NeoStem®

INVESTOR PRESENTATION

NASDAQ: NBS
DECEMBER 2014

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 Caner 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 DC/TC being developed to treat metastatic melanoma;
  - the results of our PreSERVE Phase 2 clinical trial of NBS10 (AMR-001) being developed to treat acute myocardial infarction for which we released initial data on November 17, 2014 and for which all 6 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;
- the other factors discussed in "Risk Factors" in our Form 10-K filed with the Securities and Exchange Commission ("the SEC") on March 13, 2014, and elsewhere in the Annual Report on Form 10-K; and
- the Company's acquisition of California Stem Cell, Inc. ("CSC Acquisition") and the ongoing operations associated with this new business will subject the Company to additional risks. Our Current Report on Form 8-K filed on May 8, 2014 reporting the closing of the CSC Acquisition contains a discussion of the risk factors related to the CSC Acquisition and our new Targeted Immunotherapy Program.

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 13, 2014, the "Risk Factors" described in the Current Report on Form 8-K filed by the Company on May 8, 2014 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 COMPANY OVERVIEW

- Integrated biotechnology company with a strong pipeline based on multiple platform technologies, that includes Phase 2 and 3 assets, and a revenue-generating contract development and manufacturing service business
- Headquarters in New York City
- GMP-compliant facilities in Allendale, NJ; Mountain View, CA; and Irvine, CA
- 168 employees as of September 30, 2014
- Nasdaq CM: NBS
- Market cap: $186 MM*
- $32.8 MM in cash and marketable securities of September 30, 2014

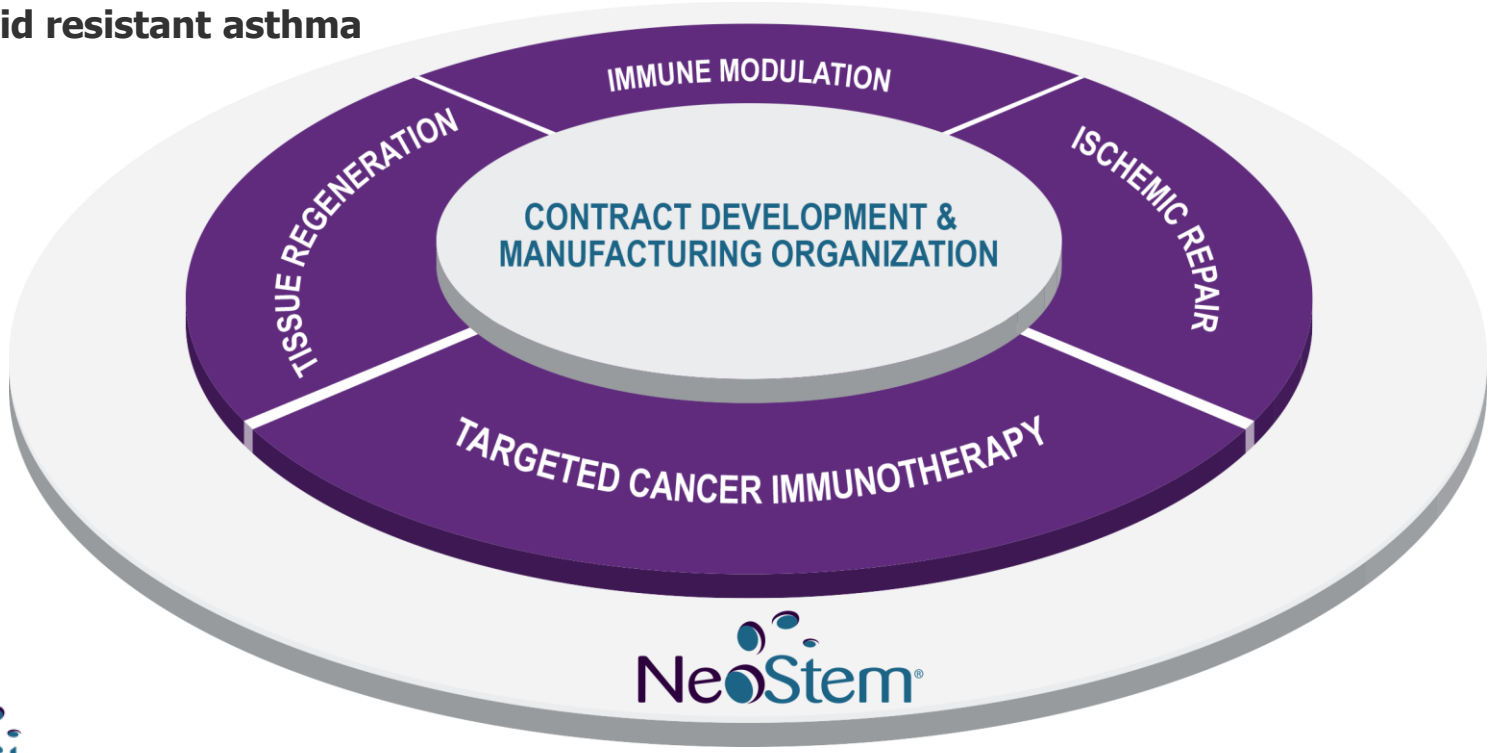
* As of October 15, 2014, based on a $5.26 share price

OUR VALUE PROPOSITION

A LATE STAGE CLINICAL PIPELINE AND A REVENUE-GENERATING SERVICE BUSINESS IN CELL THERAPY

TARGET INDICATIONS INCLUDE:

- **Stage IV and recurrent Stage III melanoma**
- **Acute myocardial infarction**
- **Type 1 diabetes**
- **Steroid resistant asthma**



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MANAGEMENT HIGHLIGHTS

Robin Smith, MD
Chief Executive Officer

- Leading NeoStem since 2006, completed six acquisitions and one divestiture

Robert Dickey IV
Chief Financial Officer

- Former investment banker (Lehman Brothers)
- Former CFO at StemCyte, a stem cell company

Douglas W. Losordo, MD
Chief Medical Officer

- Leader in cell therapy research and renowned cardiologist (Baxter, Northwestern University)

Andrew L. Pecora, MD
Chief Visionary Officer

- Chief Innovations Officer at John Theurer Cancer Center
- Co-founder of PCT

Robert A. Preti, PhD
Chief Scientific Officer, President of PCT

- Leading authority on cell engineering (30+ papers published)
- Co-founder of PCT

Stephen W. Potter
Executive Vice President

- Former Senior VP Operations & Corporate Development, Osiris Therapeutics (approval of Prochymal®, first-ever stem cell drug therapy)
- Genzyme, DuPont Pharmaceuticals, Booz Allen & Hamilton

DEVELOPMENT HIGHLIGHTS: MULTIPLE PLATFORM TECHNOLOGIES

A PORTFOLIO OF CELL THERAPY PRODUCTS IN DEVELOPMENT THAT LEVERAGE THE BODY'S NATURAL ABILITY TO HEAL AND FIGHT DISEASE

TARGETED CANCER IMMUNOTHERAPY PROGRAM

- Using DC/TC Technology

IMMUNE MODULATION PROGRAM

- Using T Regulatory Cell Technology

ISCHEMIC REPAIR PROGRAM

- Using CD34 Cell Technology

TISSUE REGENERATION PROGRAM

- Using VSEL™ Technology and Stem Cell Derived Growth Factors

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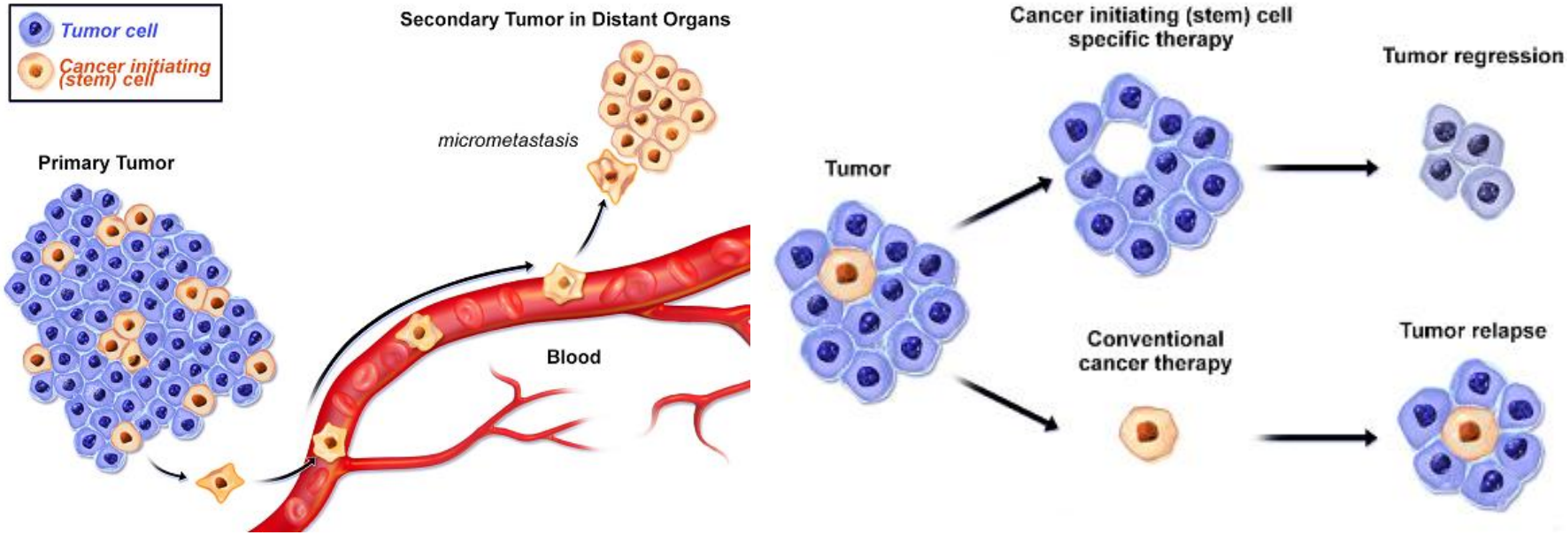
TARGETED CANCER IMMUNOTHERAPY PROGRAM RATIONALE

Cancer initiating (stem) cells* can move through the blood stream to form new metastases and grow to form new tumors



- Once isolated from patient's tumor, cancer initiating cells provide potent signature antigens to educate and direct the immune system
- Our immunotherapy program uniquely targets the patient's cancer initiating cells which are otherwise capable of reconstituting the tumor

* These cells are defined as invasive migratory cancer initiating cells capable of reconstituting and developing new tumors

FIRST TARGET INDICATION: MELANOMA

BASICS OF MELANOMA

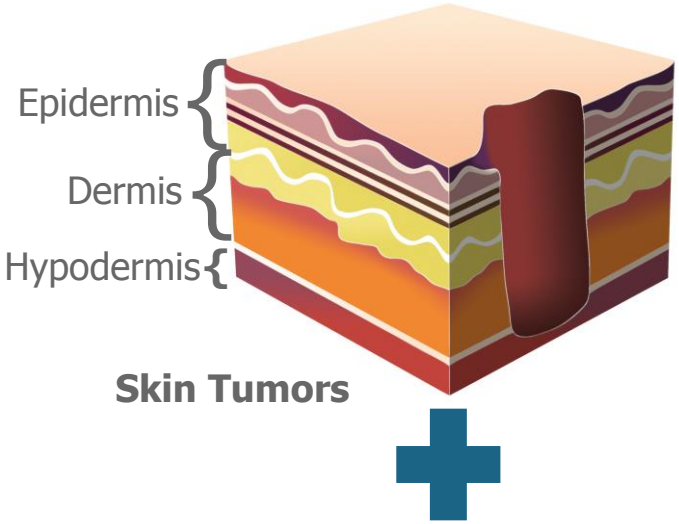
- Most lethal form of skin cancer
- Most often caused by unrepaired DNA damage to skin cells from UV radiation
- 76,100 estimated new cases per year in U.S.[1]
- Kills an estimated 9,710 in U.S. annually[1]

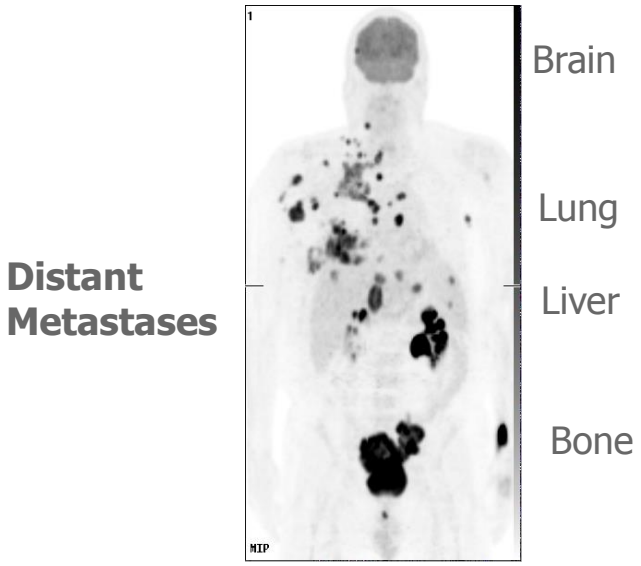
SURVIVAL RATE

- Stage IV metastatic melanoma – 15% five-year survival rate with current therapies[2]

CURRENT MAJOR-MARKET* LANDSCAPE FOR MELANOMA

- $950 million market size
- 76% of cost is spent on immunotherapies





1. National Cancer Institute – 2014 SEER

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

All other data from *Decision Resources Malignant Melanoma – 2013 Report*

* U.S., Europe and Japan in 2012

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MELANOMA: STANDARD OF CARE

SUBOPTIMAL EFFICACY, POOR TOLERABILITY, HIGH COST

THERAPY	2 YR OVERALL SURVIVAL	SIDE EFFECTS	ESTIMATED COST
Proleukin (Interleukin-2) *Prometheus Labs*	25%[1]	Capillary Leak Syndrome Impaired Neutrophil Function Disseminated Infection Sepsis	>$100,000
Yervoy (Ipilimumab) (CTLA-4 inhibitor) *Bristol Myers – Squibb*	28%[2]	Enterocolitis Hepatitis Dermatitis Neuropathy Endocrinopathy GI Disorders	>$100,000
Oral BRAF inhibitors & MEK inhibitors	28%[3]	Cutaneous Malignancies Hypersensitivity Reactions Tumor Promotion in BRAF wild-type QT Prolongation Hepatotoxicity	>$100,000
Chemotherapy	15%[4]	Anemia Fatigue Risk of Infection Nausea/Diarrhea/Constipation	~$50,000

1. Eton *JCO* 2002, Atkins *JCO* 2008
2. Hodi *NEJM* 2010, Robert *NEJM* 2010, Wolchok *Ann Oncol* 2013
3. Estimated
4. Chapman *JCO* 1999, Middleton *JCO* 2000, Ranson *JCO* 2007, Robert *NEJM* 2011, Chapman *NEJM* 2011 (Derived from a range of 9 – 20%)

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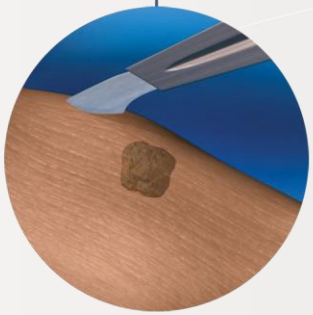
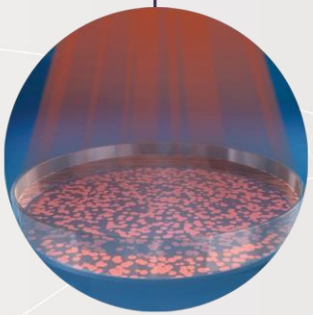
TARGETED CANCER IMMUNOTHERAPY TREATMENT PROCESS

Step 1



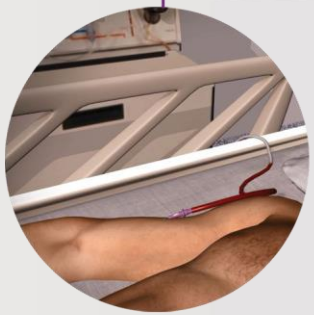
STEP 1:
Treatment begins with the surgical resection of the patient's tumor

Step 2



STEP 2:
(DAY 0 - WEEK 6)
The cancer initiating (stem) cells from the tumor are isolated, expanded, and irradiated to render them inactive

Step 3



STEP 3:
(PRIOR TO WEEK 6)
Patient undergoes leukapheresis, a procedure in which monocytes are extracted from circulating blood

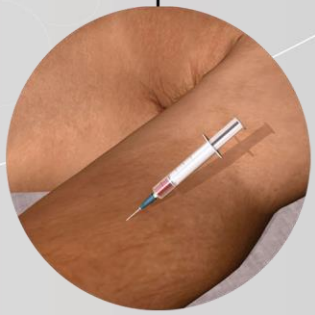
Step 4

STEP 4: (WEEK 6)
Immature dendritic cells, derived from monocytes, are exposed to the irradiated cancer initiating cells and learn to identify cancer initiating cells based on their antigen signature

Step 5

STEP 5:
(WEEK 6 - WEEK 8)
Partially matured, antigen-loaded dendritic cells are cryopreserved, quality controlled, then shipped to the clinical site

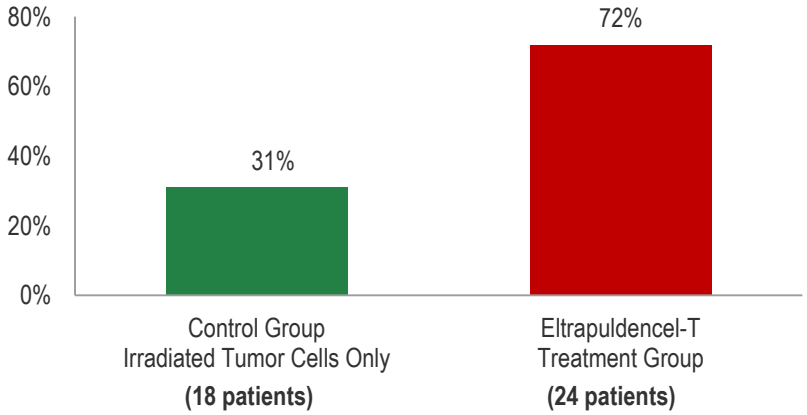
Step 6



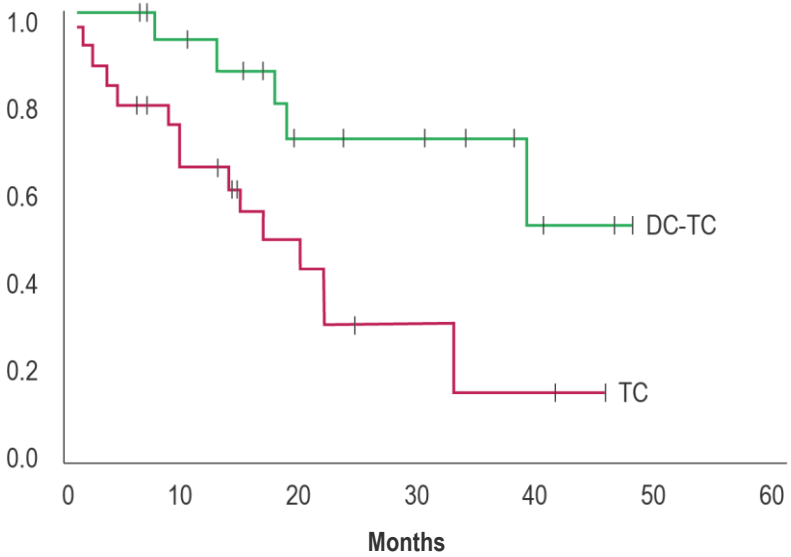
STEP 6:
Treatment begins (eight injections administered over six months)

PHASE 2 RESULTS FOR ELTRAPULDENCEL-T FOR METASTATIC MELANOMA

2 YEAR OVERALL SURVIVAL



PROPORTION SURVIVING



Dillman, et al. *Journal Immunotherapy* 2012

TRIAL DESIGN:

- Treatment group: Eltrapuldencel-T (autologous dendritic cells pulsed with irradiated tumor cells in GM-CSF)
- Control group: Irradiated tumor cells only
- Stratified by whether regional or distant metastatic disease and whether measurable disease.
- 80% power to detect 40% difference in survival. 90% power to detect a 50% difference in survival.
- P = 0.007
- Hazard ratio = 0.27

TRIAL RESULTS:

- First accrual Oct. 2007
- Last randomized Feb. 2011
- 42 patients randomized
- **No serious adverse events** related to immunotherapy
  - Minor local injection site reactions

FEATURES AND INTENDED EFFECTS OF TARGETED CANCER IMMUNOTHERAPY PROGRAM

FEATURES:	INTENDED EFFECTS:
Designed to present the entire spectrum of patient-specific antigens that are expressed on cancer initiating (stem) cells for the immune system to target	Designed to address cancer heterogeneity by including tumor-associated antigens unique to that patient
Designed to target the cancer initiating cells that express antigens associated with mutated cell lineages	Focuses on the fraction of tumor cells that cause recurrence and metastasis of cancer rather than on more differentiated cells
Designed to induce or enhance persistent T-cell immunity with activated dendritic cells	Potential for improved anti-tumor immune response compared to using tumor cells alone or specific tumor antigens as the source of tumor-associated antigens
Designed to act through natural anti-tumor pathways of humoral and cellular immunity	Potential for less toxicity compared to other anti-melanoma therapies

Adverse events seen in development to date:

- Serious adverse events in Phase 2 trials included AMI (1 patient), seizures (1 patient), acute myelogenous leukemia (1 patient), anaphylactoid reaction (1 patient) – judged unrelated to study participation
- Minor local injection site reactions in most patients

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MELANOMA SCIENTIFIC ADVISORY BOARD

Robert Dillman, MD SAB Administrative Co-Chairman	Vice President, Oncology, NeoStem
Andrew L. Pecora, MD SAB Administrative Co-Chairman	Chief Visionary Officer, NeoStem Hackensack University Medical Center
Michael B. Atkins, MD	Georgetown-Lombardi Comprehensive Cancer Center
Lisa H. Butterfield, PhD	University of Pittsburgh
Kim Margolin, MD	Stanford University
Stephen J. O'Day, MD	Beverly Hills Cancer Center
Merrick I. Ross, MD	University of Texas M.D. Anderson Cancer Center
Jedd D. Wolchok, MD, PhD	Memorial Sloan Kettering Cancer Center

INTUS PHASE 3 SPECIAL PROTOCOL ASSESSMENT (SPA) STUDY DESIGN

STUDY NAME	the Intus study
TARGET	Patients with Stage IV or recurrent Stage III metastatic melanoma
LOCATION	United States and potentially Australia & New Zealand, approximately 50 sites
DESIGN	Double blind, placebo controlled, randomized (2:1), intent to treat analysis, planned enrollment 250 evaluable patients; 80% power to detect 37.5% reduction in risk of death; Hazard ratio=0.625
ENDPOINT	Overall survival
TREATMENT GROUP	DC/TC (autologous dendritic cells pulsed with irradiated tumor cells in GM-CSF)
CONTROL GROUP	Autologous mononuclear cells (MC) in GM-CSF
SPECIAL PROTOCOL ASSESSMENT (SPA)	Suggests FDA is in agreement with the design, clinical endpoints and planned clinical analysis of this Phase 3 trial. Potential to serve as the basis for a Biologics License Application
FDA DESIGNATIONS	Fast Track Designation for metastatic melanoma and Orphan Drug Designation

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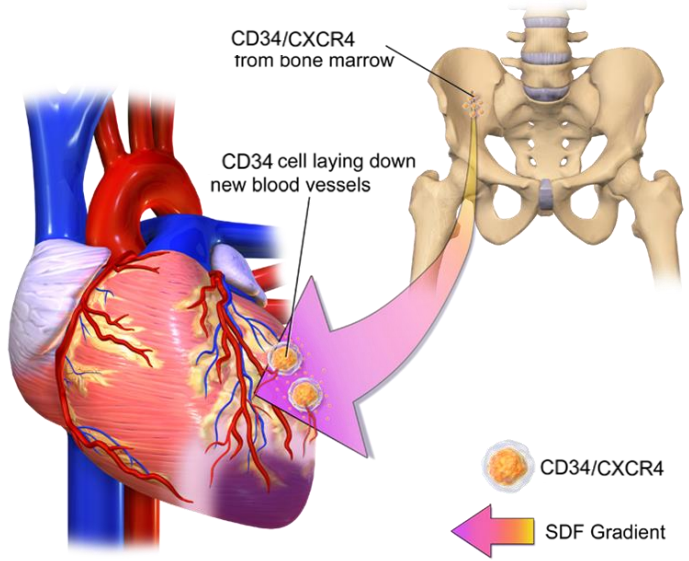
ISCHEMIC REPAIR PROGRAM RATIONALE: TO ENHANCE THE BODY'S NATURAL REPAIR MECHANISM

- Ischemia occurs when the supply of oxygenated blood is restricted
- Program seeks to reverse this restriction through development and formation of new blood vessels
- CD34/CXCR4 expressing cells have been shown to be capable of inducing the development and formation of new blood vessels and preventing heart cell death
- The same natural repair mechanism applies to multiple areas of vascular insufficiency such as:
  - Acute myocardial infarction (AMI)
  - Traumatic brain injury
  - Chronic heart failure
  - Critical limb ischemia

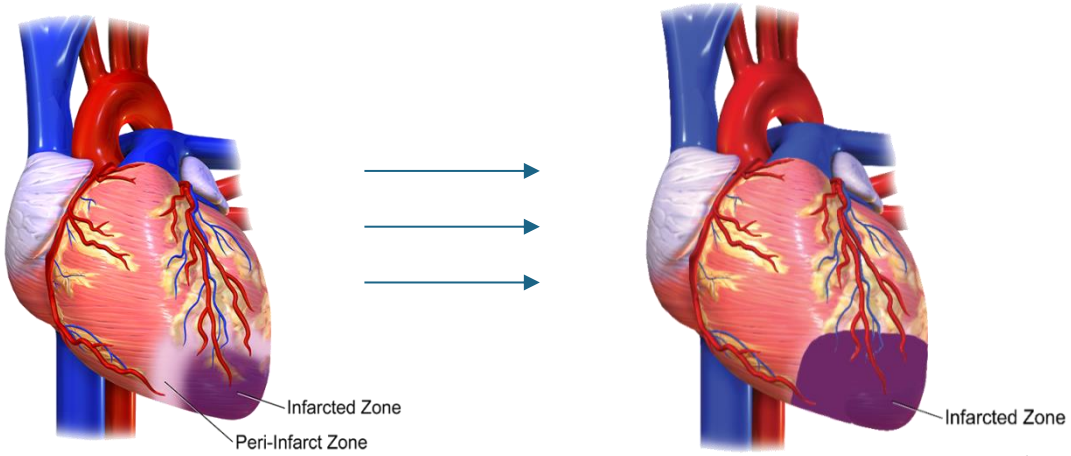


FIRST TARGET INDICATION: STEMI

- Following a heart attack, apoptosis and progressive cardiomyocyte loss leads to infarct expansion
- ST segment Elevation MI (STEMI) patients are at a high risk of a progressive deterioration in heart muscle function that leads to worsening of cardiac output, morbidity and mortality

- 240,000 STEMI patients/year in US
- Incidence and prevalence is ~1/3 of total AMI events
- Average age of AMI patient in US is 66
- > $37 billion hospital cost/year in US for AMI

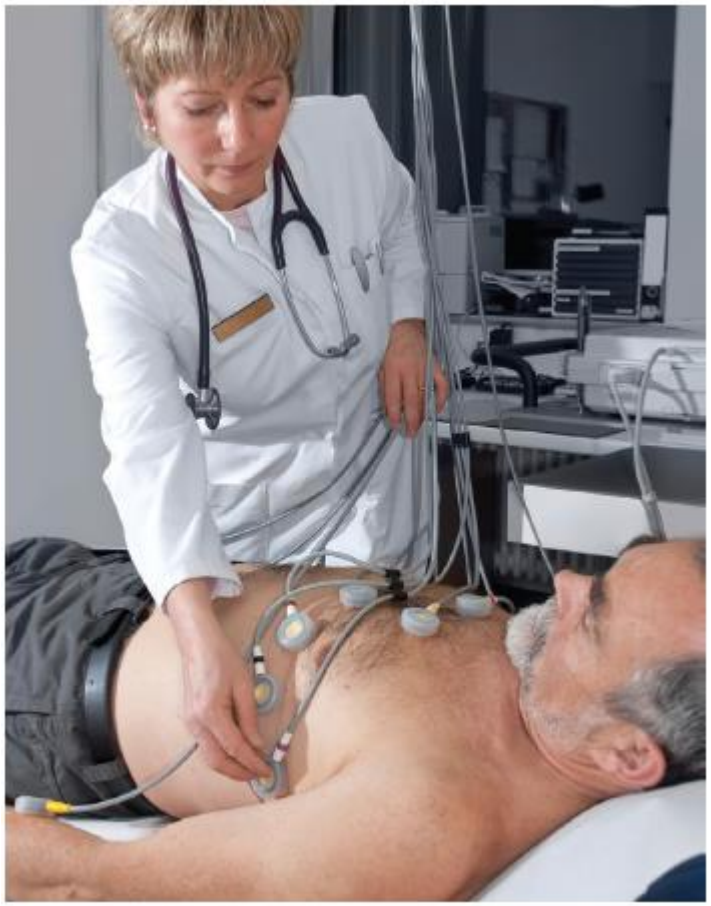
THE NATURAL PROGRESSION OF DISEASE POST-STEMI



STEMI: STANDARD OF CARE

INVASIVE, ASSOCIATED MORBIDITY & MORTALITY

- Emergency care:
  - Administration of antithrombotic therapy, aspirin, beta-blocker, nitroglycerin, and/or morphine
  - Percutaneous coronary intervention - coronary angioplasty and stenting
- Home care:
  - Aspirin, beta-blocker, ACE-inhibition/ARB
  - Cholesterol-lowering therapy and lifestyle changes
- Prognosis:
  - 30-day mortality of 7.9%[1]
  - Annual mortality of 1.5-3% after this initial 30 day period[1]
  - Occurrence of Major Adverse Cardiac Events (MACE) from 16-40% in first year [2,3]



1. Pedersen, *Journal of the American College of Cardiology*, 2014.
2. Schachinger et al, *NEJM* 2006
3. Traverse et al, *JAMA* 2012

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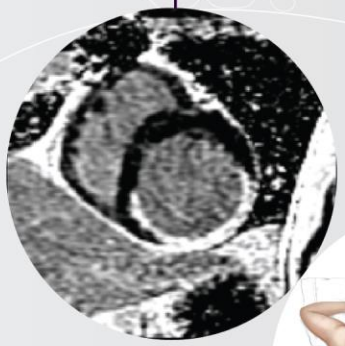
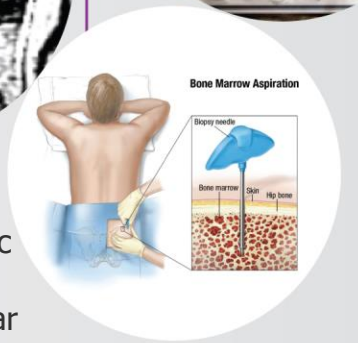
NBS10 TREATMENT PROCESS*

DAY 1 | DAY 2 | DAY 3 | DAY 4 | DAY 5 | DAY 6 | DAY 7 | DAY 8 | DAY 9 | DAY 10 | DAY 11

DAY 1:
Patient comes to emergency room with heart attack and receives stent

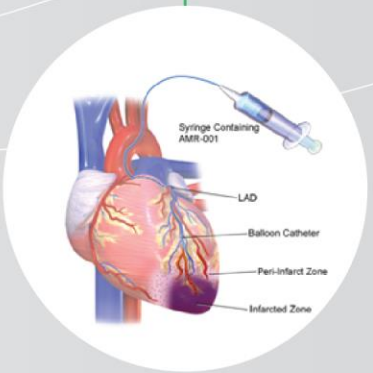


DAY 4:
Cardiac magnetic resonance to assess ventricular function



DAY 4-9:
Mini bone marrow procedure to harvest cells

DAY 5-9:
6-8 hour cell separation process to isolate CD34/CXCR4 cells



DAY 6-11:
Injection of cell therapy into the infarct-related artery

*Process as per protocol for PreSERVE Phase 2 study

PRESERVE PHASE 2 STUDY: INITIAL DATA RELEASED

TARGET	Post-AMI patients
KEY INCLUSION CRITERIA	Confirmation of ST Elevation MI (STEMI); ejection fraction ≤ 48% at day 4 by CMR; state of the art care post stenting
LOCATION AND NUMBER OF SUBJECTS	United States, 60 centers, 161 patients **(enrollment completed)**
DESIGN	Double blind, placebo controlled, randomized (1:1)
PRIMARY ENDPOINTS	Change in cardiac perfusion (RTSS by SPECT) from baseline to 6 months and incidence rates of SAEs (serious adverse events) and MACE (major adverse cardiac events - defined as composite of cardiovascular death, reinfarction, heart failure hospitalization and coronary revascularization)
OTHER ENDPOINTS	To determine preservation of cardiac function and clinical outcomes: ■ CMR to measure LVEF, LVESV, LVEDV, regional myocardial strain, infarct/peri-infarct regional wall motion abnormalities, and infarct size (baseline and 6 months) ■ Quality of Life measures: (KCCQ & SAQ)
TREATMENT	Single dose via infarct related artery with minimum dose for release ≥10MM CD34+ cells

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INITIAL PHASE 2 RESULTS: 1 YEAR MORTALITY BENEFIT & DOSE-DEPENDENT RELATIONSHIP WITH DECREASE IN SERIOUS ADVERSE EVENTS & IMPROVEMENT IN EJECTION FRACTION

- Results provide preliminary evidence that intracoronary administration of autologous CD34+ cells (NBS10) is:
  - Safe and well tolerated
  - Associated with reduced 1-year mortality rate; statistically significant mortality benefit ($p<0.05$)
  - Associated with a *dose-dependent* reduction in SAEs; statistically significant dose-dependent reduction in SAEs ($p<0.05$)
  - Associated with no difference at 6 months in myocardial perfusion (based on SPECT imaging)
  - With correction for the time to stent implantation, is associated with a statistically significant CD34 cell dose-dependent increase in LVEF ($p<0.05$)
  - Associated with a *dose-dependent* increase in LVEF in the treatment group for patients treated with dose > 20 million CD34 cells; statistically significant ($p<0.05$)

PHASE 2 RESULTS: MORTALITY

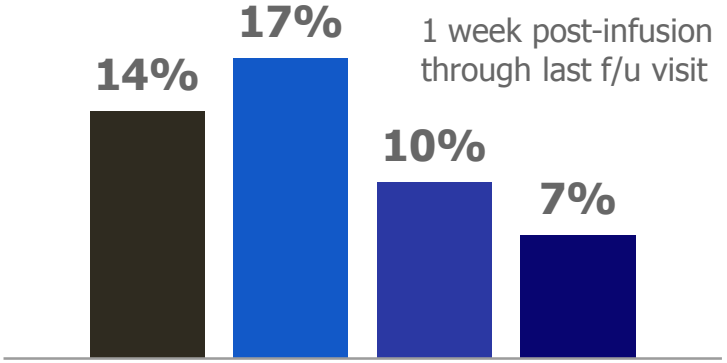
Infusion through last follow-up visit

	Placebo	NBS10	p-value*
Death	3 (3.6%)	0 (0%)	**0.04**

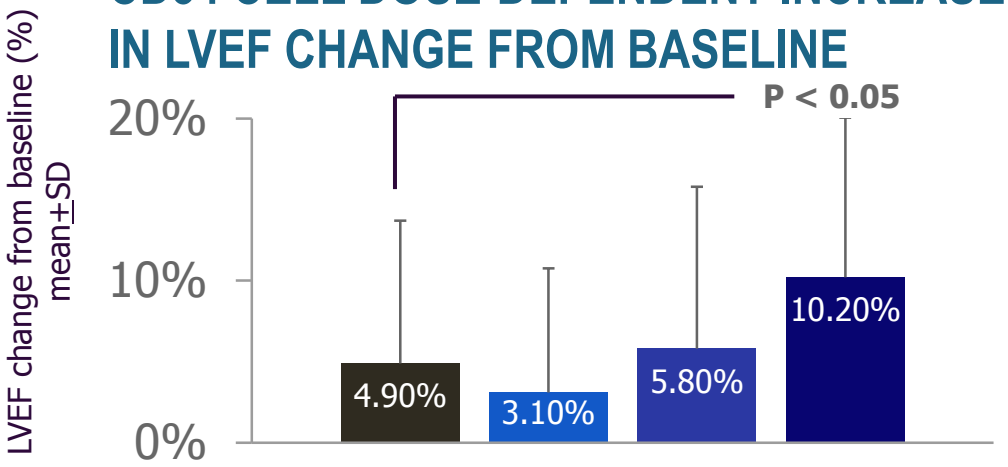
Subjects with MACE through 6 month follow up of last patient; P-value reflects a z-test
*P-value reflects a z-test of the null hypothesis of no difference in mean number of total events against the alternative that treatment group subjects experience fewer total events on average compared to controls.

PHASE 2 RESULTS

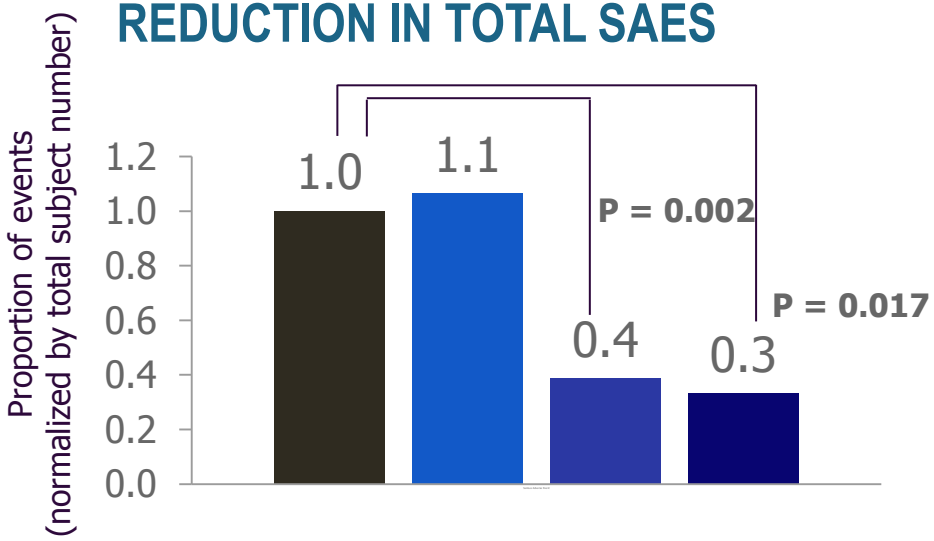
CD34 CELL DOSE-DEPENDENT REDUCTION IN MACE INCIDENCE



CD34 CELL DOSE-DEPENDENT INCREASE IN LVEF CHANGE FROM BASELINE



CD34 CELL DOSE-DEPENDENT REDUCTION IN TOTAL SAES



MULTIPLE REGRESSION MODEL WITH CHANGE IN LVEF MODELED AS A FUNCTION OF INFUSED CD34+ CELL DOSE

Parameter	Parameter Estimate (SE)	P-Value
Infused CD34+ Dose	2.21 (1.084)	**0.045**

Control (N=83) **>14M** (N=31)
<14M (N=47) **>20M** (N=15)

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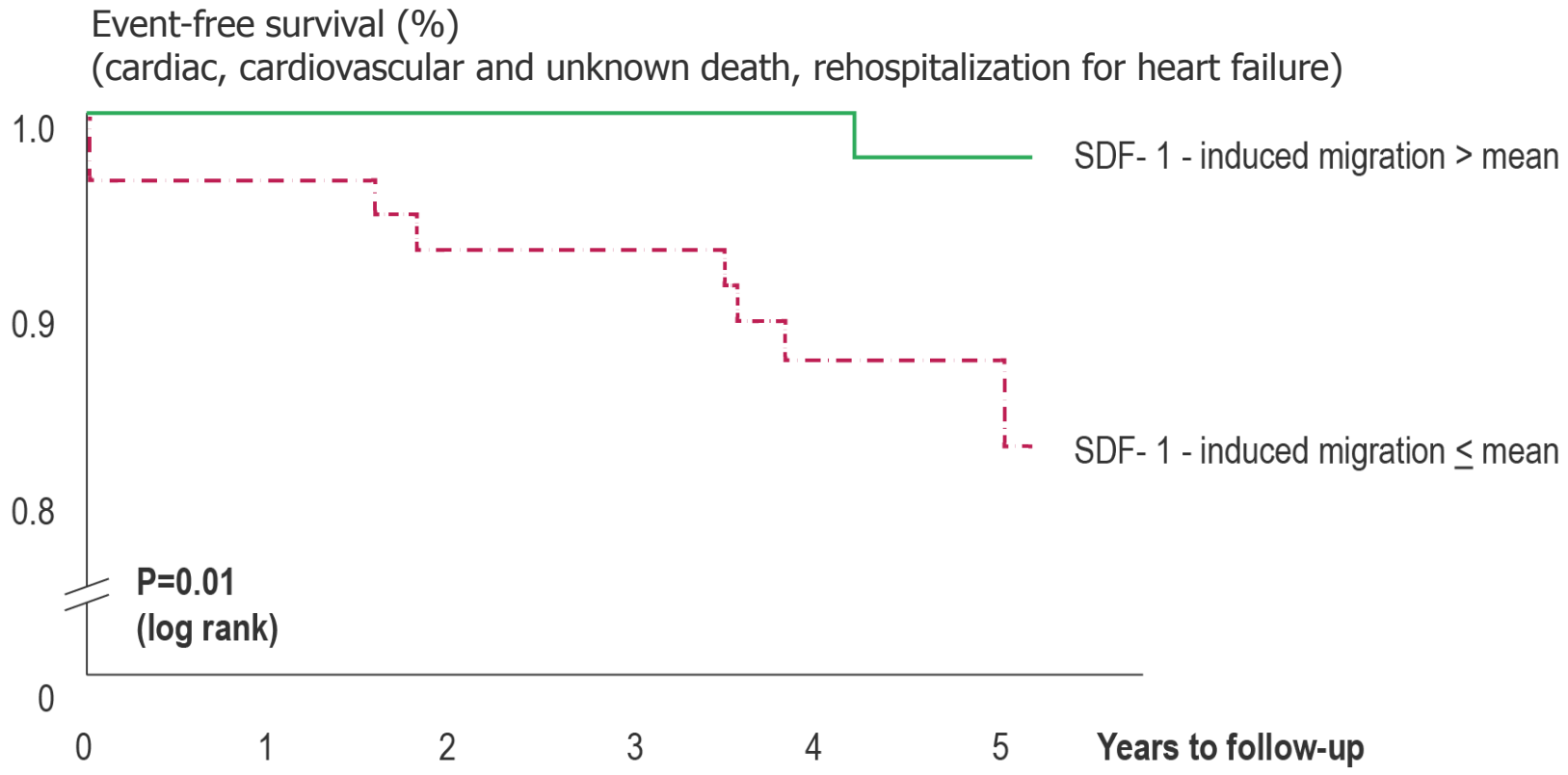
MIGRATORY CAPACITY OF ADMINISTERED CD34 CELLS ASSOCIATED WITH EVENT-FREE SURVIVAL POST AMI

- Recently published study demonstrated administration of autologous SDF-1 migratory CD34 cells, significantly reduces cumulative incidence of major adverse clinical cardiac events following acute myocardial infarction (AMI)



Assmus, B., et al. (2014) Long-term clinical outcome after intracoronary application of bone marrow-derived mononuclear cells for acute myocardial infarction: migratory capacity of administered cells determines event-free survival. *European Heart Journal*

FEATURES AND INTENDED EFFECTS OF NBS10

FEATURES:	INTENDED EFFECTS:
CD34/CXCR4 cells are designed to target viable tissue surrounding the infarcted myocardium (peri-infarct zone) after administration and persist	Mobile cells migrate to targeted tissues
Autologous cells take up residence in the peri-infarct zone, with potential to promote angiogenesis	No immunogenicity risk; Potential for improved blood flow
Cell preparation has a 72 hour shelf life and is infused into patient 5 to 11 days following an acute myocardial infarction (AMI)	Cells are introduced after pro-inflammatory "hot phase" but prior to permanent scar formation; Enhanced likelihood of healthy tissue formation
Infusion into infarct related artery (IRA), not myocardium	Designed to be safer and permit greater distribution

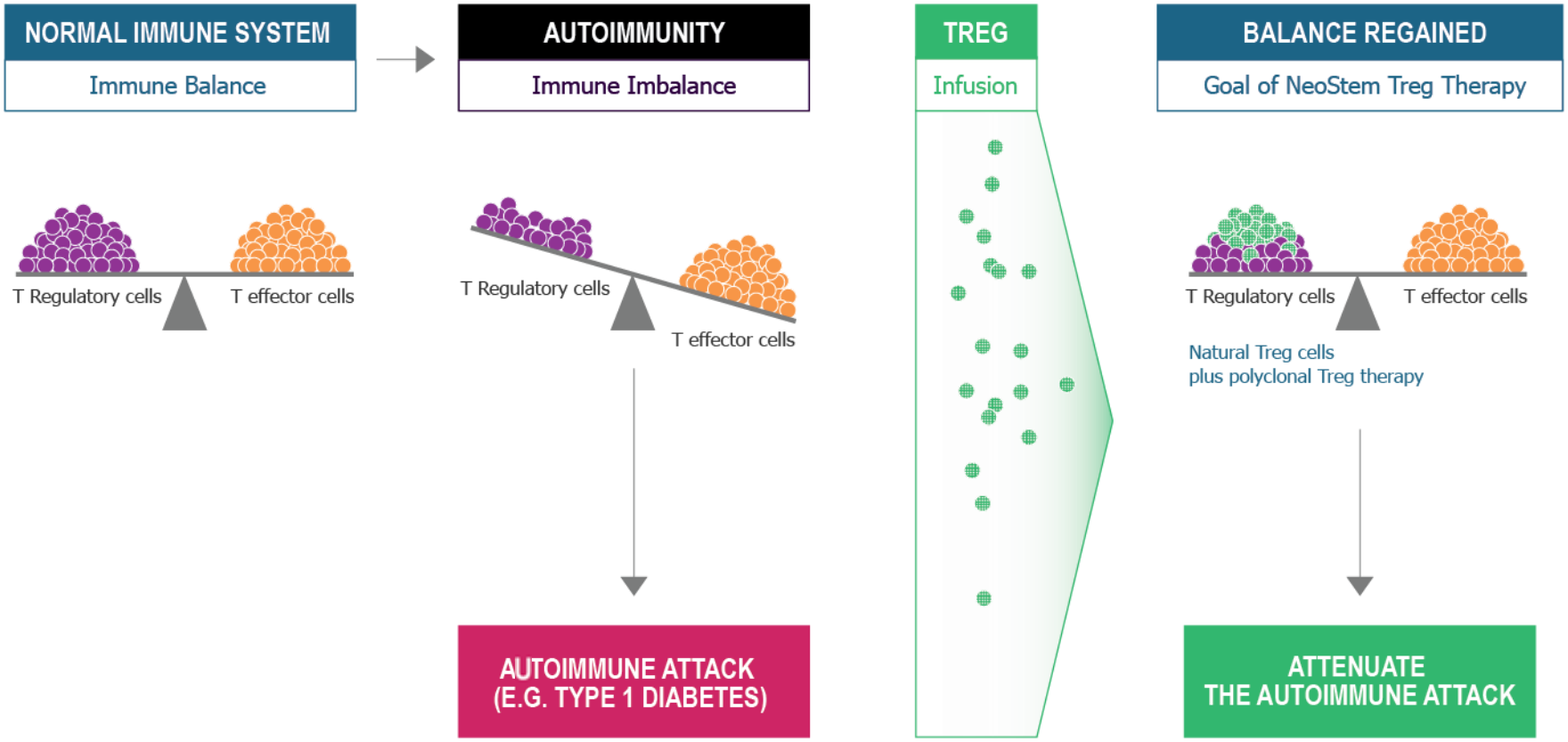
Adverse events seen in treated Phase 1 patient population:

- One case of congestive heart failure 1 year after cell infusion
- One patient was diagnosed with chronic myelogenous leukemia (CML)
- Two cases of re-stenosis and thrombosis

NeoStem

IMMUNE MODULATION PROGRAM RATIONALE

TREG THERAPY REPRESENTS A NOVEL APPROACH FOR RESTORING IMMUNE BALANCE BY ENHANCING T REGULATORY CELL NUMBER AND FUNCTION[1]

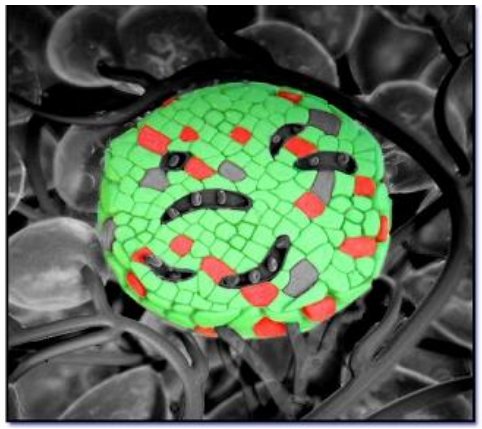


1. Chai, Jian-Guo et al, *Journal of Immunology* 2008; 180;858-869

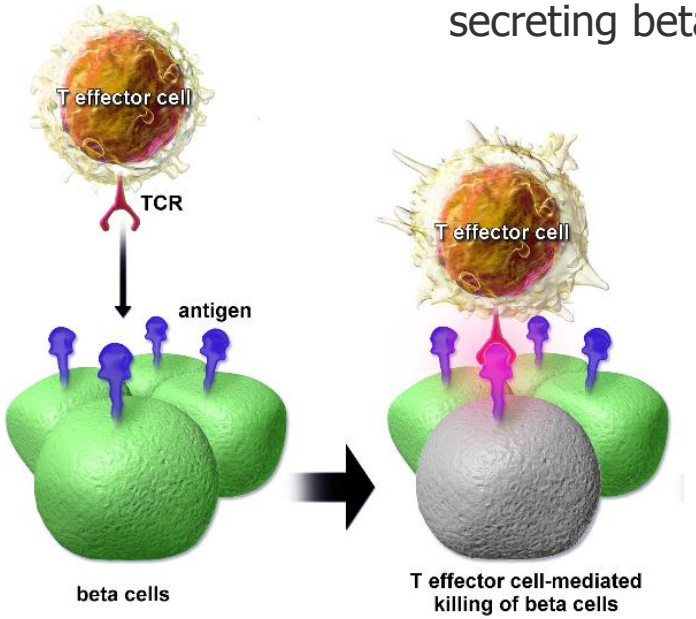
FIRST TARGET INDICATION: DIABETES MELLITUS TYPE-1 (T1D)

- Also called insulin dependent diabetes or juvenile diabetes
- Affects >34 million worldwide, 1 in 300 children and more adults
- Economic burden of T1D in the U.S. is estimated at $14.9 billion
- Autoimmune destruction of insulin-producing (beta cells) of the pancreas
- Diabetes is leading cause of kidney failure, new cases of adult blindness, and non-traumatic lower-limb amputations
- Results in total insulin deficiency
- At time of diagnosis, there are still insulin-secreting beta cells in islets

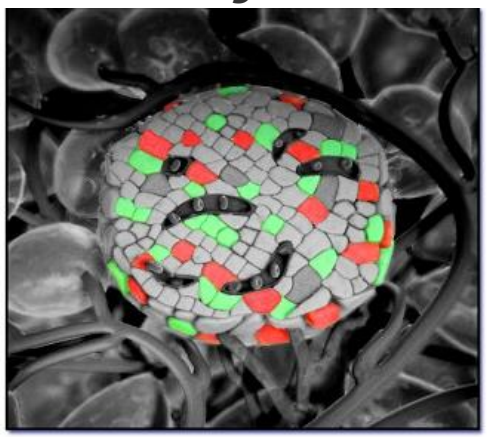
Healthy islet



Insulin-secreting cells
Glucagon-secreting cells



Islet at diagnosis of T1D



Insulin-secreting cells
Glucagon-secreting cells

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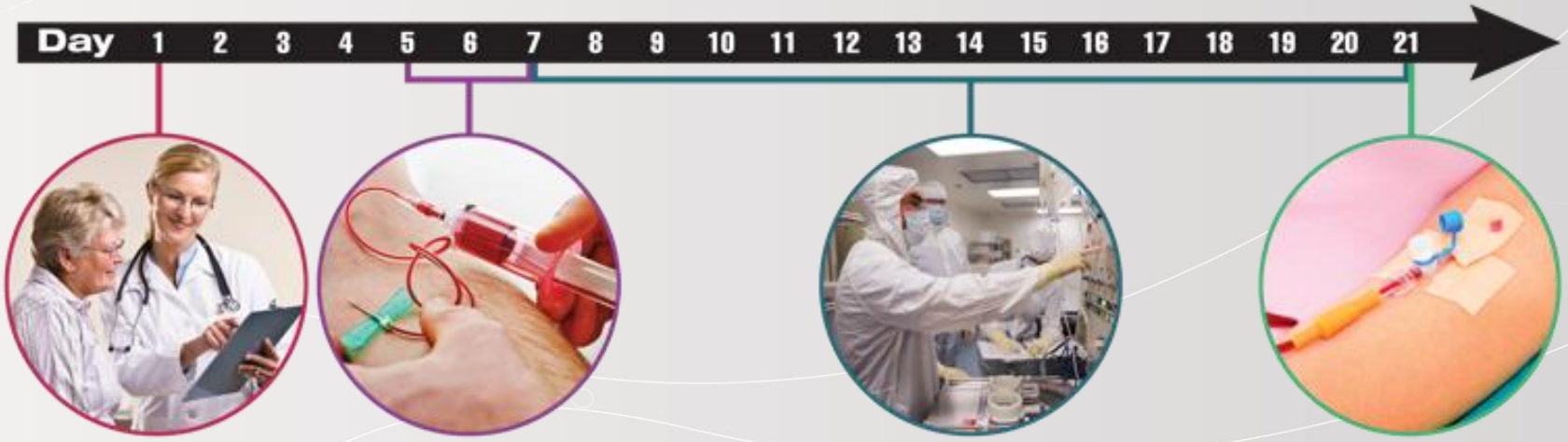
T1D: STANDARD OF CARE

LIFETIME INSULIN DEPENDENCY, COMORBIDITIES

- There is no treatment for T1D – only lifelong insulin therapy to help avoid complications
  - 2 or more injections daily
  - $2 billion estimated market size for insulin sales in 2017 for T1D alone[1]
- Complications and comorbidities occur, even in patients with good diabetes control:
  - Chronic kidney disease and end-stage renal disease
  - Diabetic macular edema
  - Diabetic ulcers
  - Lipid abnormalities and hypertension
  - Increased risk heart attack and stroke
  - Diabetic neuropathy

1. Burn, Nat Rev Drug Discov, 2010

T1D TREG TREATMENT PROCESS



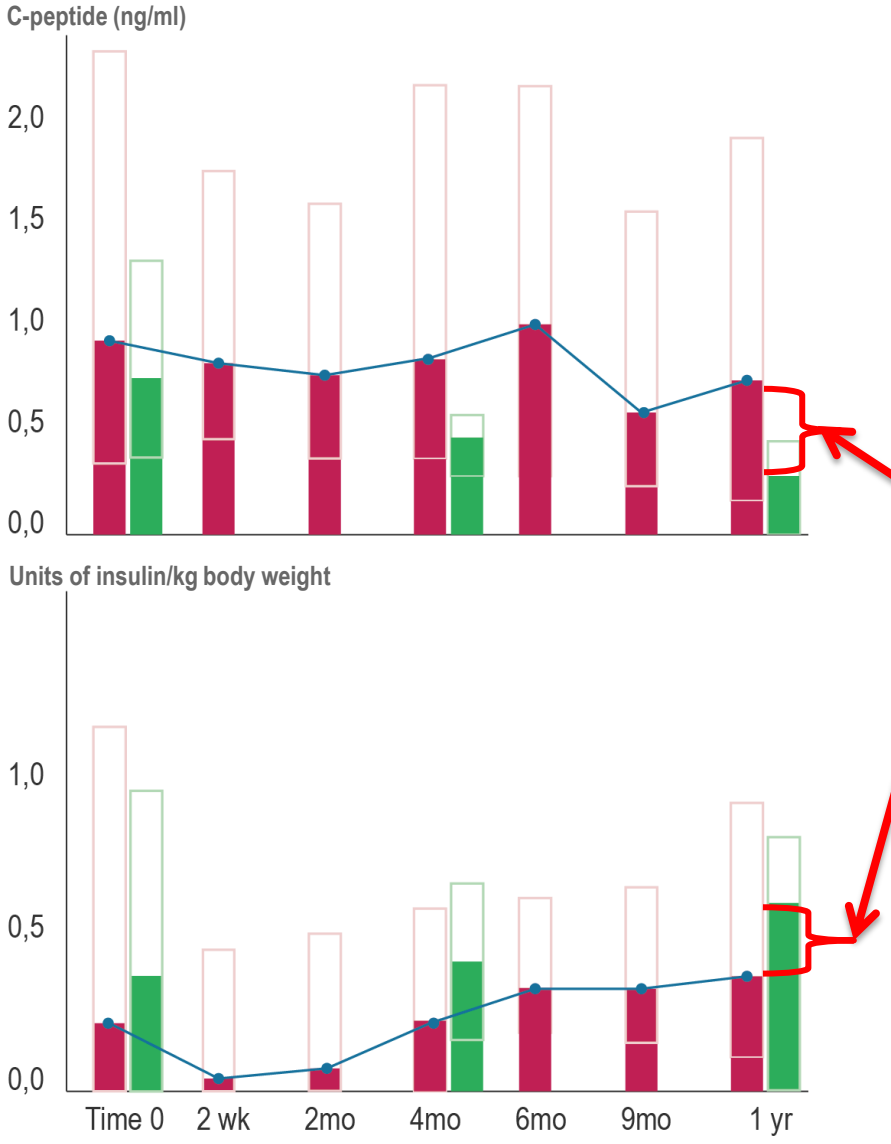
DAY 1:
Screening and enrollment

DAY 5-7:
Blood draw from patient

DAY 7-21:
Manufacturing including expansion

DAY 21:
Infusion of Treg therapy to patient

ADMINISTRATION OF REGULATORY T CELLS PRESERVES BETA CELL FUNCTION IN T1D IN CHILDREN*



- First human evidence of therapeutic effect of autologous Treg therapy protection of pancreatic function in new onset T1D in children
- One year follow-up: evidence that Treg therapy preserves function of pancreatic islets cells
  - C-peptide levels stabilized
  - Reduction of insulin requirements
- 20% of patients able to come off of exogenous insulin four months after treatment

Green bars represent control group

* Children aged 8-16 in study
Regulatory T cells expressing CD4+CD25highCD127-

Marek-Trzonkowska N et al. Diabetes Care 2012;35:1817-1820
Marek-Trzonkowska N et al. Clinical Immunology 2014

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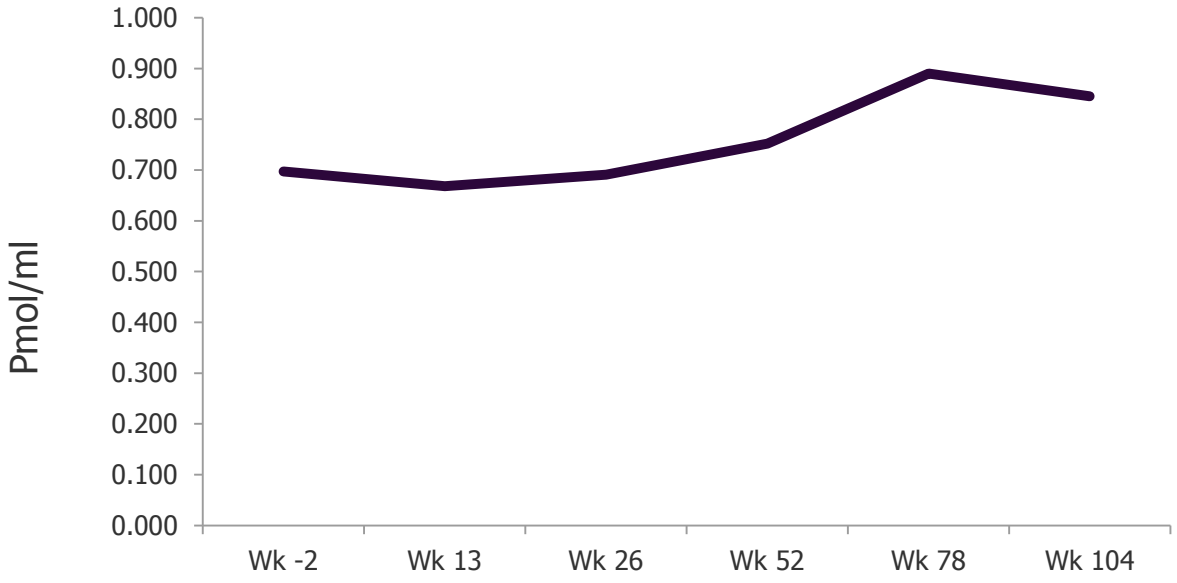
ADMINISTRATION OF REGULATORY T CELLS* APPEARS TO BE SAFE IN ADULTS WITH ESTABLISHED T1D

- Preliminary data indicates safety and tolerability
- Infused Tregs detected in peripheral circulation for over 6 months
- Results complement safety and efficacy data from new onset trial in children and informs design of NeoStem's Phase 2 trial in new onset T1D

Mean C-peptide levels (MMTT AUC)**



Gitelman et al, American Diabetes Association Abstract, 2014

Summary data of 4 dose cohorts (14 patients) through completed follow up through 104 weeks

* Regulatory T cells expressing $CD4^{+}CD25^{high}CD127^{-}$
** MMTT = Mixed Meal Tolerance Test
AUC = Area under the curve

NeoStem

FEATURES AND INTENDED EFFECTS OF IMMUNE MODULATION PROGRAM

FEATURES:	INTENDED EFFECTS
Tregs are natural part of immune system	Potential for positive safety profile
Tregs shown in pre-clinical studies to be important in modulating autoimmune disorders and allergic conditions	Platform may be applicable to steroid resistant asthma, rheumatoid arthritis, lupus, multiple sclerosis, organ transplant rejection, graft vs. host disease
Proprietary technology with minority interest by Becton Dickinson	Intellectual property protection and CMC section that can be used for the investigation of multiple indications
Collaboration with University of California, San Francisco and laboratory of Dr. Jeffrey Bluestone	Accelerated development by utilizing already-generated UCSF Phase 1 data

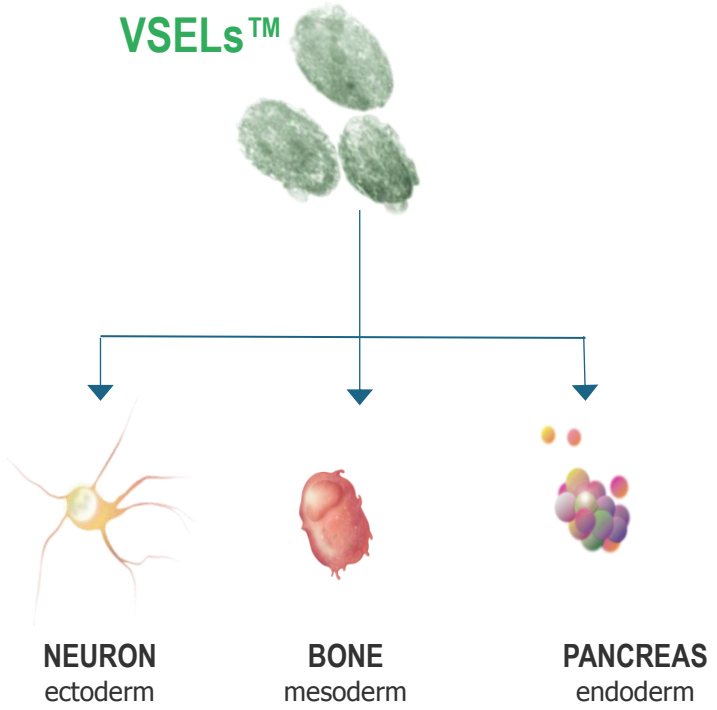
Adverse events seen in development to date:

- Serious adverse events in Phase 1 T1D trial included hypoglycemia (2 events in 1 patient) and diabetic ketoacidosis (1 patient) – judged unrelated or unlikely to be related to study participation

TISSUE REGENERATION PROGRAMS

VSEL™ TECHNOLOGY: POTENTIAL TO REPAIR DAMAGED TISSUE

- Evaluating therapeutic potential of very small embryonic-like stem cells (VSELs™)
- Research suggests multipotency and multi-lineage differentiation into all basic cell types (mesoderm, ectoderm, endoderm)
- Exploring the development for retinal repair and the treatment of chronic wounds
- $4.5 million of grants toward preclinical VSEL™ research



DERMATOLOGY PROGRAM: TOPICAL PRODUCT BASED ON STEM CELL DERIVED GROWTH FACTORS

- Exploring potential for fine lines and wrinkles, psoriasis, and wound care

INTELLECTUAL PROPERTY

TARGETED CANCER IMMUNOTHERAPY PROGRAM

- 5 issued patents and 35 pending patents in the U.S. and OUS with coverage including:
  - Stem cell growth medium and methods of making and using same; Antigen-presenting cancer vaccines; Individualized high purity carcinoma initiating (stem) cells for target indications, methods and use of same; and rapid methods to produce high purity cancer initiating (stem) cells

ISCHEMIC REPAIR PROGRAM

- Broad and growing patent portfolio supports cardiac conditions and a broad range of other conditions caused by underlying ischemia
- 17 granted composition of matter and methods patents
- 19 patents pending

IMMUNE MODULATION PROGRAM

- Exclusive rights to 23 issued patents and 9 pending patents covering isolation, activation, expansion and methods of treating or preventing certain conditions and/or diseases using Tregs in U.S. and major international markets
- Includes composition of matter patents and method patents

TISSUE REGENERATION (VSEL™ TECHNOLOGY)

- In-licensed from the University of Louisville the world-wide patent rights and know-how regarding the isolation, purification and therapeutic use of very small embryonic-like (VSEL™) stem cells

PCT PROVIDES OUTSOURCED MANUFACTURING CAPABILITIES TO CELL THERAPY INDUSTRY

ALSO ENABLES DEVELOPMENT OF INTERNAL PIPELINE

- High quality manufacturing capabilities with 15-year track record of success
- Proven efficiencies and reduced capital investment for customers through outsourcing
- Demonstrated regulatory expertise:
  - 50+ EU and U.S. regulatory filings;
  - All clinical trial phases including BLA submission and product approval by FDA
- Significant focus on innovation, engineering and automation
- EU product distribution requirement compliant
- Continuing to expand commercial capabilities in the U.S. and internationally

PCT CELL THERAPY SERVICES

ALLENDALE, NEW JERSEY (30,000 ft^2)
ISO Class 7 / Class 10,000 suites
ISO Class 6 / Class 1,000 suite
Recent expansion of clean room space

MOUNTAIN VIEW, CALIFORNIA (25,000 ft^2)
ISO Class 7 / Class 10,000 suites
Recent expansion of clean room space

IRVINE, CALIFORNIA (12,500 ft^2)
ISO Class 7 / Class 10,000 suites

CONTRACT MANUFACTURING IS A SIGNIFICANT OPPORTUNITY

EXAMPLES OF CONTRACT SERVICES POTENTIAL FROM CONCEPTION TO COMMERCIALIZATION*

	LOW COMPLEXITY PRODUCT	MEDIUM COMPLEXITY PRODUCT	HIGH COMPLEXITY PRODUCT
PRECLINICAL DRUG DISCOVERY CONTRACT	12 to 18 Month Engagement **$50,000 to $250,000**	12 to 24 Month Engagement **$250,000 to $500,000**	24 to 36 Month Engagement **$500,000 to $1,000,000**
PHASE 1 CLINICAL TRIAL MANUFACTURING CONTRACT	6 to 12 Month Eng. 5 to 25 Units Produced **$250,000 to $750,000**	12 to 18 Month Eng. 25 to 50 Units Produced **$625,000 to $1,250,000**	12 to 24 Month Eng. 50 to 100 Units Produced **$1,000,000 to $2,000,000**
PHASE 2 CLINICAL TRIAL MANUFACTURING CONTRACT	12 to 18 Month Eng. 25 to 50 Units Produced **$625,000 to $1,250,000**	12 to 24 Month Eng. 100 to 200 Units Produced **$2,000,000 to $4,000,000**	18 to 36 Month Eng. 200 to 400 Units Produced **$3,000,000 to $6,000,000**
PHASE 3 CLINICAL TRIAL MANUFACTURING CONTRACT	12 to 18 Month Eng. 50 to 100 Units Produced **$1,000,000 to $2,000,000**	24 to 48 Month Eng. 200 to 400 Units Produced **$3,000,000 to $6,000,000**	24 to 48 Month Eng. 400 to 1,000 Units Produced **$4,000,000 to $10,000,000**
COMMERCIAL MANUFACTURING CONTRACT	Est. Peak Annual Sales 2,500 to 5,000 Units **$38M to $75M / Yr.**	Est. Peak Annual Sales 10,000 to 25,000 Units **$80M to $200M / Yr.**	Est. Peak Annual Sales 25,000 to 50,000 Units **$125 to $250M / Yr.**

*Based on industry experience and estimated potential future commercial manufacturing in the industry

NeoStem

FINANCIAL METRICS

MARKET METRICS

MARKET CAPITALIZATION[1]	$186M
STOCK PRICE[2]	$5.26
52 WEEK RANGE[2]	$4.56 - $8.29
FLOAT[1]	31.2M
INSIDER HOLDINGS[1]	11.9%

FINANCIAL METRICS

REVENUE[3]	$4.1M (Third Quarter)
CASH[4]	$32.8M
COMMON SHARES OUTSTANDING[1]	35.4M
WARRANTS[1]	3.6M (avg. warrant exercise price of $14.13)
OPTIONS[1]	4.5M (avg. option exercise price of $9.24)

1. As of October 15, 2014 (based on shares outstanding on September 30, 2014)
2. As of October 15, 2014
3. For the three months ended September 30, 2014
4. As of September 30, 2014 (includes marketable securities)

NeoStem

FUTURE GROWTH DRIVERS

DEVELOP NOVEL PROPRIETARY CELL THERAPY PRODUCTS

- Leverage unique capabilities for cost effective in-house product development
- Partner select programs at key inflection points
- Grow pipeline and capabilities through strategic acquisition

EXPAND REVENUE-GENERATING SERVICE BUSINESS

- Grow client base organically and through new service areas
- Expand manufacturing in U.S. and internationally
- Expand into cell therapy tools and technology market

CONTACT INFORMATION

NEOSTEM, INC.

NASDAQ: NBS

WWW.NEOSTEM.COM

ROBIN SMITH, MD, MBA

CHAIRMAN & CEO

PHONE: (212) 584-4174

EMAIL: RSMITH@NEOSTEM.COM

APPENDIX

BOARD OF DIRECTORS

Robin Smith, MD, MBA
Chairman of the Board

- MD – Yale; MBA – The Wharton School
- Formerly President & CEO IP2M, EVP & CMO HealthHelp
- Experience - Trustee of NYU Medical Center; Chairman of the Board of NYU Hospital for Joint Diseases (through November 2009) and Chairman of Stem for Life Foundation

Richard Berman
Independent Director

- BS and MBA – NYU; JD – Boston College
- Over 35 years of venture capital, management, M&A experience
- Experience – Current Board of Directors of Apricus Biosciences, Easylink Services International, Inc., Advaxis, Inc., Broadcaster, Inc., National Investment Managers

Drew Bernstein, CPA
Independent Director

- BS – University of Maryland Business School
- Licensed in State of New York; member AICPA, NYSSCPA and NSA
- Experience – Bernstein & Pinchuk LLP (member of BDO Seidman Alliance); PRC auditing; 200+ real estate transactions with $3B+ aggregate value; accountant and business advisor

Martyn Greenacre, MBA
Independent Director

- BA – Harvard College; MBA – Harvard Business School
- Experience – Board and executive positions for multiple biopharmaceutical companies; Former CEO of Delsys Pharmaceutical Corporation and Zynaxis Inc; Chairman of the Board of BMP Sunstone Corporation

Steven M. Klosk
Independent Director

- BS Industrial & Labor Relations – Cornell; JD – New York Law School
- Experience – President, CEO & Director of Cambrex Corporation (leading provider of active pharmaceutical ingredients) since 2008 driving significant revenue growth during his tenure

Steven Myers
Independent Lead Director

- BS Mathematics – Stanford University
- Experience – Founder/Chairman/CEO SM&A (competition management services); career in aerospace and defense sectors supporting DoD & NASA programs

Andrew Pecora, MD, FACP
Director

- MD — University of Medicine and Dentistry of New Jersey
- Experience – Chief Innovations Officer, Professor and Vice President of Cancer Services at John Theurer Cancer Center at Hackensack University Medical Center, and Managing Partner of the Northern New Jersey Cancer Center

Eric Wei
Director

- BS – Mathematics & Economics – Amherst College; MBA – The Wharton School
- Experience – Founder/Managing Partner of RimAsia Capital partners (private equity); Formerly with Peregrine Capital, Prudential Securities, Lazard Freres, Citibank, Gilbert Global Equity Partners, and Crimson Asia Capital Partners

NeoStem

SINCE 2006, ACCESSED OVER $193M AND COMPLETED MULTIPLE M&A TRANSACTIONS AND ONE DIVESTITURE

2006
PHASE III MEDICAL, INC. ACQUIRED NEOSTEM, INC.

2007
2008
VSEL Technology
ACQUIRED STEM CELL TECHNOLOGIES, INC.

2009
ERYE
ACQUIRED CBH (51% OF ERYE)

2010
BEGAN PARTNERSHIP WITH VATICAN

2011
AMORCYTE
A NeoStem Company
ACQUIRED

2012
PCT CELL THERAPY SERVICES
ACQUIRED

2013
ERYE
DIVESTED

Athelos
80% ACQUIRED

2014
California Stem Cell
ACQUIRED

CARDIOVASCULAR SCIENTIFIC ADVISORY BOARD

Douglas W. Losordo, MD, FACC, FAHA SAB Administrative Chairman	Chief Medical Officer, NeoStem
Eugene Braunwald, MD, FRCP	Brigham & Women's Hospital
Bernard J. Gersh, MD, ChB, DPhil, FRCP	The Mayo Clinic
Dean J. Kereiakes, MD, FACC	The Christ Hospital Heart of Greater Cincinnati
Douglas L. Mann, MD, FACC	Washington University School of Medicine
Emerson C. Perin, MD, PhD, FACC	Texas Heart Institute
Bertram Pitt, MD	University of Michigan School of Medicine
Arshed Quyyumi, MD, FRCP, FACC,	Emory University School of Medicine
Edmund K. Waller, MD, PhD, FACP	Emory University School of Medicine
James T. Willerson, MD	Texas Heart Institute
Joseph Wu, MD, PhD	Stanford University School of Medicine

IMMUNE MODULATION PROGRAM ADVISORS

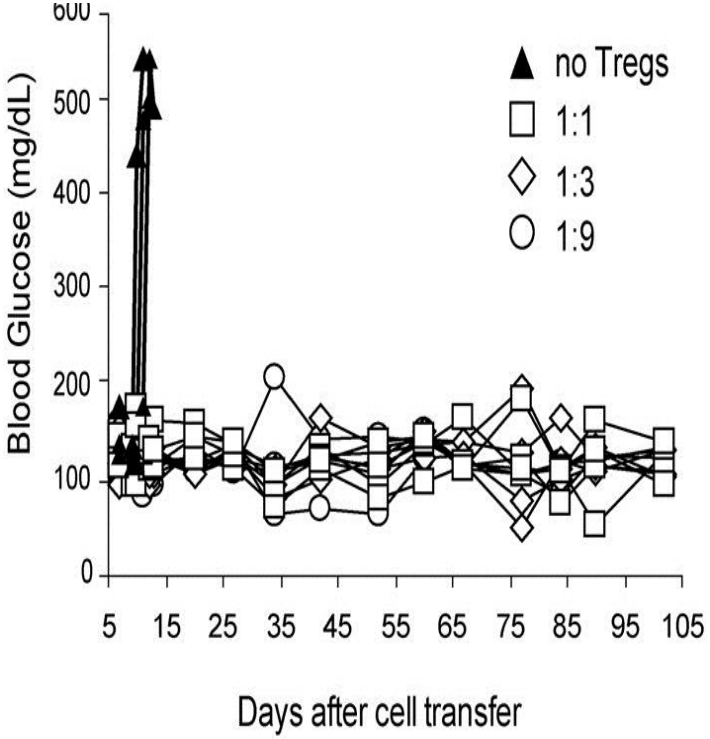
The Company accesses these experts to advise in the areas of diabetes, asthma, and other autoimmune conditions for its Immune Modulation Program.

Jeffrey Bluestone, PhD	University of California, San Francisco, Diabetes Center
William Busse, MD	University of Wisconsin
Mario Castro, MD, MPH	Washington University in St. Louis
David A. Horwitz, MD	University of Southern California
Robert Korngold, PhD	Hackensack University Medical Center
Robert J. Meyer, MD	Virginia Center for Translational and Regulatory Sciences
Robert S. Negrin, MD	Stanford University
Paul O'Byrne, MB	McMaster University
David Peritt, PhD	Hospira
Noel L. Warner, PhD	BD Biosciences
Prescott Woodruff, MD, MPH	University of California, San Francisco

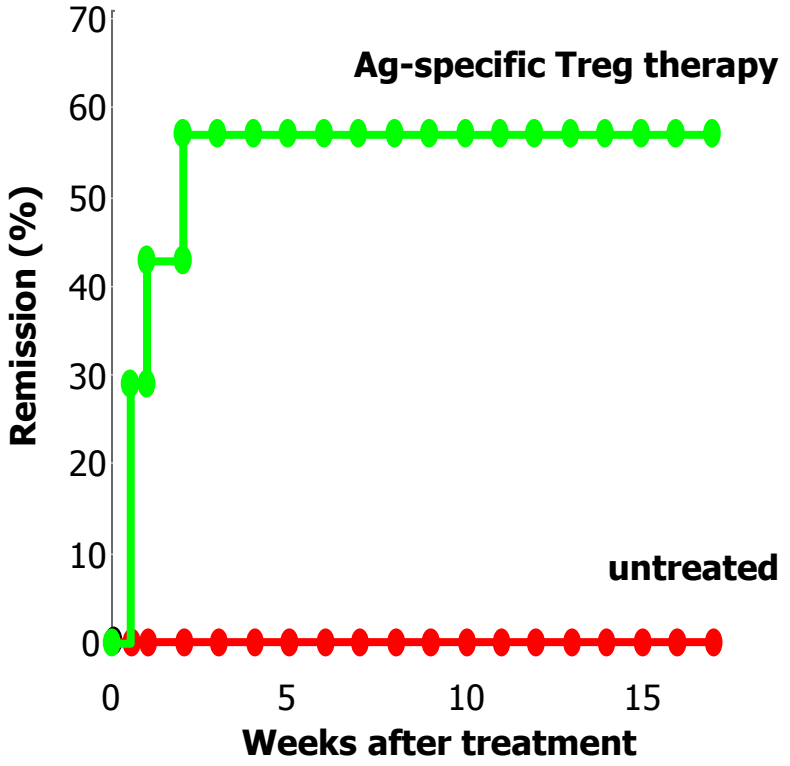
VSEL™ TECHNOLOGY ACADEMIC COLLABORATORS

Mariusz Ratajczak, MD, PhD, Dsci	University of Louisville
Russell Taichman, DMD, DMSc	University of Michigan
Vincent Falanga, MD	Boston University
Michael Young, PhD	Schepens Eye Research Institute, Harvard Medical School
Kameran Lashkari, MD	Schepens Eye Research Institute, Harvard Medical School
Song Li, PhD	University of California, Berkeley

TREG IMMUNOTHERAPY WORKS IN MODEL OF T1D



Tregs effectively suppress diabetes

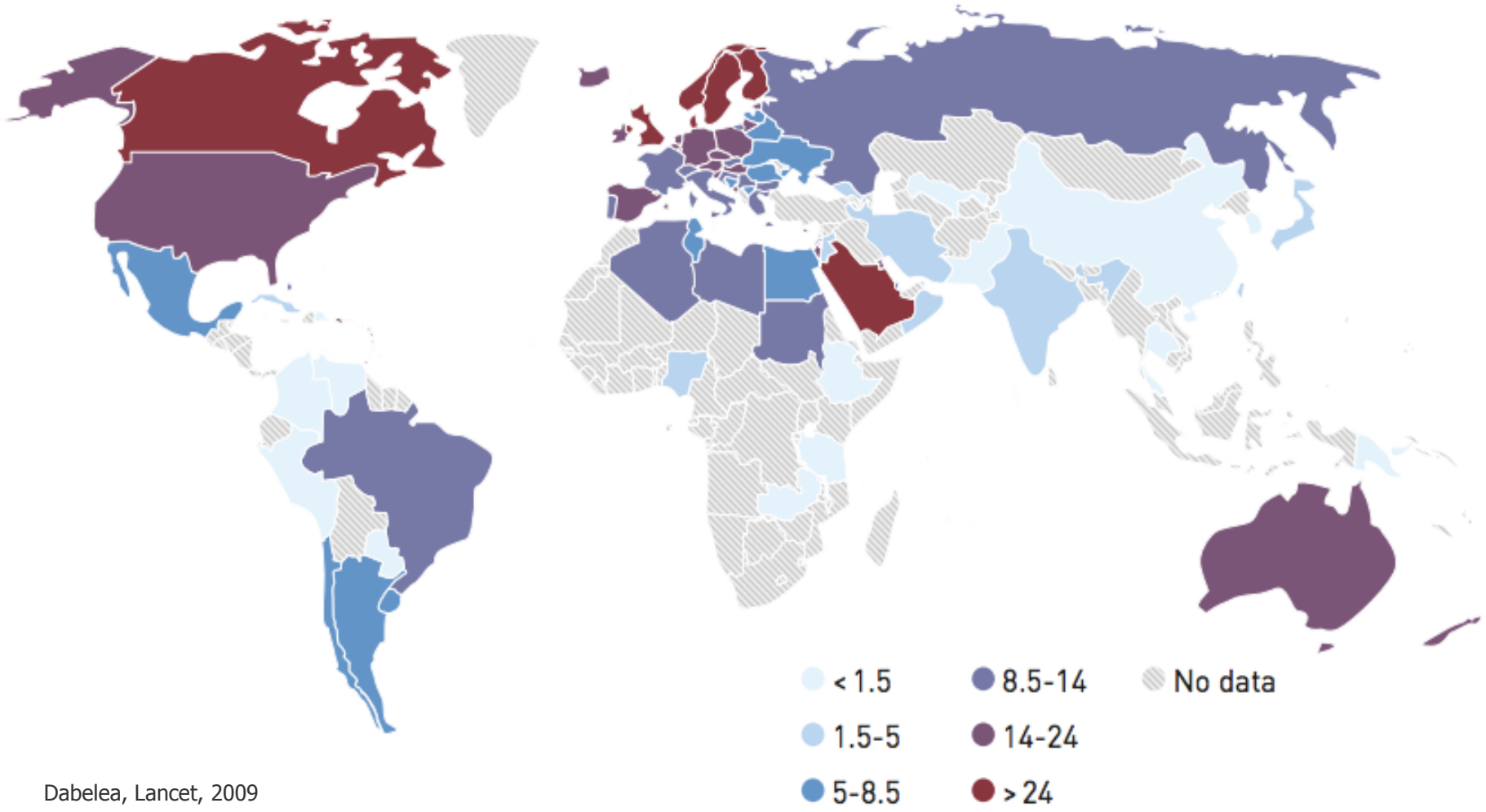


Ag-specific Tregs reverse diabetes

Tang, Bluestone, et al.

T1D IS ON THE RISE

NEW CASES OF T1D (0-14 YEARS) PER 100,000 CHILDREN, 2013: CONCENTRATION IN DEVELOPED MARKETS



Dabelea, Lancet, 2009

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ECONOMIC IMPACT OF T1D

THE ECONOMIC BURDEN OF T1D IN THE U.S. IS ESTIMATED AT $14.9 BILLION[1]

- Average economic burden per person with diabetes is larger for T1D vs T2D

PREVENTION IS KEY - MEDICAL COSTS ASSOCIATED WITH T1D INCREASE SUBSTANTIALLY WITH AGE AND DURATION OF DISEASE

- Annual medical costs per person increase with age at a much faster rate for those with T1D vs T2D
- For T1D the average medical cost per case increases from ~$4,000 for people younger than age 44 to ~$35,000 for the population age 65 and older
- Increased utilization of institutional care in elderly T1D patients

$2 BILLION ESTIMATED MARKET SIZE FOR INSULIN SALES IN 2017

- For the T1D indication alone

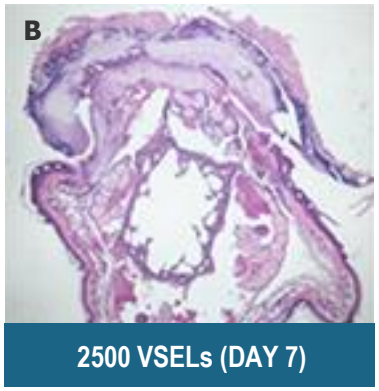
UNMET NEED FOR β-CELL PRESERVING/PREVENTATIVE TREATMENTS FOR T1D

1. Dall TM et al. *Population Health Management* 2009;12:103–110

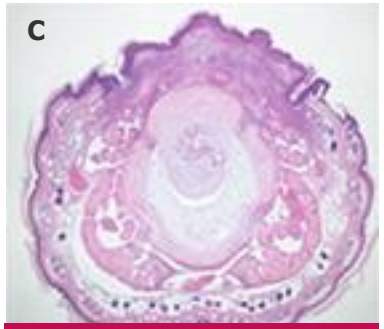
HUMAN VSELS™ ACCELERATE HEALING IN A SCID MOUSE COMPLEX TAIL WOUND MODEL

PRELIMINARY DATA IN A PRECLINICAL MODEL OF SEVERE COMPLEX WOUNDS SUGGEST THAT VSELS™ MAY BE MORE EFFECTIVE IN ACCELERATING HEALING THAN MESENCHYMAL STROMAL CELLS (MSCs)

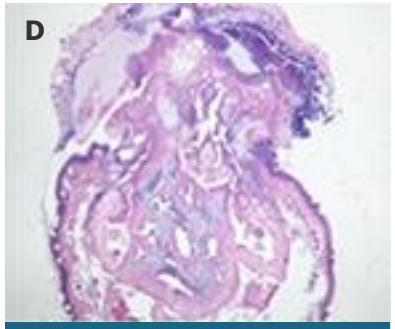
FIBRIN CONTROL (DAY 7)



2500 VSELs (DAY 7)



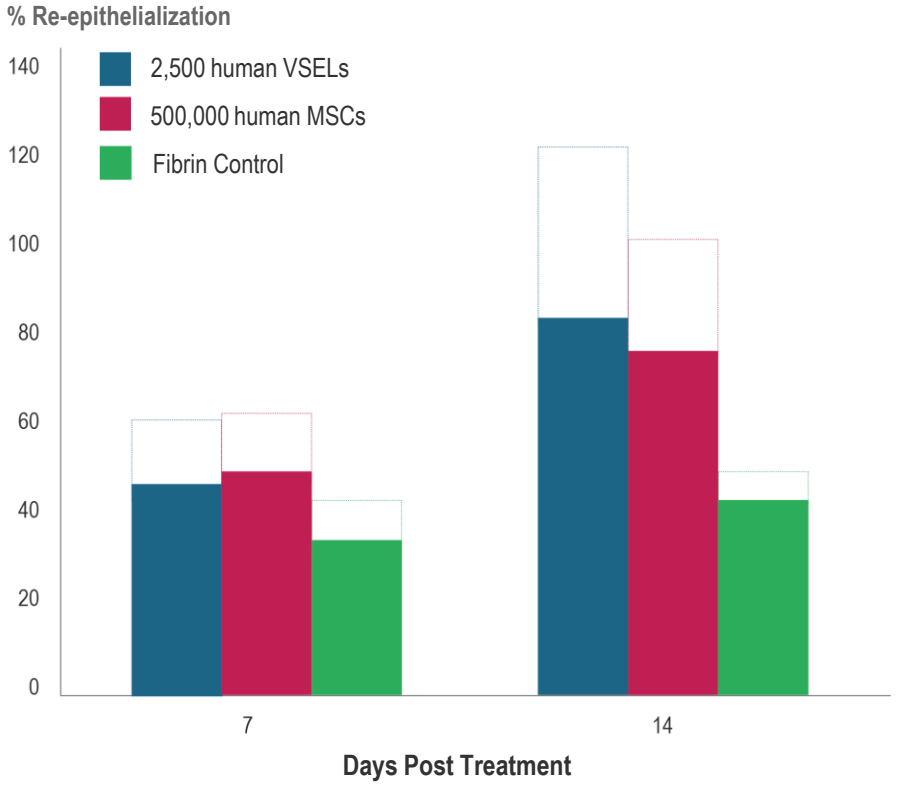
FIBRIN CONTROL (DAY 14)



2500 VSELs (DAY 14)

VSELs vs. MSCs

P<0.05



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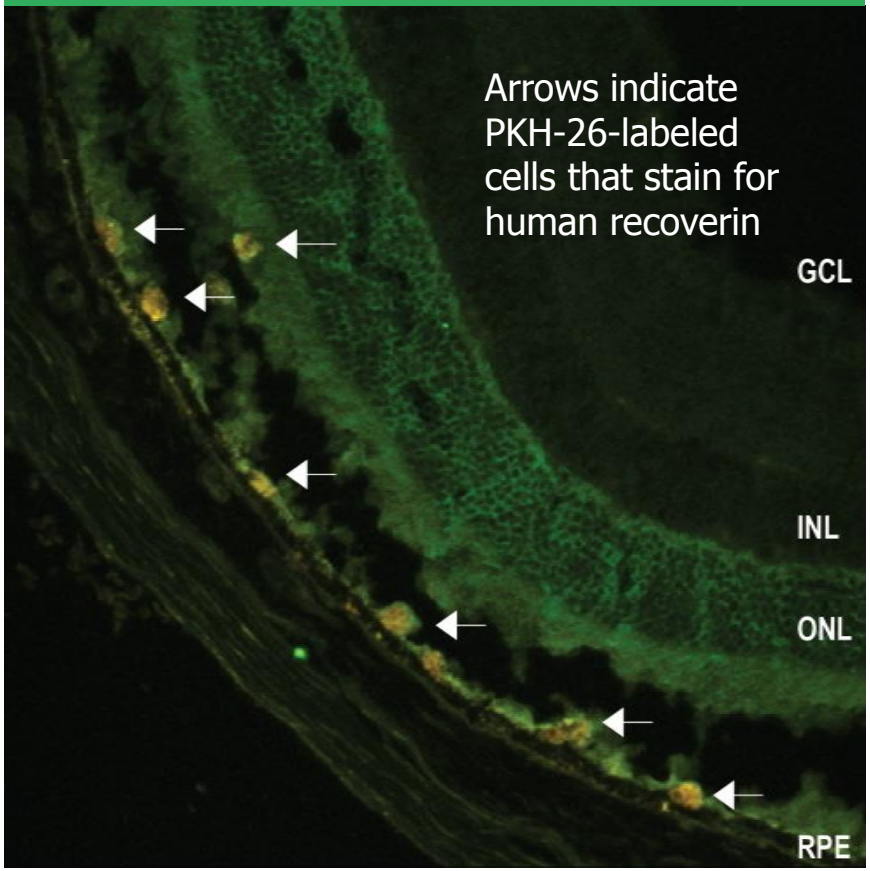
VSELS™ COULD BE USED TO TREAT MACULAR DEGENERATION

PRELIMINARY DATA SUGGEST HUMAN VSELS™ INJECTED INTO A MOUSE SUB-RETINAL SPACE INTEGRATE AND SHOW DIFFERENTIATION POTENTIAL IN SITU

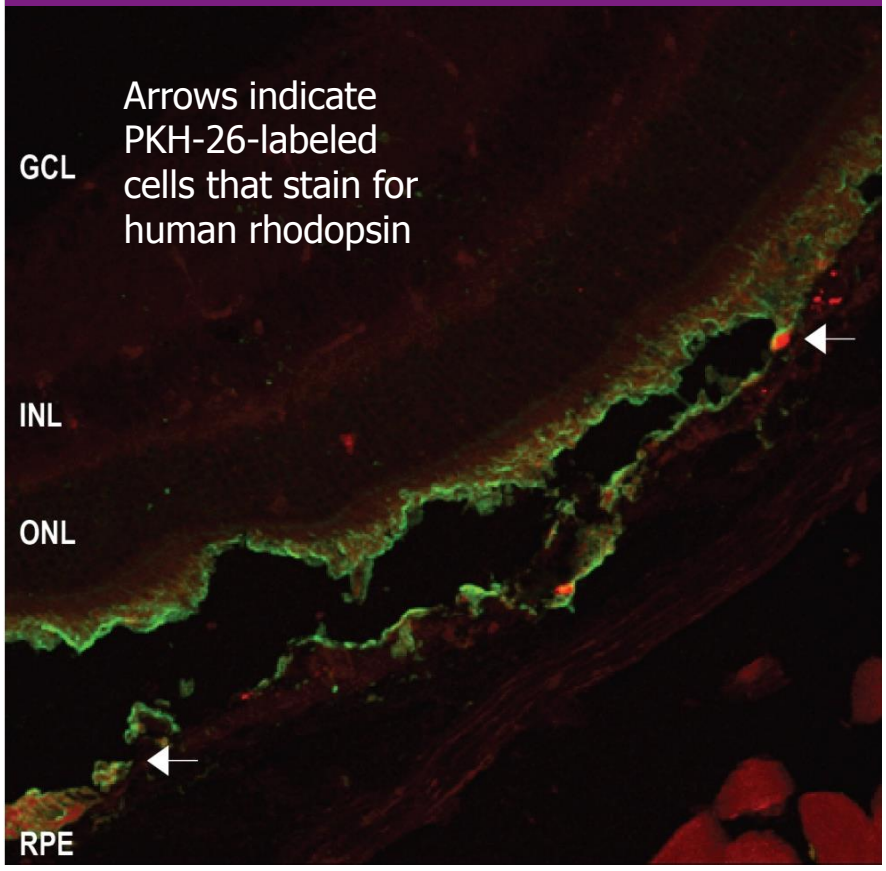
PKH-26 / RECOVERIN

PKH-26 positive cells co-labeled with Recoverin (400x).



PKH-26 / RHODOPSIN

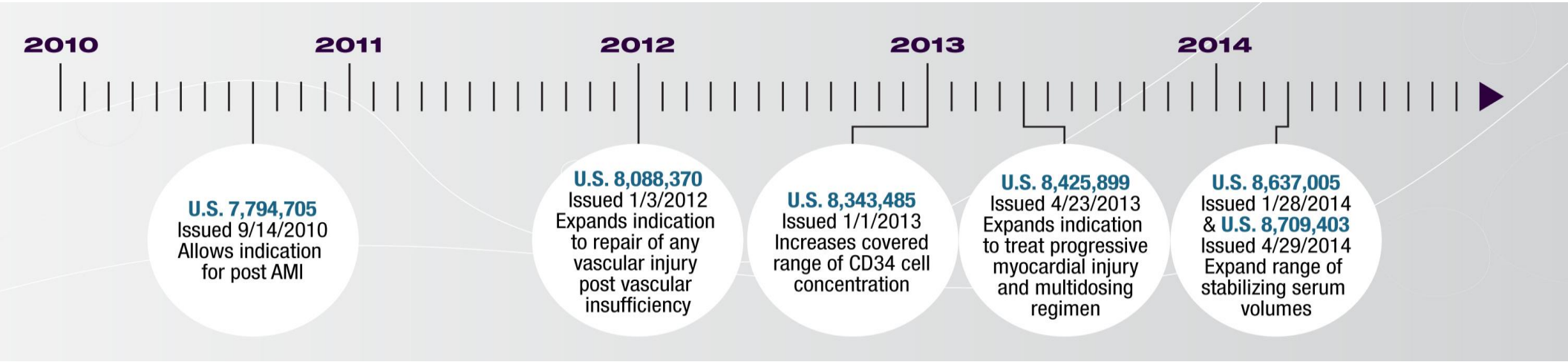
PKH-26 positive cells co-labeled with Rhodopsin (400x).



Eminli, S. et al. Exploring the use of human very small embryonic-like stem cells (VSELs) isolated from adult peripheral blood for therapy of dry age-related macular degeneration (AMD). ISSCR 2012 Annual Meeting, Yokohama, Japan. Poster presentation.

ISCHEMIC REPAIR PROGRAM INTELLECTUAL PROPERTY

- Broad and growing patent portfolio supports cardiac and other ischemic conditions
- NeoStem's patent claims cover a pharmaceutical composition that contains a therapeutic concentration of non-expanded CD34/CXCR4 stem cells that move in response to SDF-1 or VEGF, together with a stabilizing amount of serum, and that can be delivered parenterally through a catheter to repair an injury caused by vascular insufficiency
- Six granted U.S. composition of matter and methods patents



- 10 granted or allowed OUS composition of matter and method patents:
  - European Union, Japan, South Africa, Malaysia, Philippines, Canada, Russia
- Patent Applications: 20 U.S. and OUS patents pending
- Issued and pending claims can be applied to broad range of other conditions caused by underlying ischemia, including: chronic myocardial ischemia post-AMI; chronic heart failure; critical limb ischemia; and ischemic brain injury

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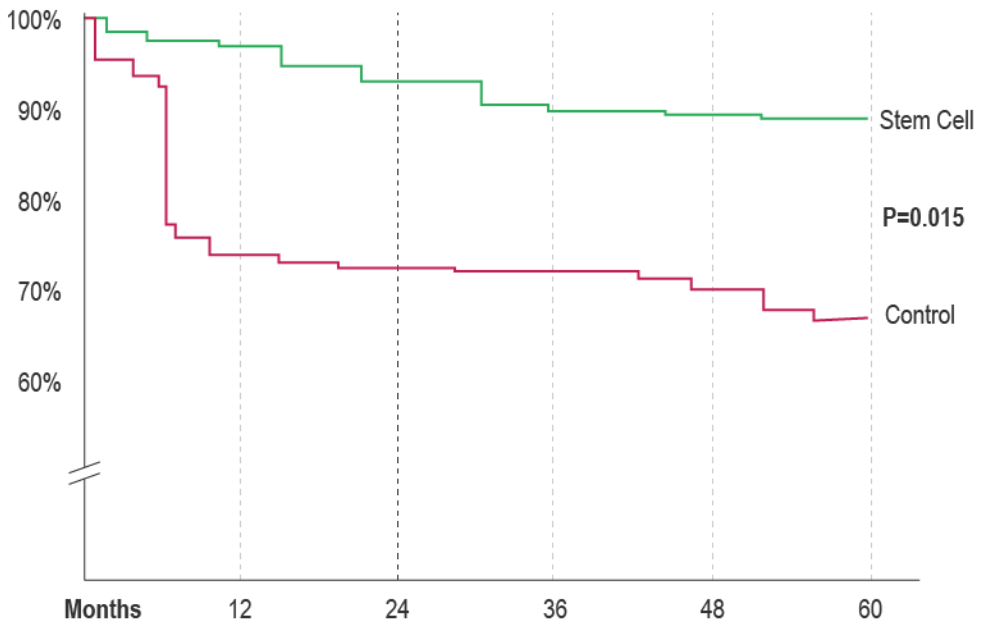
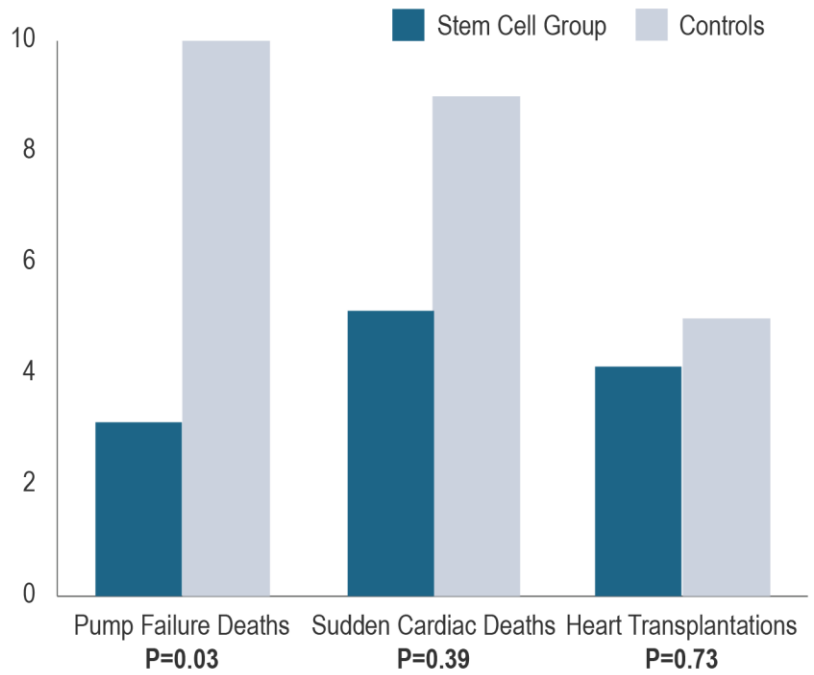
RECENT DATA SUPPORTS CD34 STEM CELL THERAPY IN CHRONIC HEART FAILURE

CD34 STEM CELL THERAPY SIGNIFICANTLY IMPROVES EVENT-FREE SURVIVIAL AT 5 YEARS IN PATIENTS WITH DILATED CARDIOMYOPATHY





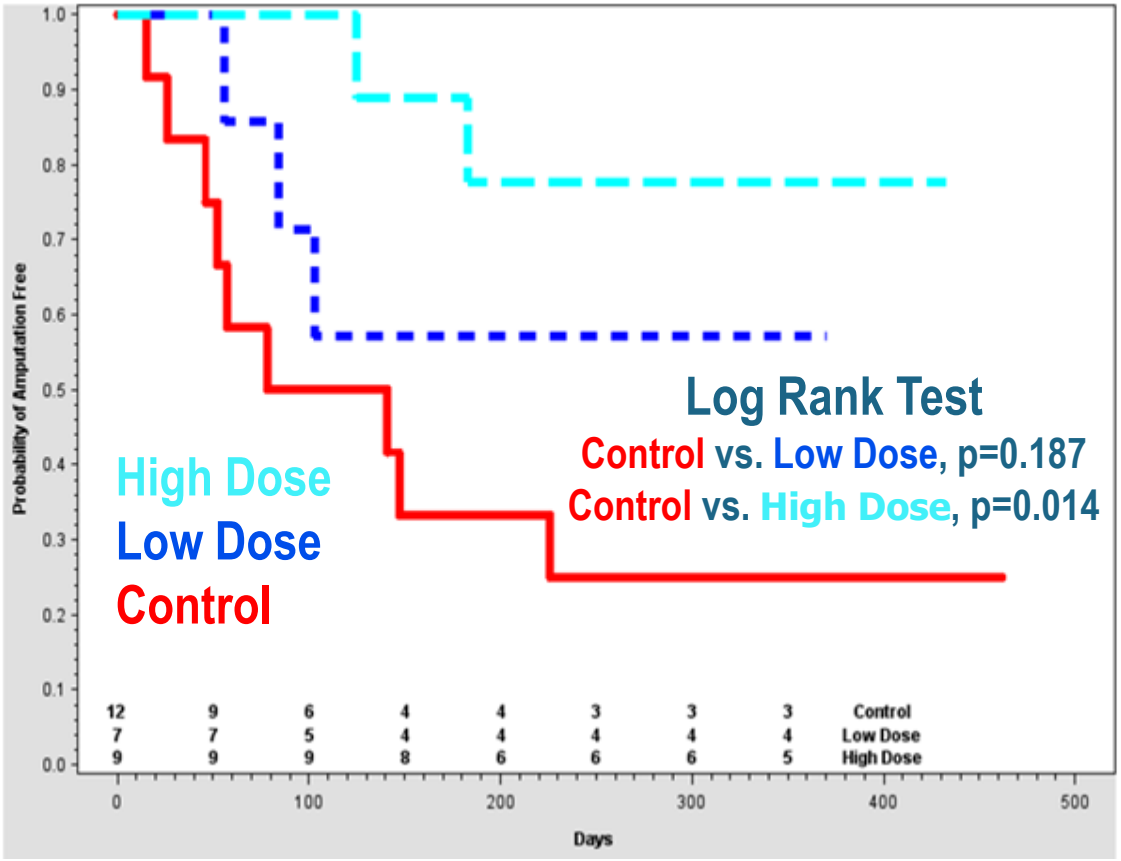
- Significant need - prevalence of over 23 million worldwide, 5.7 million U.S.
- Therapy would enable larger distribution (not limited to mapping systems)

Adapted from Vrtovec et al, *Circ Res* published online 10/12/2012
Note: 110 patients (open label, 55 treated with cells and 55 standard of care)

NeoStem

RECENT DATA SUPPORTS CD34 STEM CELL THERAPY IN CRITICAL LIMB ISCHEMIA

PROBABILITY OF AMPUTATION-FREE SURVIVAL 12 MONTHS



- Double blind, randomized, controlled trial of autologous CD34 cells
- Two dose levels (N=28); Diabetics distributed equally
- CLI Patients (Rutherford Score IV or V); Non-optimal candidate for surgical or percutaneous revascularization or have refused revascularization
- 8 intramuscular injections or placebo Rx

Losordo et al. (2012) A Randomized, Controlled Pilot Study of Autologous CD34+ Cell Therapy for Critical Limb Ischemia, *Circulation Cardiovascular Interventions*.

NeoStem

MARKET OPPORTUNITY IN ASTHMA

ASTHMA

- Affects 25 million in U.S. and 300 million worldwide
- Asthma accounts for $56 billion in annual direct and indirect health care costs in U.S.
- Steroid resistant asthma afflicts less than 5% of the total asthma population, but accounts for up to 50% of healthcare spending on asthma
- Plan to initiate proof-of-concept study subject to review and approval of the protocol by the appropriate regulatory authorities