose, and time to stent as covariate



PreSERVE Sites

Investigator Name	Site
Arshed Quyyumi	Emory
Alejandro Vasquez	Heart Center Research
Dean Kereiakes	The Christ Hospital
Marc Klapholz	UMDNJ-Newark
Kenichi Fujise	Univ. Texas - Galveston
Nandish Thukral	Methodist San Antonio
Gary Schaer	Rush University Medical Center
Robert Iwaoka	Presbyterian CVI Research
	U. of Kentucky, Gill Heart Institute
Ahmed Abdel-Latif	
Vijaykumar Kasi	Orlando Health
Vernon Anderson	U. of Texas HSC - Houston
Roger Gammon	Austin Heart PLLC
Stephen Frohwein	St Joseph's Research Institute
Tim Henry	Minneapolis Heart
Richard Schatz	Scripps-La Jolla
Tanvir Bajwa	Aurora Health
Nabil Dib	Mercy Gilbert Medical Center
Catalin Toma	UPMC Presbyterian
Michael Tamberella	CaroMont Heart
Pradyumna Tummala	Northeast Georgia Heart Center
Charles Davidson	Northwestern University
Gregory Barsness	Mayo Clinic - Minnesota
Virender Sethi	Hackensack University
Tarek Helmy	University of Cincinnati
David Shavelle	Keck School of Medicine-USC
Fadi El-Ahdab	CV Group Central Lynchburg
Martin Cohen	Westchester Medical Center
Gerald Koenig	Henry Ford
Carl Pepine	University of Florida-Gainesville
Vincent Pompili	Ohio State University
	Maimonides Medical Center-Brooklyn
Robert Frankel	
Mark Vesely	University of Maryland

Investigator Name	Site
	Detroit Receiving/Harper Hospital
Theodore Schreiber	
Mazen Abu-Fadel	U. of Oklahoma HSC
Emerson Perin	Texas Heart Institute
David Fortuin	Mayo Clinic - Arizona
	Stony Brook University Hospital
Luis Gruberg	
Charles Lambert	Florida Hospital
	University of Alabama-Birmingham
Massoud Leesar	
Joseph Wu	Stanford University
Howard Eisen	Drexel University
Lawrence Barr	Advocate Health Elm Hurst
Buddhadeb Dawn	Kansas U. Medical Center
Amit Patel	University of Utah
Christopher Gange	MetroWest Medical Center
Paul Gordon	Miriam Hospital
Richard Rothschild	St. John's Regional Hospital
Peter Kerwin	Advocate Health Oakbrook
Hitinder Gurm	U. Michigan
Michael Imburgia	Louisville Cardiology
Kimberly Skelding	Geisinger Medical Center
Vijay Iyer	Buffalo General Hospital
	Stern Cardiovascular Foundation/Baptist Hospital
Frank McGrew	
Zachary Hodes	St. Vincent Medical Group
Augusto Prichard	Medstar Heart Institute
	UVA Health System
Michael Ragosta	Cardiology Research
	Cardiology Associates Research LLC
Barry Bertolet	
	Detroit Clinical Research Center PC
Majid Qazi	
Paul Huang	Swedish Medical Center



Thank you for your attention



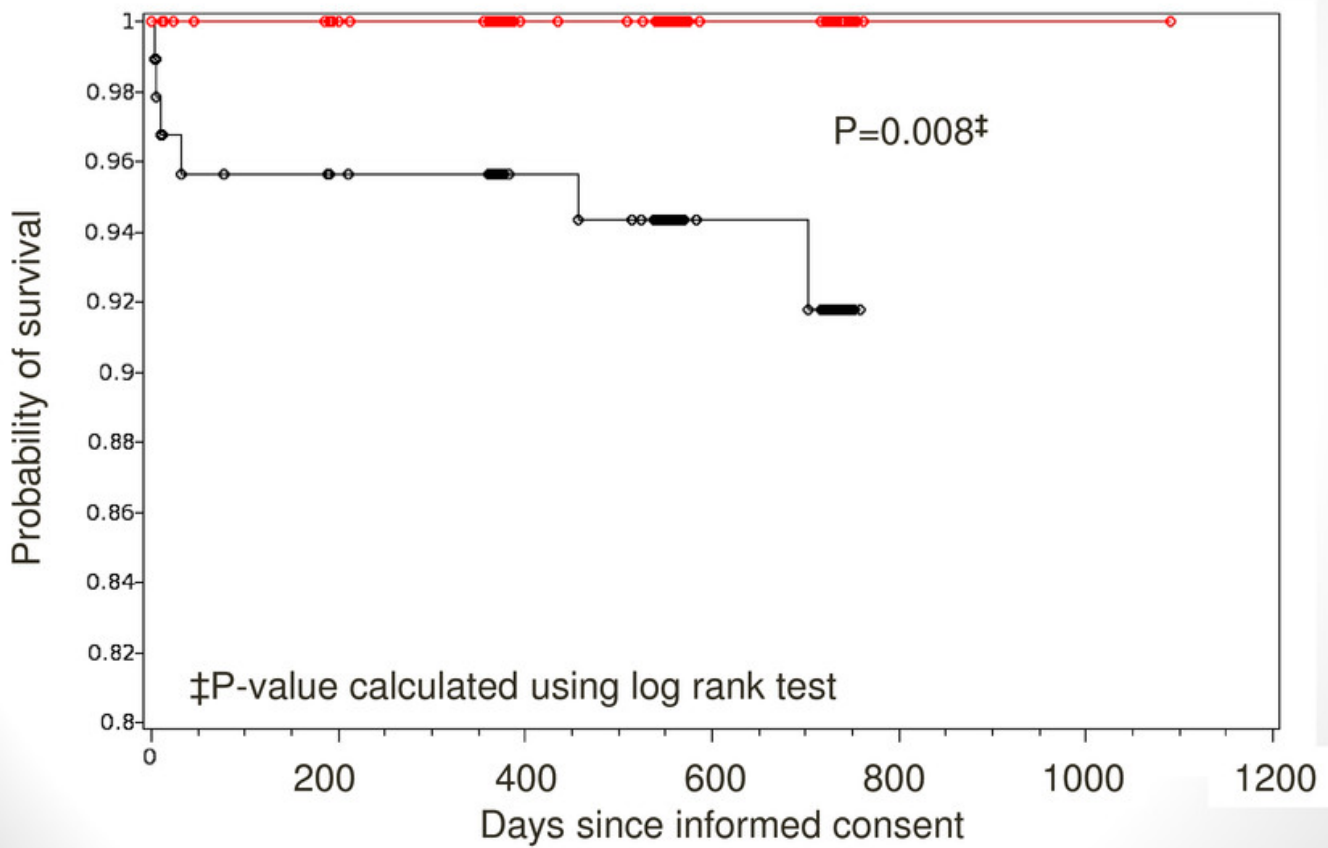
BACK UP SLIDES

{ 20 }



Time to Cardiac Death (ITT Population)

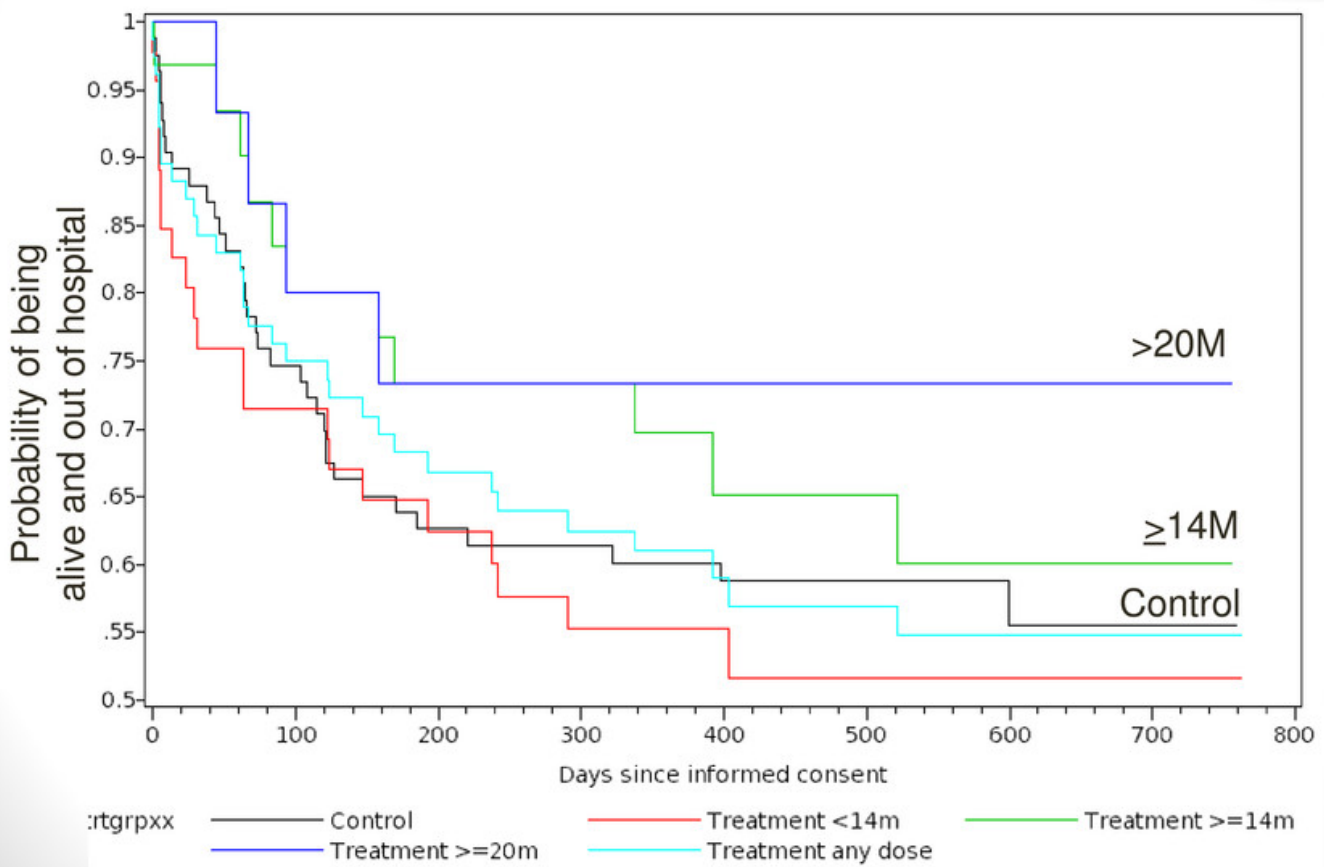
MEDIAN FOLLOW-UP: 18 MONTHS



\ddagger P-value calculated using log rank test

Time to First Hospitalization (mITT)

MEDIAN FOLLOW-UP: 12 MONTHS





Corporate Presentation
NASDAQ: NBS

Transforming Personalized Medicine

David J. Mazzo, PhD
Chief Executive Officer
March 2015

Forward-looking statements

This presentation contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, as well as historical information. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from anticipated results, performance or achievements expressed or implied by such forward-looking statements. When used in this presentation, statements that are not statements of current or historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "plan," "intend," "may," "will," "expect," "believe," "could," "anticipate," "estimate," or "continue" or similar expressions or other variations or comparable terminology are intended to identify such forward-looking statements, although some forward-looking statements are expressed differently. We remind readers that forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors and involve known and unknown risks that could cause the actual results, performance, levels of activity or our achievements or industry results, to be materially different from any future results, performance levels of activity or our achievements or industry results expressed or implied by such forward-looking statements. Such forward looking statements appear in this presentation. Factors that could cause our actual results to differ materially from anticipated results expressed or implied by forward-looking statements include, among others:

- our ability to obtain sufficient capital or strategic business arrangements to fund our operations and expansion plans, including meeting our financial obligations under various licensing and other strategic arrangements, the funding of our clinical trials for product candidates in our development programs for our Targeted Cancer Immunotherapy Program, our Ischemic Repair Program and our Immune Modulation Program, and the commercialization of the relevant technology;
- our ability to build and maintain the management and human resources infrastructure necessary to support the growth of our business;
- our ability to integrate our acquired businesses successfully and grow such acquired businesses as anticipated, including expanding our PCT business internationally;
- whether a large global market is established for our cellular-based products and services and our ability to capture a meaningful share of this market;
- scientific and medical developments beyond our control;
- our ability to obtain and maintain, as applicable, appropriate governmental licenses, accreditations or certifications or comply with healthcare laws and regulations or any other adverse effect or

limitations caused by government regulation of our business;

- whether any of our current or future patent applications result in issued patents, the scope of those patents and our ability to obtain and maintain other rights to technology required or desirable for the conduct of our business; our ability to commercialize products without infringing the claims of third party patents;
- whether any potential strategic or financial benefits of various licensing agreements will be realized;
- the results of our development activities, especially:
 - the results of our planned Intus Phase 3 clinical trial of NBS20 being developed to treat metastatic melanoma;
 - the results of our PreSERVE Phase 2 clinical trial of NBS10 being developed to treat acute myocardial infarction for which we released initial data on November 17, 2014 and for which all 6 and 12 month data has been collected; however it is subject to ongoing analysis, and currently reported results, although promising, are preliminary and there can be no assurance that further analysis may not reveal negative, or less promising, results;
- our ability to complete our other planned clinical trials (or initiate other trials) in accordance with our estimated timelines due to delays associated with enrolling patients due to the novelty of the treatment, the size of the patient population and the need of patients to meet the inclusion criteria of the trial or otherwise; and
- the other factors discussed in "Risk Factors" in our Form 10-K filed with the Securities and Exchange Commission ("the SEC") on March 2, 2015, and elsewhere in the Annual Report on Form 10-K.

The factors discussed herein, including those risks described in Item 1A, "Risk Factors" in the Company's Annual Report on Form 10-K filed with the SEC on March 2, 2015 and in the Company's other periodic filings with the Securities and Exchange Commission (the "SEC") which are available for review at www.sec.gov under "Search for Company Filings" could cause actual results and developments to be materially different from those expressed or implied by such statements. All forward-looking statements attributable to us are expressly qualified in their entirety by these and other factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Except as required by law, the Company undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

NeoStem financial metrics

MARKET METRICS

MARKET CAPITALIZATION¹	\$150.0 M
STOCK PRICE²	\$3.90
52 WEEK RANGE²	\$3.08 - \$7.75
FLOAT¹	33.7M
INSIDER HOLDINGS¹	12.1%

FINANCIAL METRICS

REVENUE³	\$17.9M (FY 2014)
CASH⁴	\$26.3M
COMMON SHARES OUTSTANDING¹	38.3 M
WARRANTS¹	3.5 M (avg. warrant exercise price of \$14.12)
OPTIONS¹	6.4 M (avg. option exercise price of \$7.44)

1. As of March 12, 2015 (based on shares outstanding on March 12, 2015)

2. As of March 12, 2015

3. For the year ended December 31, 2014

4. As of December 31, 2014 (includes cash, cash equivalents and marketable securities)

Transforming cells into therapies



NeoStem's PCT: *Industry-recognized single source premier services*

**Center of excellence
for process development, engineering and manufacturing**



**PRODUCT &
PROCESS
DEVELOPMENT**



MANUFACTURING



**ENGINEERING &
AUTOMATION**



**CELL & TISSUE
PROCESSING**



**LOGISTICS
STORAGE &
DISTRIBUTION**



**EXPERT
CONSULTATION &
REGULATORY
SUPPORT**

At a glance

Highly experienced management and scientific team

Proprietary platform technologies yielding a diversified, balanced pipeline targeting critical unmet needs in large global markets and near-term development milestones

Immunotherapy platform applicable across multiple solid tumors with Fast Track and Orphan Drug Designations and a SPA for a phase 3 study in metastatic melanoma

Cell therapy platform applicable in multiple cardiovascular indications with ongoing Phase 2 study for acute myocardial infarction – compelling and consistent interim results

Immunomodulation therapy platform targeting autoimmune disorders with FDA cleared phase 2 study in adolescents with type I diabetes

Internal center of excellence (PCT) with bicoastal facilities and proven capabilities innovating discovery, development, manufacturing and delivery of cell-based therapies

Experienced executive team

David J. Mazzo, PhD
Chief Executive Officer

Over 30 years experience in all aspects of large and emerging global biotech/biopharma company operations and successful international drug development

Robert S. Vaters, MBA
President and Chief Financial Officer

Over 25 years financial and management experience in a variety of healthcare, biotechnology, biologics, medical device and pharmaceutical companies

Douglas W. Losordo, MD
Chief Medical Officer

A leader in cell therapy research and development and renowned cardiologist with noteworthy academic and industry credentials

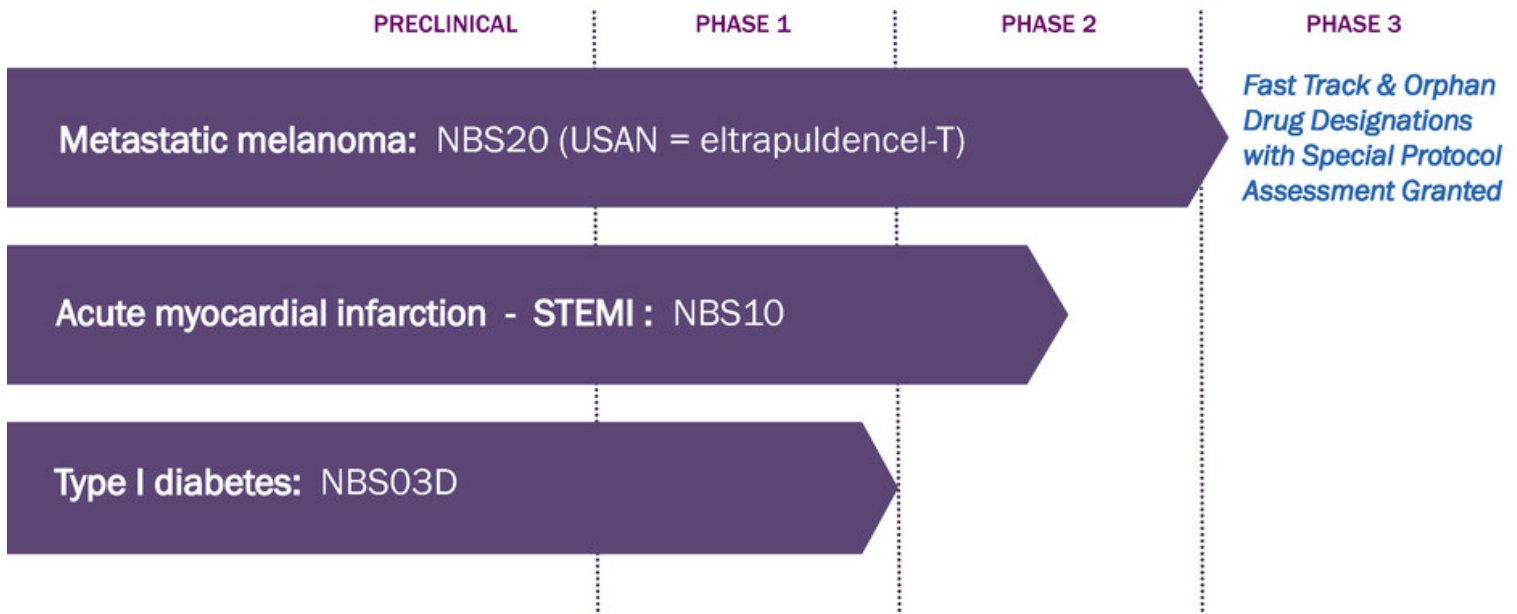
Robert A. Preti, PhD
President of NeoStem's PCT

A leading authority on cell-based therapy engineering with unique development and commercialization experience

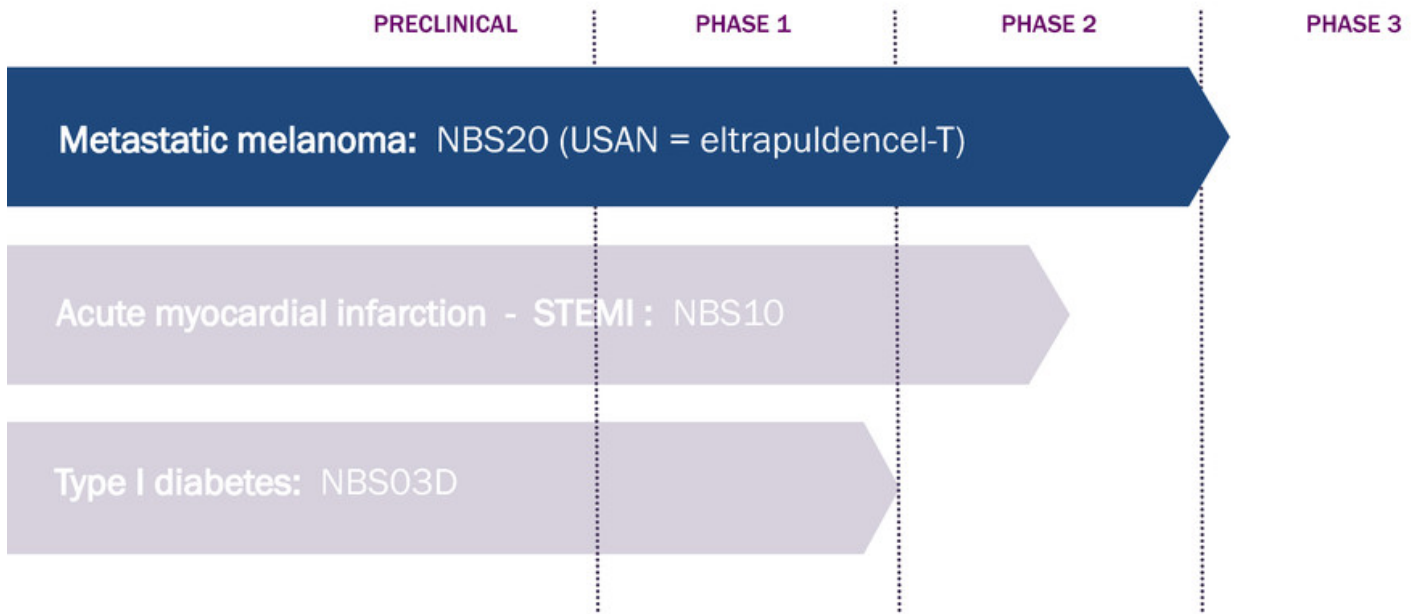
Robin L. Smith, MD, MBA
Executive Chairman

Extensive background in healthcare, business development and management; led NeoStem 2006-2014

Robust, diversified and balanced pipeline



Robust, diversified and balanced pipeline





NBS20:

(USAN = eltrapuldencel-T)

Metastatic melanoma

Fast Track designation

Orphan Drug designation

Special Protocol Assessment

Stage III recurrent/stage IV metastatic melanoma

PREVALENCE AND UNMET MEDICAL NEED

~20,000 estimated new cases per year in U.S.¹

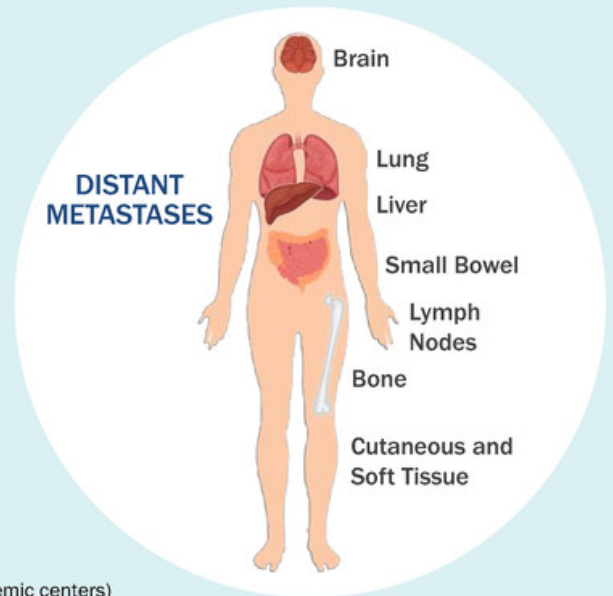
~10,000 deaths per year in U.S.¹

~15% five-year survival rate²

~\$1 billion U.S. market size³

Numerous non-synonymous mutations

- Unique patient-specific antigenic fingerprints
- Ideal target for autologous immunotherapy



1. American Cancer Society, 2014 SEER

2. For Stage IV metastatic melanoma - AJCC Cancer Staging 2010 (based on 17 academic centers)
(Five year data for recently approved melanoma immunotherapies is not yet reflected)

3. GBI Research - 2013

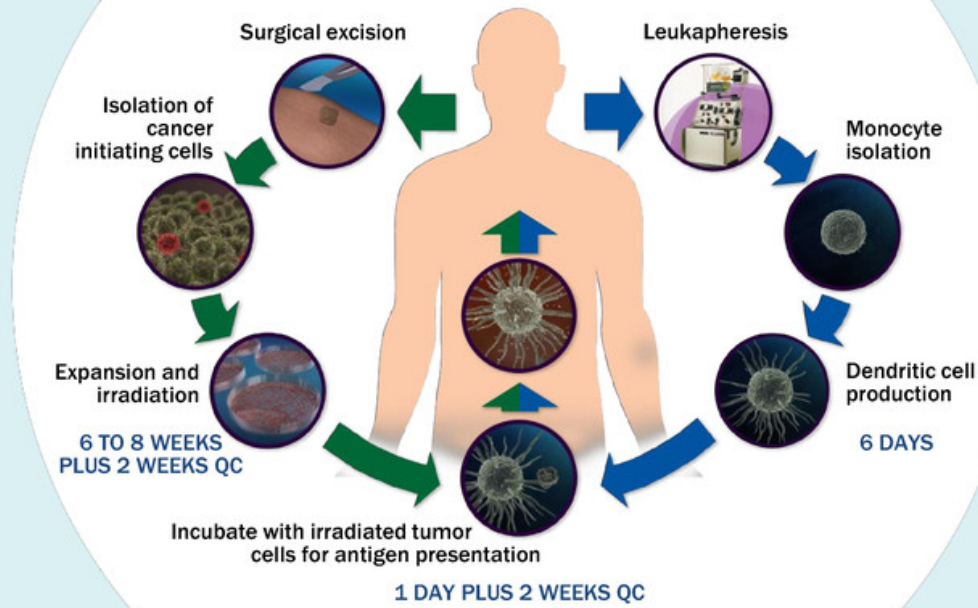
Current metastatic melanoma therapies insufficient

CURRENTLY APPROVED THERAPIES	2 Year Survival	5 Year Survival
DTIC (GENERIC) <i>JCO 1999, JCO 2000</i>	9-20%	4%
INTERLEUKIN-2 (PROMETHEUS LABS) <i>JCO 2002</i>	25%	15%
IPILIMUMAB (BMS) <i>NEJM 2010</i>	24%	20%
ANTI-PD1¹ (BMS AND MERCK) <i>Clin Oncol 2014</i>	40-50%	N/A
VEMURAFENIB (ROCHE) <i>Engl J Med 2012</i>	Est. 20%	N/A
THERAPEUTIC CANDIDATES		
T-VEC (AMGEN – P3) <i>Clin Oncol 2013</i>	40%	N/A
TUMOR INFILTRATING LYMPHOCYTES (LION - P2) <i>Clin Cancer Res 2011</i>	40%	29%

1. Includes both nivolumab and pembrolizumab

2. Survival rates for patients with Stage IV (distant metastatic disease), calculated from time of treatment

Preparation of NBS20 - stimulating immune response



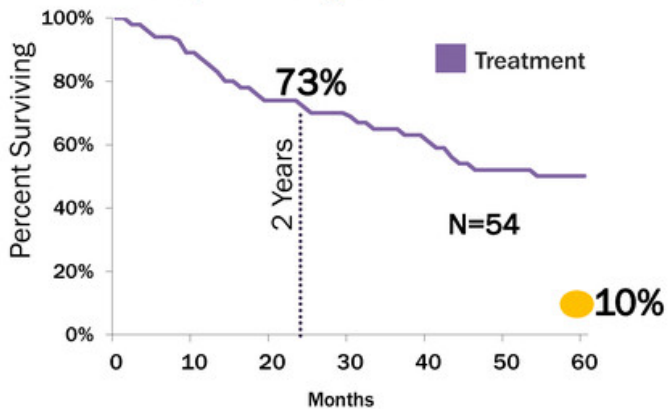
NBS20 uniquely targets cancer initiating cells by leveraging the patient's own immune system

Process times are approximate

Phase 2: multiple trials; consistent, compelling data

5-YEAR OVERALL SURVIVAL

54 patient single arm P2 trial



50% observed 5-year survival rate

Treatment considered safe and generally well tolerated

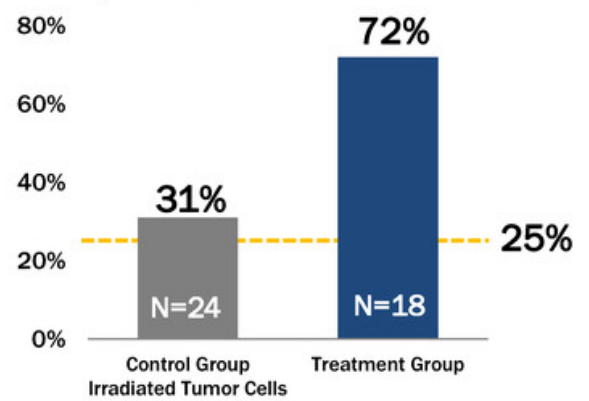
- Minor local injection site reactions

Dillman, et al. *Cancer Biother Radiopharm* 2009

● Historical control for distant metastases: *Balch J Clin Oncol* 2009

2-YEAR OVERALL SURVIVAL

42 patient randomized P2 trial



$p = 0.007$; Hazard ratio = 0.27

Treatment considered safe and generally well tolerated

- Minor local injection site reactions

Dillman, et al. *Journal Immunotherapy* 2012

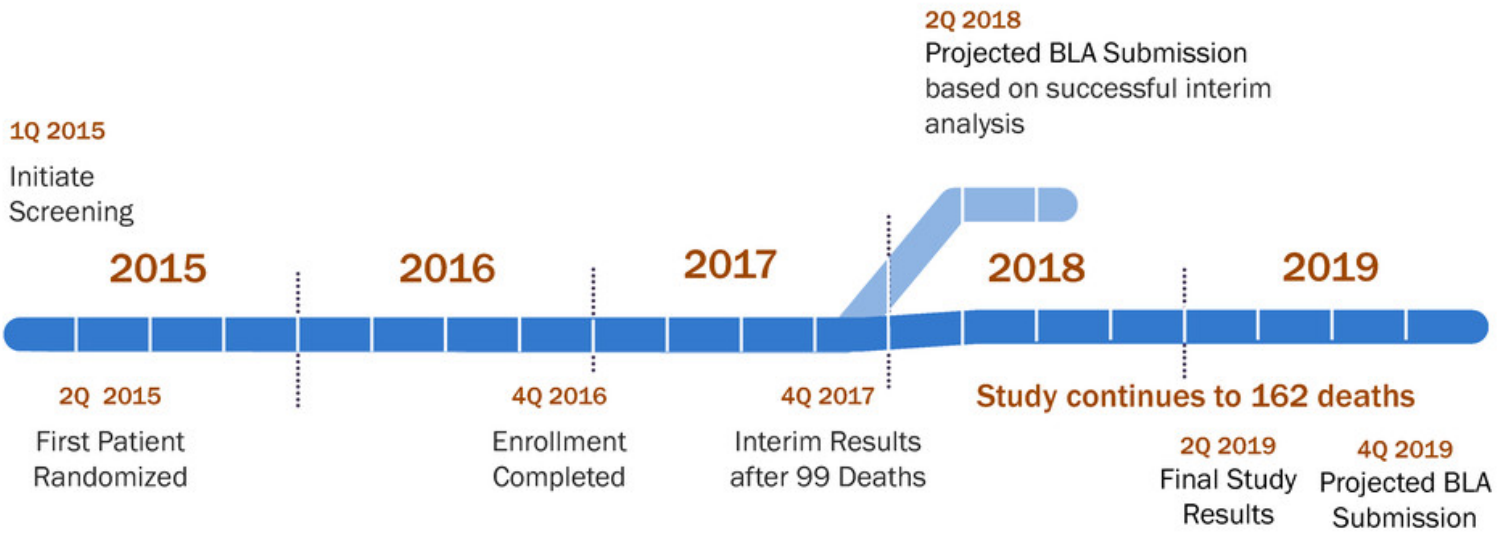
--- Historical control for distant metastases

The Intus study: phase 3 with SPA and orphan drug and fast track designations



DESIGN	Single randomized, double blind, placebo controlled trial for stage III recurrent or stage IV metastatic melanoma for registration
PRIMARY ENDPOINT	Overall survival
POWERING	80% power to detect 37.5% reduction in risk of death
RELATION TO STANDARD THERAPIES	Adjunctive (clinical practice based trial)
STUDY SIZE	Planned 250 eligible patients across approximately 50 sites (US, Canada, Australia, New Zealand)
TREATMENT	Autologous dendritic cells loaded with antigen from proliferating autologous tumor cells + GM-CSF
CONTROL	Peripheral blood mononuclear cells obtained from pheresis product + GM-CSF

Timeline to BLA



Total trial cost to earliest projected BLA: ~\$45 million

Multi-billion dollar lifecycle opportunity

Potential application across multiple solid tumor types



LUNG CANCER

(Feasibility of cell lines from biopsies initiated)



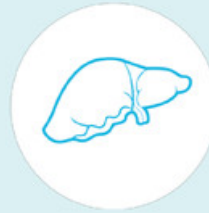
COLON CANCER

(Feasibility of cell lines planned)



OVARIAN CANCER

(US FDA approved phase 2 protocol, cell line feasibility established)



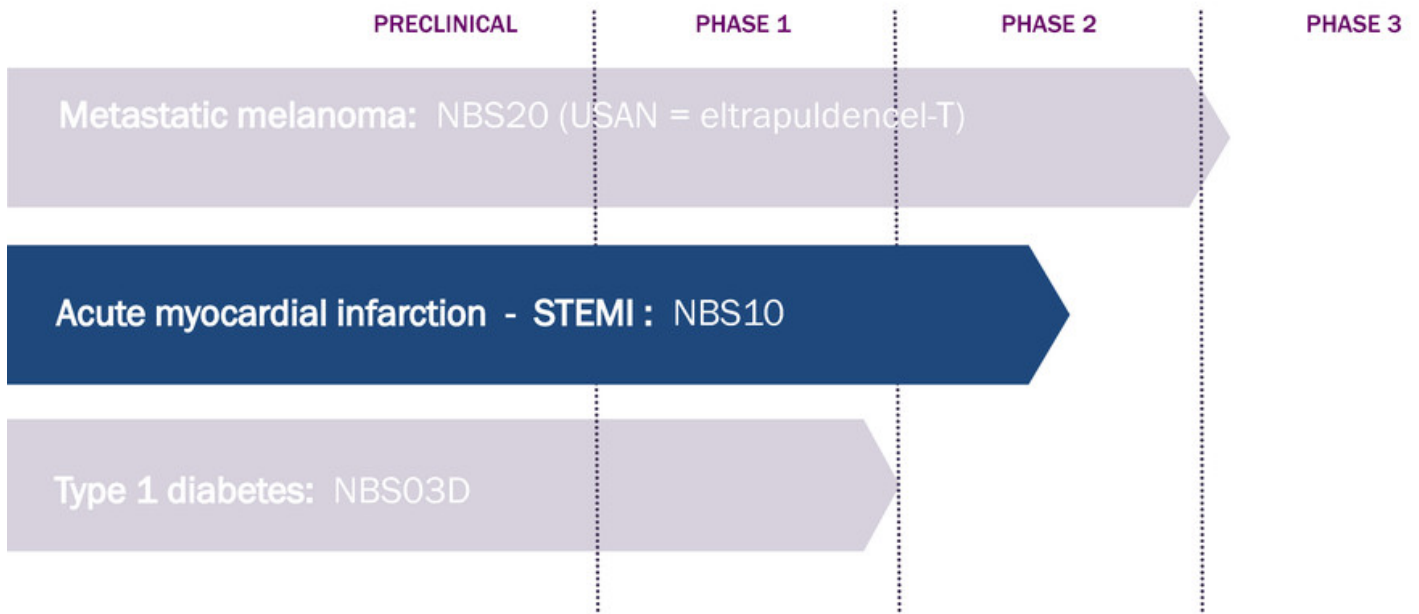
HEPATOCELLULAR CARCINOMA (LIVER)

(8 HCC patients with HBV treated, no toxicity)



GLIOBLASTOMA MULTIFORME (BRAIN)

Robust, diversified and balanced pipeline





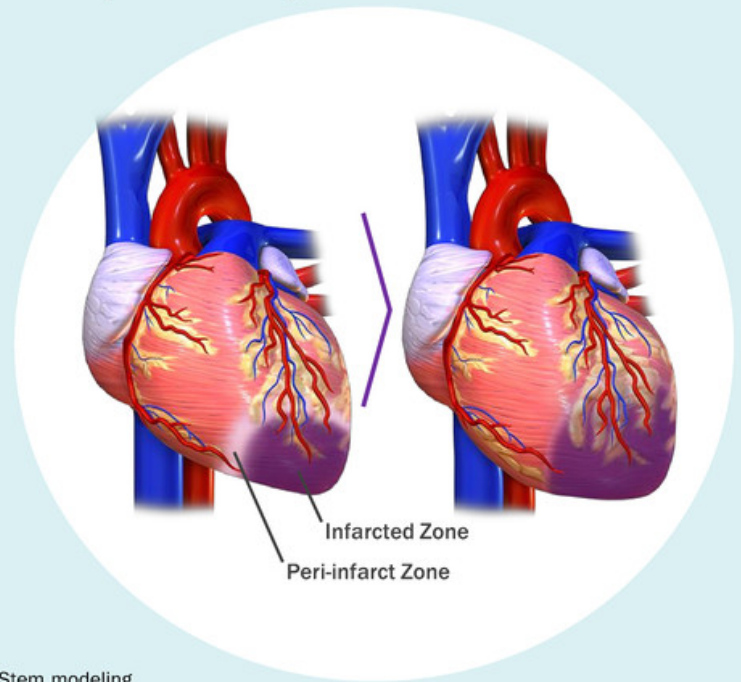
NBS10: ST segment elevation myocardial infarction (STEMI)

Acute myocardial infarction (STEMI)

PREVALENCE AND UNMET MEDICAL NEED

STEMI patients are at high risk of progressive deterioration in heart muscle function leading to Major Adverse Cardiac Events (MACE)

~65,000 STEMI patients/year in U.S.
(successfully stented) later experience heart failure¹

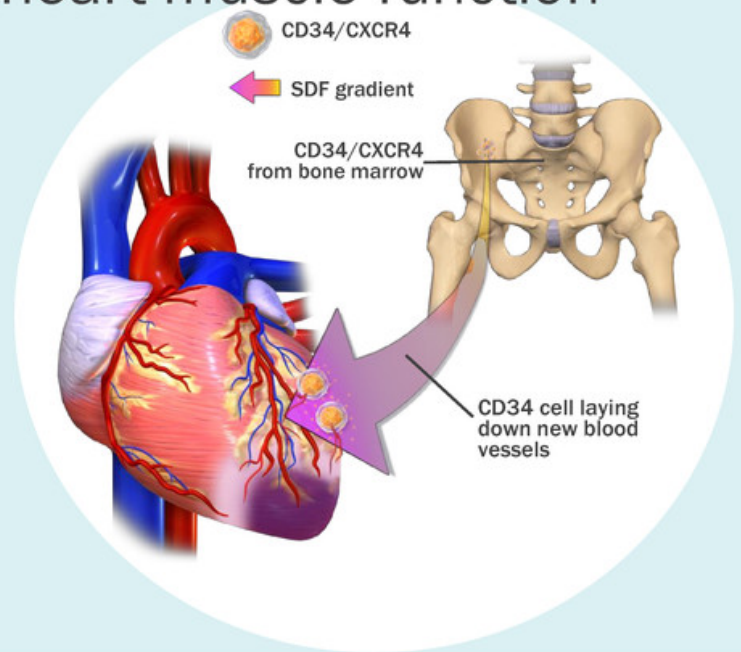


1. Pedersen, *Journal of the American College of Cardiology*, 2014 and NeoStem modeling

NBS10 – Leveraging the body’s natural repair mechanism to preserve heart muscle function

CD34+ cells have been shown to induce the development of new blood vessels, preventing tissue death by improving blood flow

NBS10 = CD34+ cells extracted from the patient’s bone marrow, treated to maximize potency and then delivered directly to the infarct site via a routine catheter lab procedure



PreSERVE study: enrolled phase 2 study in follow-up

DESIGN	Randomized (1:1), Phase 2, double blind, placebo controlled trial for post-AMI (STEMI) patients
PRIMARY ENDPOINTS AND KEY SECONDARY ENDPOINT	Change in cardiac perfusion from baseline to 6 months (exploratory) Incidence rates of SAEs and MACE (regulatory – AMI) LVEF change from baseline to 6 months (regulatory – heart failure)
KEY INCLUSION CRITERIA	Confirmation of ST Elevation MI; ejection fraction $\leq 48\%$ at day 4 by CMR; state-of-the-art care post stenting
STUDY SIZE	161 patients, 60 centers in United States
TREATMENT	Single dose via infarct related artery with minimum dose for release $\geq 10\text{M}$ (million) $\pm 20\%$ CD34+ cells. Actual dose determined by intrinsic number of cells in marrow and processing success rate
CONTROL	Matching infusion with placebo

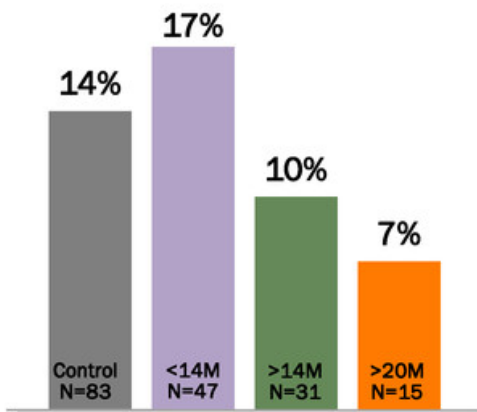
PreSERVE 6 & 12-month interim conclusions*

- CD34 cell dose-dependent trend in reduction of MACE
— Signal for a mortality benefit (12 month data)
- Signal for reduction in frequency of SAEs in higher dose groups (12 month data)
- CD34 cell dose-dependent trend in improvement of left ventricular ejection fraction and reduction in infarct size
- No correlation between experimental endpoint of perfusion and treatment
- Favorable trends in clinical events encourage continued development
- Results inform regarding important design parameters for next development steps

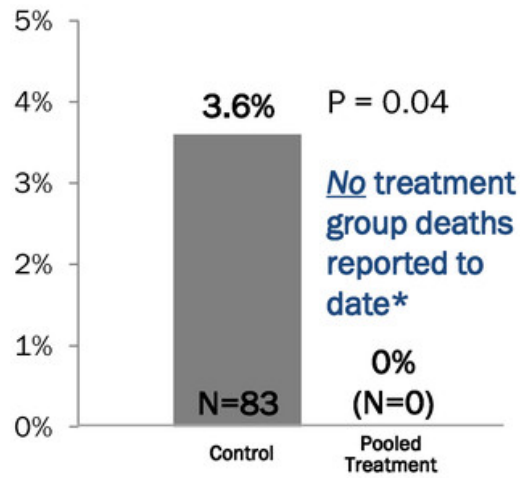
*Based on data collected at 6 months except where noted

PreSERVE: MACE incidence (median follow-up 12 mos)

CD34 DOSE-DEPENDENT TREND IN REDUCTION OF MACE



SIGNAL FOR A MORTALITY BENEFIT

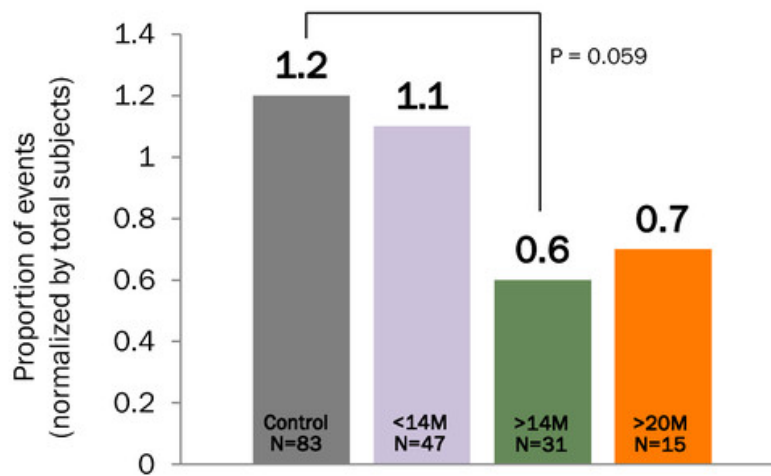


First time dose response demonstrated in this patient population

MACE= Death, MI, CHF Hospitalization, Revascularization.

PreSERVE: SAE incidence (median follow-up 18 mos)

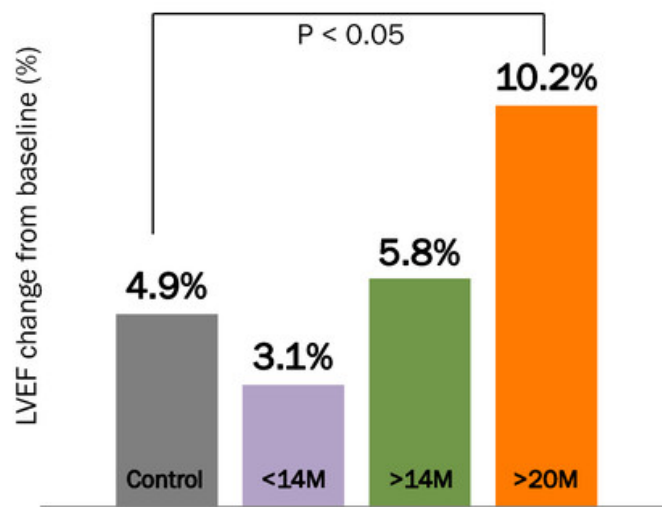
SIGNAL FOR REDUCTION IN FREQUENCY OF SAEs IN HIGHER DOSE GROUPS



*First time
dose response
demonstrated
in this patient
population*

PreSERVE: LVEF change from baseline at 6 mos.

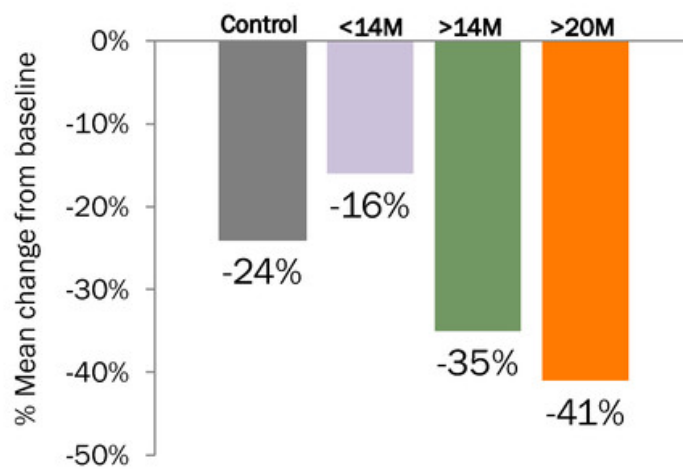
CD34 CELL DOSE-DEPENDENT TREND IN IMPROVEMENT OF LVEF



*First time
dose response
demonstrated
in this patient
population*

PreSERVE: Infarct size change (baseline to 6 mos.)

CD34 CELL DOSE-DEPENDENT TREND IN REDUCTION OF INFARCT SIZE



*First time
dose response
demonstrated
in this patient
population*

Next steps for ischemic repair program

STEMI NEXT DEVELOPMENT STEPS

- **March 2015:** One-year data
- **2H 2015:** Determine next development steps based on PreSERVE interim results and consultation with medical advisors (potentially Phase 2B/3 trial)
- **March 2016:** Two-year data
- **March 2017:** Three-year data, end of study

NEXT POTENTIAL DEVELOPMENT STEPS IN OTHER INDICATIONS

- Phase 2 in chronic heart failure
- Phase 2 in critical limb ischemia

Multi-billion dollar lifecycle opportunity

Potential application across several cardiovascular indications

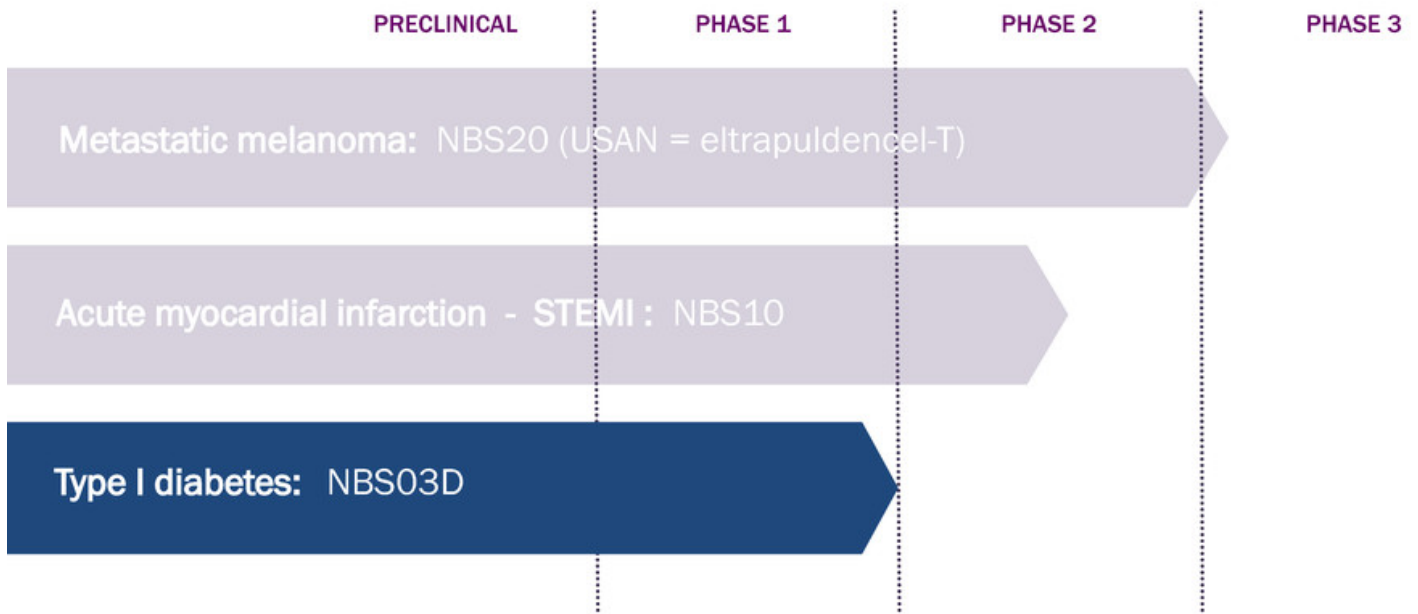


**CHRONIC HEART
FAILURE**



**CRITICAL LIMB
ISCHEMIA**

Robust, diversified and balanced pipeline





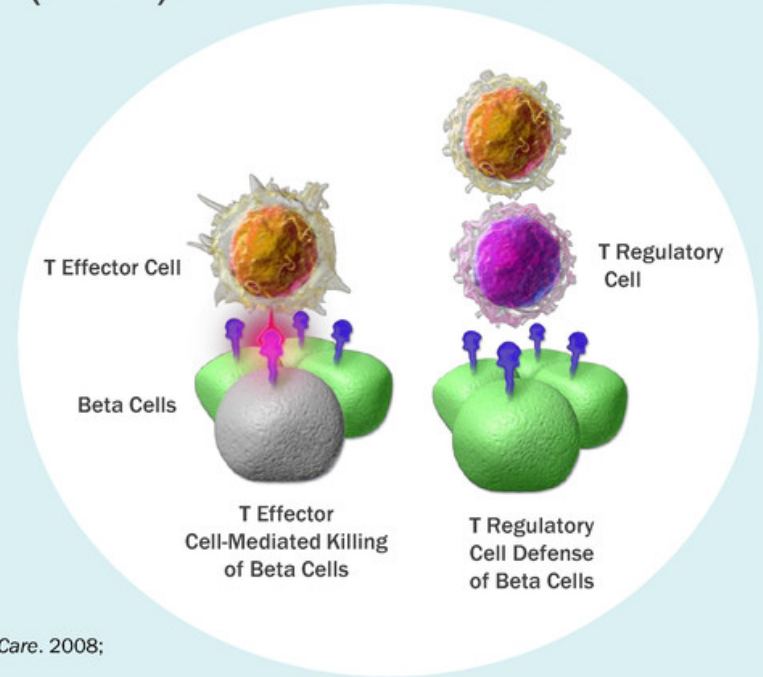
**NBS03D:
Diabetes Mellitus Type-1 (T1D)**



Diabetes Mellitus Type-1 (T1D): an autoimmune disease

PREVALENCE AND UNMET MEDICAL NEED

- 18,000 children under 20 in U.S. with new onset T1D per year¹
- 3% annual growth rate worldwide²
- No curative treatments for T1D, only lifelong insulin therapy
- Diabetes is leading cause of kidney failure, new cases of adult blindness and non-traumatic lower-limb amputations



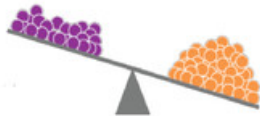
1. Hamman RF, et al. *Diabetes Care*. 2014; Sosenko JM, et al. *Diabetes Care*. 2008; Palmer JP. *Diabetes/metabolism research and reviews*. 2009
2. The DIAMOND Project Group. *Diabetic Medicine*. 2006;23:857-866.

Preparation of NBS03D – restoring immune balance and function

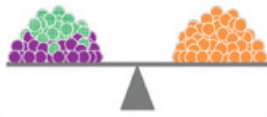
**NORMAL IMMUNE SYSTEM:
IMMUNE BALANCE**



**AUTOIMMUNITY:
IMMUNE IMBALANCE**



**INFUSION of TREGs
BALANCE REGAINED**



- T regulatory cells
- T effector cells
- Natural polyclonal T regulatory cells

Blood draw from patient



Manufacturing including expansion

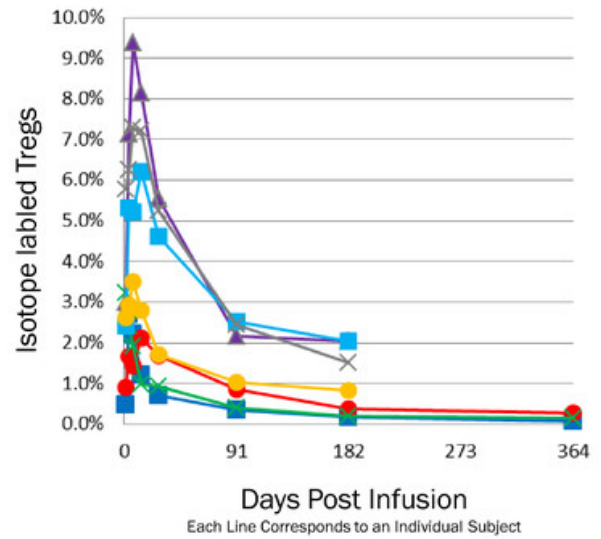


Infusion of Treg therapy to patient



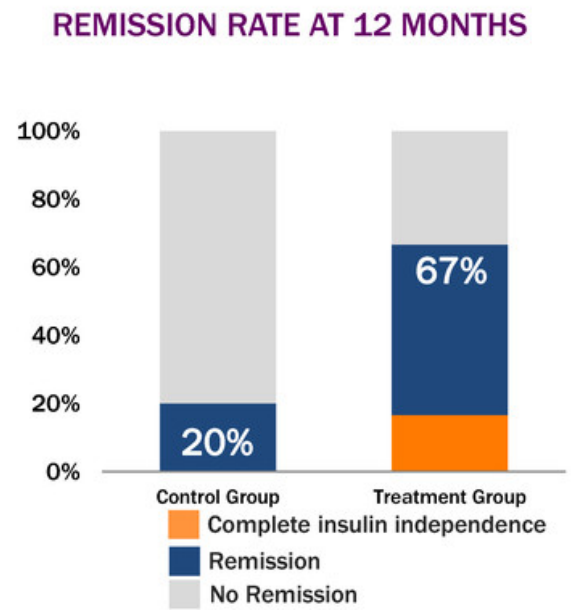
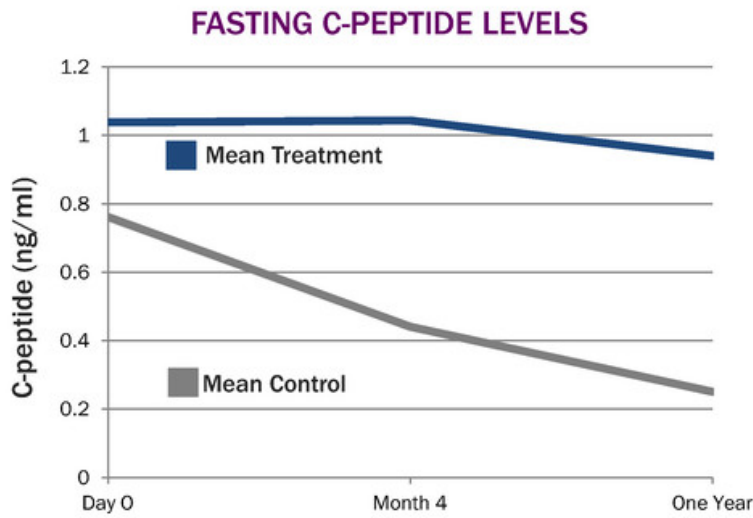
Regulatory T Cell therapy appears to be safe and well tolerated in adults¹

DESIGN	U.S. UCSF/Yale open label Phase 1 study, 4-dose escalation cohorts
PATIENTS	14 adult patients with established T1D
RESULTS	<ul style="list-style-type: none">• Preliminary data indicates safety and tolerability• Established manufacturing feasibility• Implied sustainability of effect<ul style="list-style-type: none">• Infused Tregs were stable and detected in peripheral circulation for >6 months



1. Gitelman et al, American Diabetes Association Abstract, 2014

Regulatory T Cell therapy preserves beta cell function in children¹



Marek-Trzonkowska, N t al. *Clinical Immunology* 2014

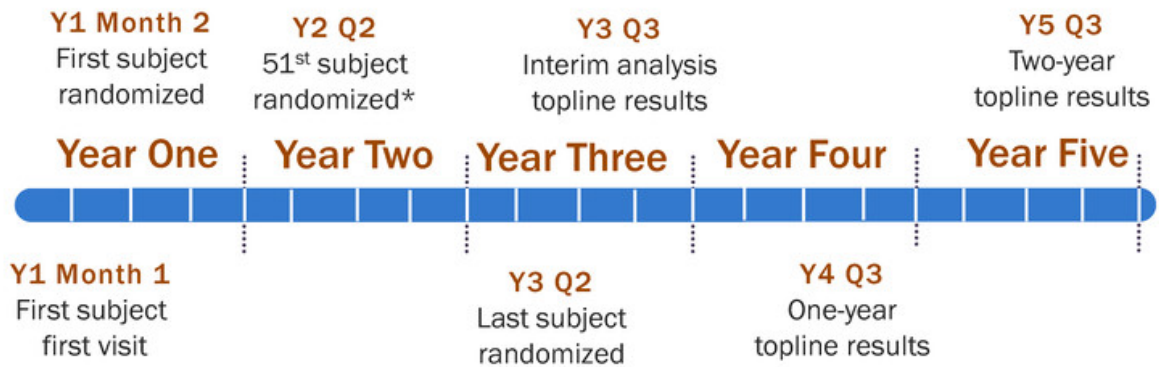
1. Children aged 5-18 administered 1 (10 or 20 mil cells/kg) or 2 doses (total 30 mil cells/kg) of Tregs

The Trutina study: phase 2 in adolescents with T1D¹

DESIGN	Double blind, placebo controlled, randomized (1:1:1) for adolescent patients with recent onset T1D ages 12 to 18
PRIMARY ENDPOINT	Preservation of C-peptide at 52 weeks in comparison to placebo
POWERING	80% power to detect 50% attenuation of the decline in mixed meal tolerance test stimulated c-peptide in comparison to placebo, adjusted for baseline
STUDY SIZE	111 subjects to be enrolled across ~11 US sites
TREATMENT	2 dose groups of NBS03D (single dose autologous ex-vivo expanded polyclonal T Regulatory cell therapy): 10 and 20 million cells/kg
CONTROL	Matching infusion

1. Study cleared by FDA to proceed based on efficacy data in children establishing prospect of direct benefit

Trutina study timeline



Expected cost of trial: ~\$22.5 million

*One-year visit of 51st subject triggers interim analysis

Multi-billion dollar lifecycle opportunity

Potential application across multiple autoimmune and allergic diseases



**STERIOD
RESISTANT
ASTHMA**



**MULTIPLE
SCLEROSIS
(MS)**



**CHRONIC
OBSTRUCTIVE
PULMONARY DISEASE
(COPD)**



**INFLAMMATORY
BOWEL DISEASE**



**GRAFT VS. HOST
DISEASE**

Investment summary

- ✓ Highly experienced management and scientific team
 - ✓ Proprietary platform technologies yielding a diversified, balanced pipeline targeting critical unmet needs in large global markets and **near-term development milestones**
 - ✓ **Immunotherapy** platform applicable across multiple solid tumors with **Fast Track** and **Orphan Drug** designations and a **SPA** for a **phase 3 study in metastatic melanoma**
 - ✓ **Cell therapy** platform applicable in multiple cardiovascular indications with ongoing Phase 2 study for acute myocardial infarction – **compelling and consistent interim results**
 - ✓ **Immunomodulation** therapy platform targeting autoimmune disorders with **FDA cleared phase 2 study in adolescents with type I diabetes**
 - ✓ Internal center of excellence (**PCT**) with bicoastal facilities and **proven capabilities** innovating discovery, **development, manufacturing and delivery of cell-based therapies**
-



Transforming Personalized Medicine

Corporate Presentation

NASDAQ: NBS
March 2015

Contact:

Eric Powers, Manager of
Communications & Marketing

Phone: 212.584.4173

Email: epowers@neostem.com

Web: www.neostem.com

