



Cells for Therapy and Research

ISCO.QB

Forward Looking Statement

This presentation includes certain statements, estimates and projections with respect to the anticipated future business and performance of the Company, which are collectively referred to as forward-looking statements.

Forward-looking statements reflect various assumptions of management that may or may not prove to be correct, and are intended solely to convey our expectations or predictions about the future performance of the Company.

All forward-looking statements are inherently uncertain as they are based on our current expectations and assumptions concerning the future performance of our Company. This is not an offer to sell nor a solicitation to buy any security.

RM Company with Substantial Revenues

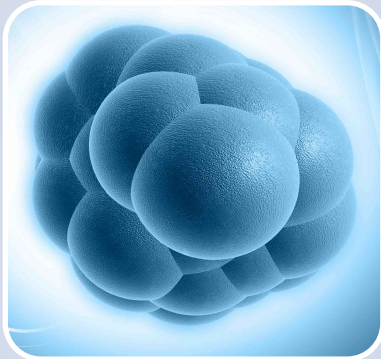
Stem cell platform technology targeting high value therapeutic indications:

- First in man study in Parkinson's disease
- Secondary programs in metabolic liver disease and ophthalmology indications
- Potential to unlock multi indications
- Multiple partnering opportunities

\$5.66 million* revenue from biomedical products businesses

*TTM

Core Company Components



Stem Cell Platform

- Unique Benefits
- Differentiated
- Multiple Indications
- Ethically Superior
- Patented and Protected



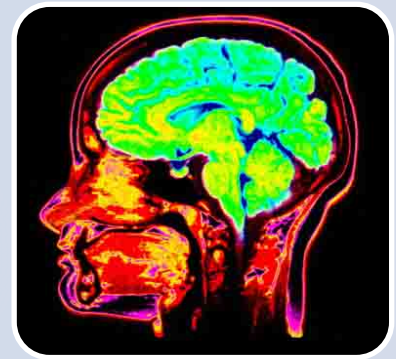
Human Cell Manufacturing

- Research and GMP grade
- Human Cells and Media
- Efficient, Scalable Low-cost Manufacturing Processes



Biomedical Products Businesses

- Strong Revenue Growth
- Excellent Margins
- Synergistic Infrastructure



Cell Therapy Programs

- Large Unmet Medical Needs
- Neural Stem Cells
- Hepatocyte like Cells
- Extensive Pre-Clinical Datasets

Platform Stem Cell Technology

Parthenogenesis. Human pluripotent stem cells from unfertilized eggs

Clinically superior for allogeneic therapy

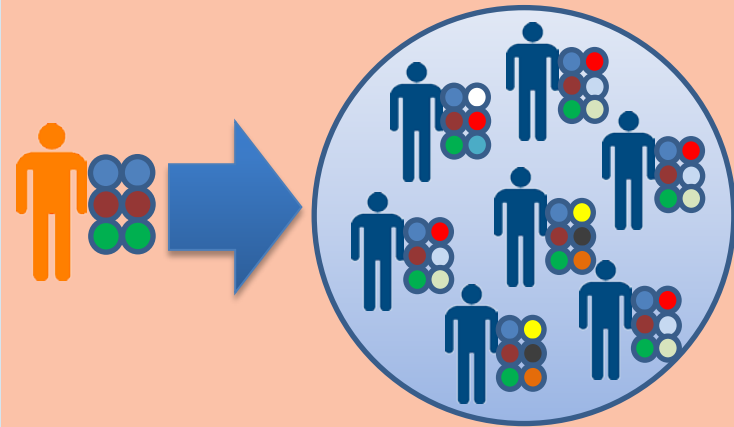
Histocompatible cells (less rejection)

Pluripotent

One cell line can be used to treat millions

Bypasses ethical concerns

No viable embryo created or destroyed



Intellectual Property Investment

Large patent portfolio including stem cell creation and differentiation methods

130 patents and licenses in 14 families

90 patents pending in 5 families

Significant peer-reviewed publications

Nature's Scientific Reports (2013)
Cell Stem Cell (2011,2012)



Manufacturing Capabilities

Human cell manufacturing capabilities suitable for early-stage clinical trials

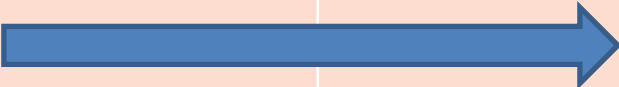
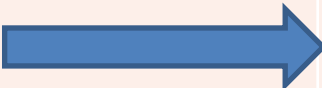

13,125 sq.ft laboratory including 5 GMP manufacturing suites

Largest private cryobank of histocompatible human pSC



R&D Targeting Multiple Diseases

Validating the stem cell platform for allogeneic clinical therapy

Program	Target	Pre-Clinical	IND Track	Phase I
Human Neural Stem Cells	<i>Parkinson's disease</i>			
Hepatocyte-like cells	<i>Inherited metabolic liver diseases</i>			
Corneal cell/tissue	<i>Corneal blindness</i>			

Success unlocks significant additional value

Overview of Parkinson's Disease

2nd most common neurodegenerative disease

- 7-10 million people world-wide
- 60k new case / year (Parkinson's disease Foundation)
- \$2.5 billion in sales (2012)

Oral medications

- Dopamine replacement/ agonists
- Blockers of DA metabolism

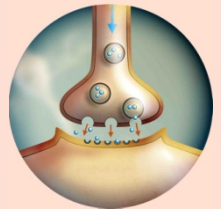
Deep brain stimulation

Surgical implant of neuro-stimulator to modulate brain activity

- Limited to a sub-group of patients
- Unknown long-term safety

Fetal tissue implants:

- Ethically controversial
- Immune rejection by host
- Heterogeneity of the grafts
- Graft induced dyskinesia occur in subsets of patients



Disease continues to progress. No cure

hNSC for Allogeneic Therapy

Self-renewing, multipotent human neural stem cells

Derived from parthenogenetic stem cells

1. Practical, unlimited supply of pure cells
2. Not ethically controversial
3. May be less immunogenic

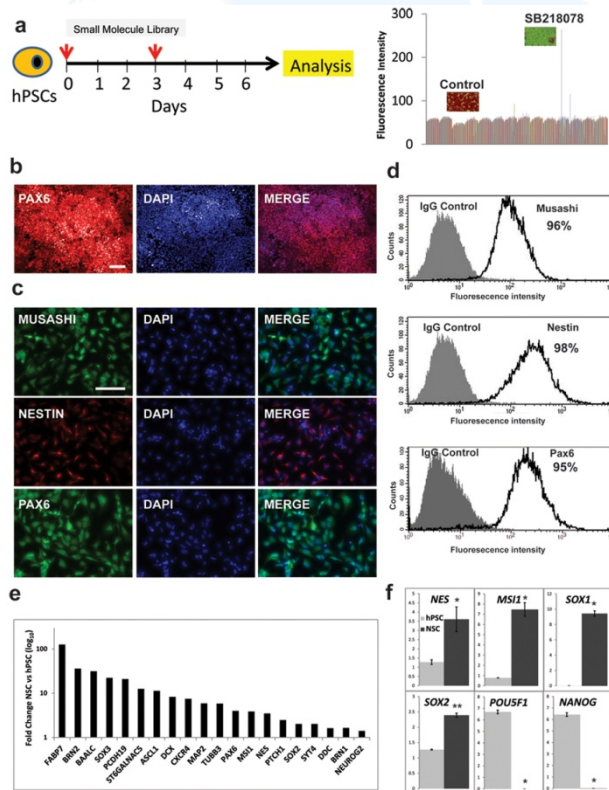
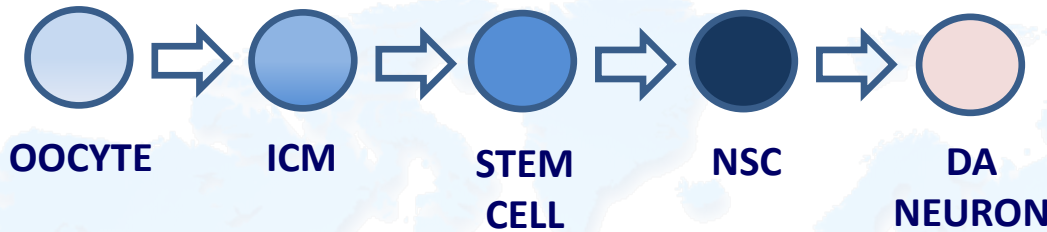
Potential mechanism

1. *Neuroprotection*: Produce nerve growth factors that protect against cell death
2. *Immunomodulation*: Migrate to areas of inflammation and inhibit immune response
3. *Cell Replacement*: Differentiate into neuronal cell types lost in PD

Value driving - unlocks multiple additional indications

- Stroke, Amyotrophic Lateral Sclerosis, Palsy etc

hNSC Characterization and Manufacturing



Scalable, low cost GMP protocol

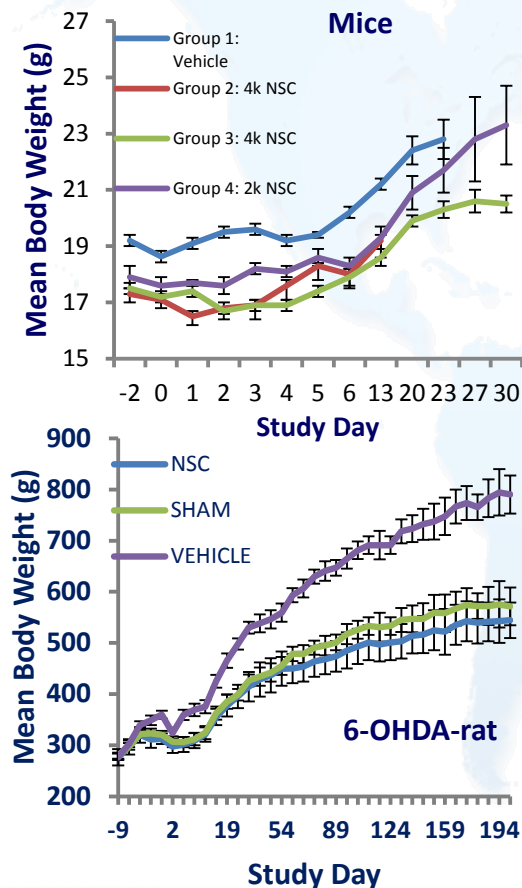
- Suitable for pre-clinical and clinical studies
- Fully characterized *for purity, safety and functionality*

Published in peer-reviewed literature

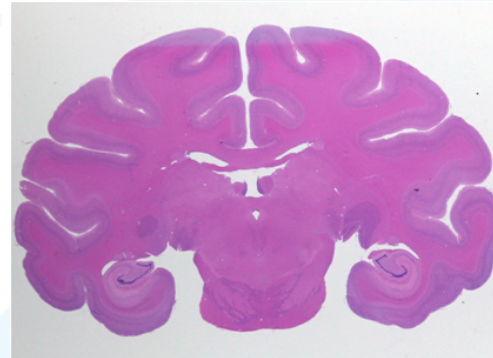


hNSC Show Good Safety and Tolerability

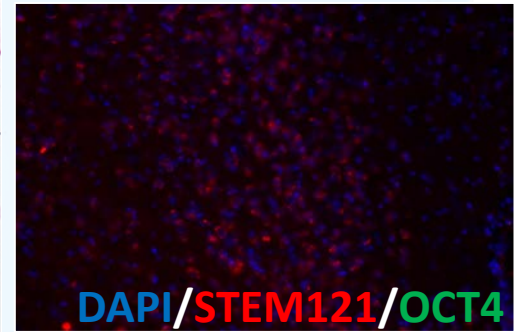
Body weight of mice and rats within normal ranges



No visible tumors or pluripotent cells



Coronal section of the monkey brain stained with hematoxylin and eosin showing a normal morphology without the presence of ectopic tissue



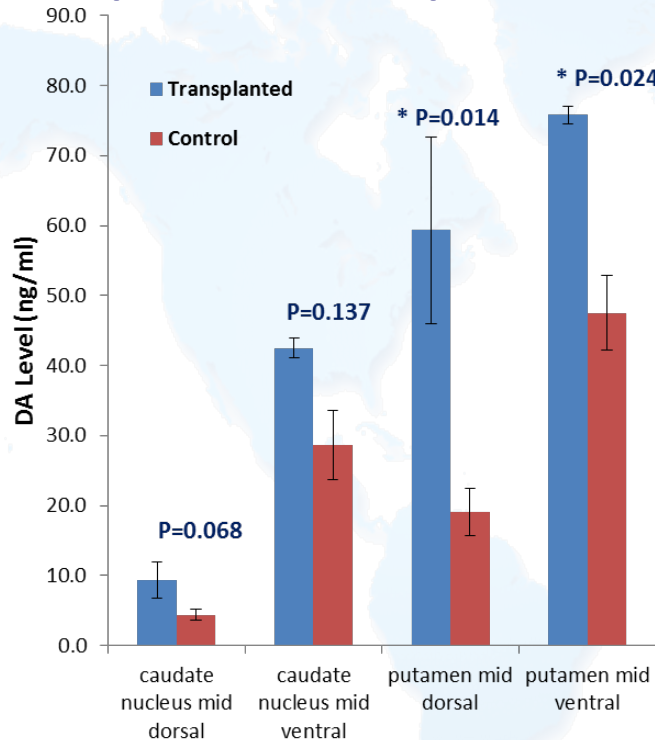
Implantation site stained for human specific antibody STEM121 (in red) and OCT4 (in green), a marker of undifferentiated pluripotent stem cells. OCT4 is completely absent in the graft site.

Necropsies revealed all organs to be normal

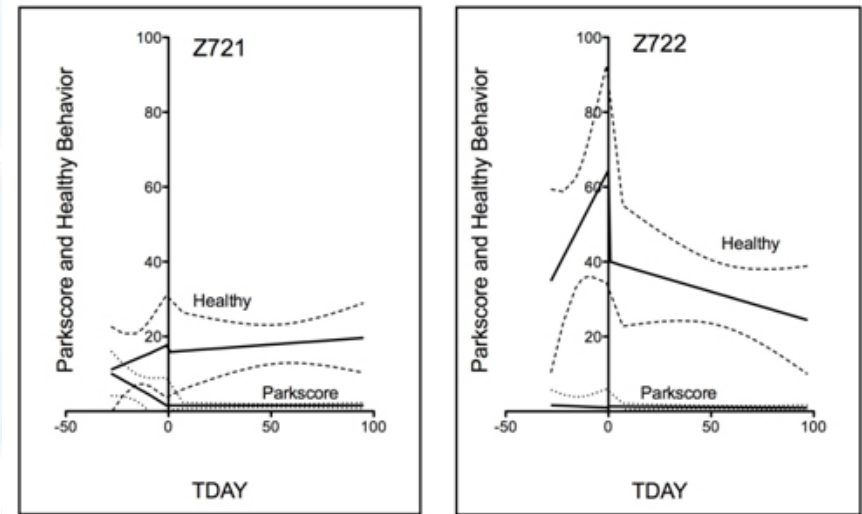
Biodistribution analysis indicated no human cells found in any peripheral organs

Primate Proof-of-Concept Data

Dopamine levels post mortem



Stable Parkscores and Healthy Behavior for duration of the study



Functional activity demonstrated in disease model (asymptomatic) primates

World-class Partners

Dr. Mark Stacy, MD

Vice Dean for Clinical Research, Neurology at Duke University School of Medicine

- **Clinical PI**
- **Neurologist**

Dr. Evan Y. Snyder, MD PhD

Chair of the FDA Advisory Committee for Cellular, Tissue and Gene Therapy UCSD and Director of Sanford-Burnham Stem Cell Research Center

- **Histology**
- **Data analysis**

Dr. D. Eugene Redmond Jr. MD

Professor of Psychiatry and of Neurosurgery, Yale School of Medicine

- **Primate Research**
- **Necropsies**

Dr. Jeanne Loring, PhD

Professor of Developmental Neurobiology, The Scripps Research Institute

- **Genomic analysis**
- **Characterization**

Parkinson's Disease 2014 Targets

Complete pre-clinical

- Primate pharmacology, toxicology, and efficacy – Mid 2014
- Tumorigenicity study in SCID mice – Mid 2014



Submit IND and begin FIM study w/ Duke

- Single arm, open label, dose escalating study
- < 20 subjects with idiopathic PD, UPDRS < 50
- PI - Prof. Mark Stacy, internationally renowned Neurologist with significant clinical trials experience in PD
- Stem cell therapy center of excellence

First company using PSC to treat PD



Commercial Subsidiaries

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Corporate Structure



Core stem cell technology
Intellectual Property
Therapeutic Research and Development



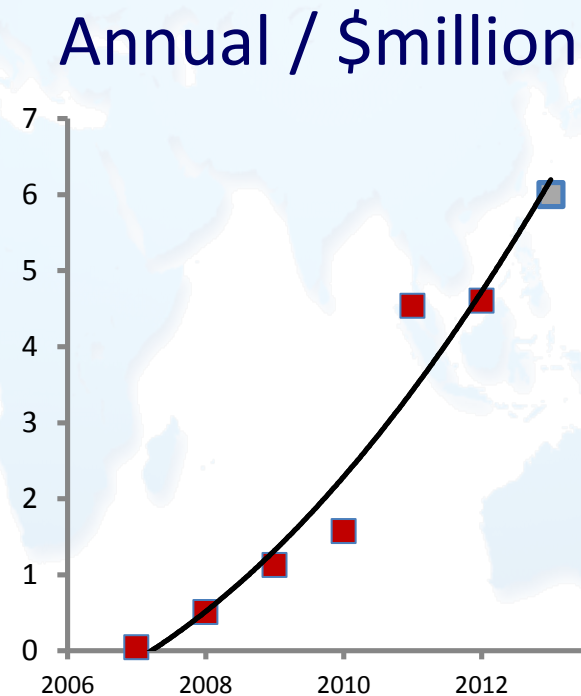
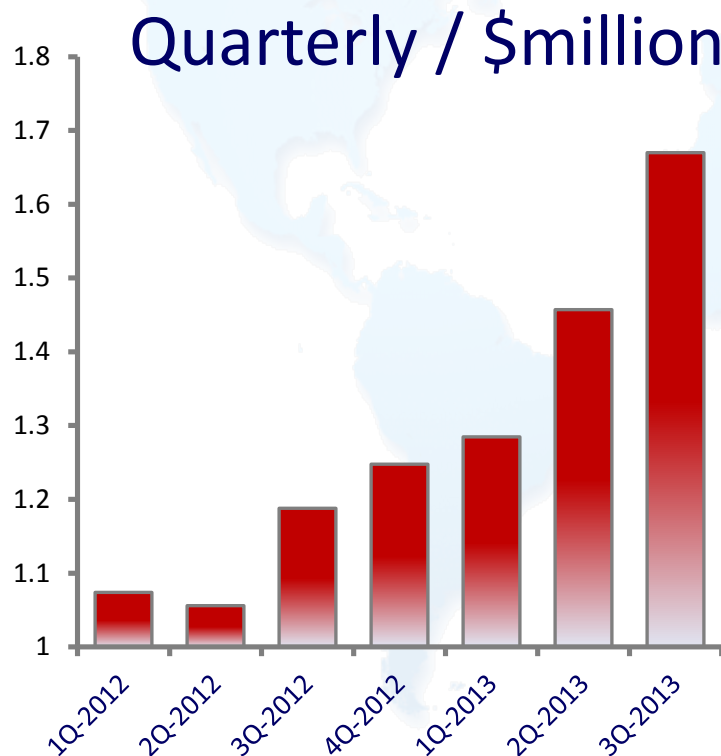
Biomedical research products
Primary human cells
Optimized cell culture media



Branded anti-aging skin care products
Proprietary stem cell skin care technology

Commercial Operations

Strong Revenue growth from Biomedical businesses



Lifeline Cell Technology



Vertically integrated human cell and media business

- \$2.3 billion world-wide market (bcc research 2009)
- Over 130 cells and optimized culture media products
- Branded and OEM products
 - Growing domestic sales force
 - International Distributors covering EU / Japan



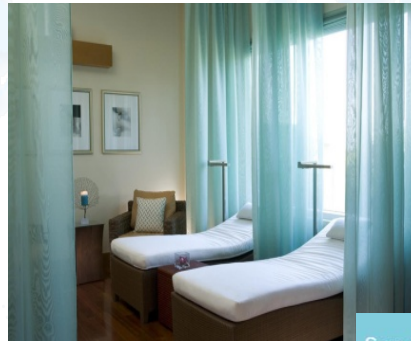
Lifeline Skin Care

LIFELINE[®]
STEM CELL SCIENCE FOR SKIN™

Branded anti-aging stem cell skin care products



*Four Seasons Resort
Maui at Wailea*



*Rosewood
Tucker's Point
Bermuda*

*Marriott
Palm Beach*



Jen Galardi

Hollywood Fitness guru and yoga instructor

*Emme - Supermodel
Woman of the year (Glamour Magazine)
One of the 50 most beautiful people (People)*



Credit: Nisam

“I started using Lifeline Skin Care Defensive Day Moisture Serum and Recovery Night Moisture Serum. I see a difference with the fine lines slowly going away.”

Emme

Emme is the world's leading plus-size model and committed to healthy skin, body, mind and spirit.



Someday, stem cells will change the world.
Today, stem cells will change your skin.

Lifeline[®] speeds up production of new skin cells and stimulates your skin's ability to repair itself. Damaged skin cells causing fine lines and wrinkles and superficial imperfections are quickly outnumbered by the proliferation of healthy cells. You'll see an



Jennifer Galardi

“What this company is doing is very exciting. And the products... they really work.”

*JOHN MAULDIN
Dallas, Texas*

[READ MORE](#)



*John Mauldin
Economist and Best Selling Author*

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Questions?

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