Cells for Therapy and Research

Rodman & Renshaw®

Annual Global Investment Conference

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New York City, NY 2014

International Stem Cell Corporation
5950 Priestly Drive
Carlsbad CA 92008

OTCQB ISCO
www.internationalstemcell.com
1-760-940-6383

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.

Cells for Therapy and Research

Unique stem cell platform

Proprietary

Scalable

Ethical

Robust pre-clinical pipeline addressing large unmet medical needs

Neural stem cells
Parkinson's disease
Stroke

Liver cells
Crigler-Najjar syndrome
α_1-antitrypsin difficiency

Cornea & Retina cells
Corneal blindness
Age-related Macular Degeneration

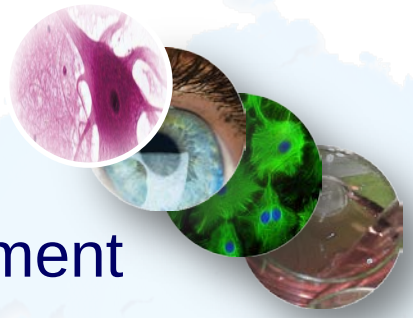
Commercially successful human cell manufacturing subsidiary

$6 MM revenue
Primary cells & media
Dermatology products

Three Businesses in One

INTERNATIONAL STEM CELL CORPORATION

Core stem cell technology and IP
Therapeutic Research and Development



LIFELINE CELL TECHNOLOGY

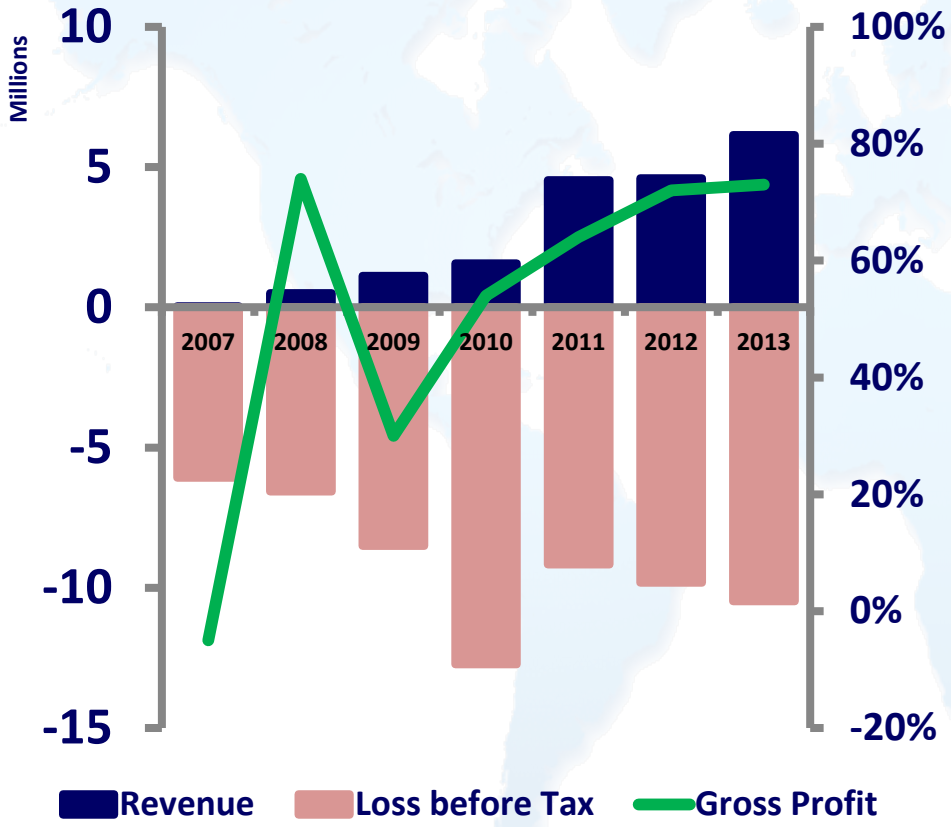
Biomedical research products
Primary human cells &
optimized cell culture media

LIFELINE®
STEM CELL SCIENCE FOR SKIN™

Branded skin care products
Proprietary stem cell skin care technology

$6.2 MM revenue
73% gross margin

Growing Revenues from Subsidiaries



Trading symbol	**OTCQB ISCO**
Headquarters	**Carlsbad, CA**
Stock price	**$0.11**
52 week range	**$0.06 - $0.30**
Market cap.	**$25.5 MM**
90 day volume	**1.04 MM**
Long-term debt	**$0**
Cash on hand	**$0.75 MM**
Net cash used in operating activities	**($3,357k)**
Full time employees	**38**
Audit firm	**Mayer Hoffman McCann**

*As of 7/31/14 or last 10-Q unless otherwise states

UniStemCell

Unique stem cell platform technology
Human parthenogenesis (unfertilized oocytes)

	PSC	ESC	iPS	Adult
Potential to immune match	Yes	Impractical each line is unique	Individual only	Individual only
Fully proliferative/ Economic source	Strong	Strong	Varies	Weak
Genes manipulated/ Use of viruses	No	No	Yes	No
Genetic diseases/ Carries defective gene	Superior	Superior	Carries damaged gene	Carries damaged gene

Intellectual Property

Freedom to operate in major jurisdictions
Potential competitive advantages in EU

130 patents and licenses in 14 families

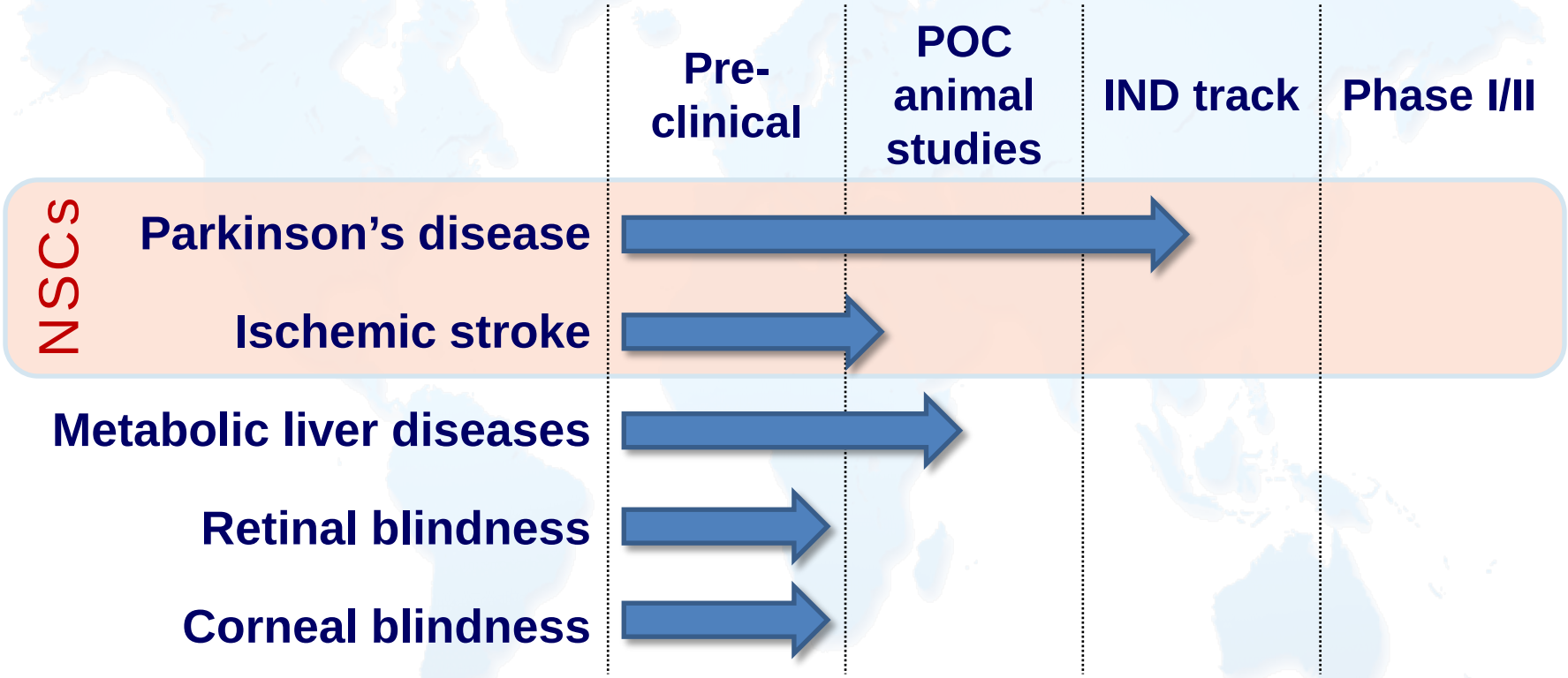
90 patents pending in 5 families

Significant peer-reviewed publications

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

Multiple Therapeutic Opportunities

Success unlocks significant value

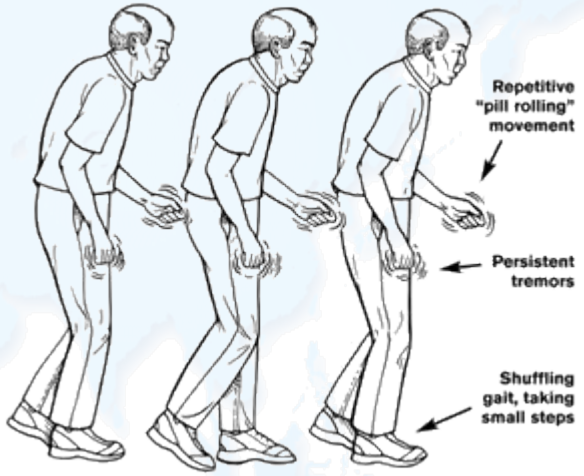


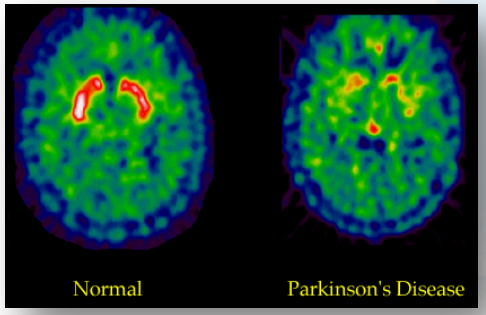
Partner with human data

Parkinson's Disease

2 Neurodegenerative disease
Limited treatment options (symptomatic only)

- About 1 million people in US have PD
- Direct and indirect costs ~$25 billion
- Rarely diagnosed prior to 50 years of age
- Hallmark motor symptoms
  - Bradykinesia (slow movement)
  - Rigidity
  - Tremor





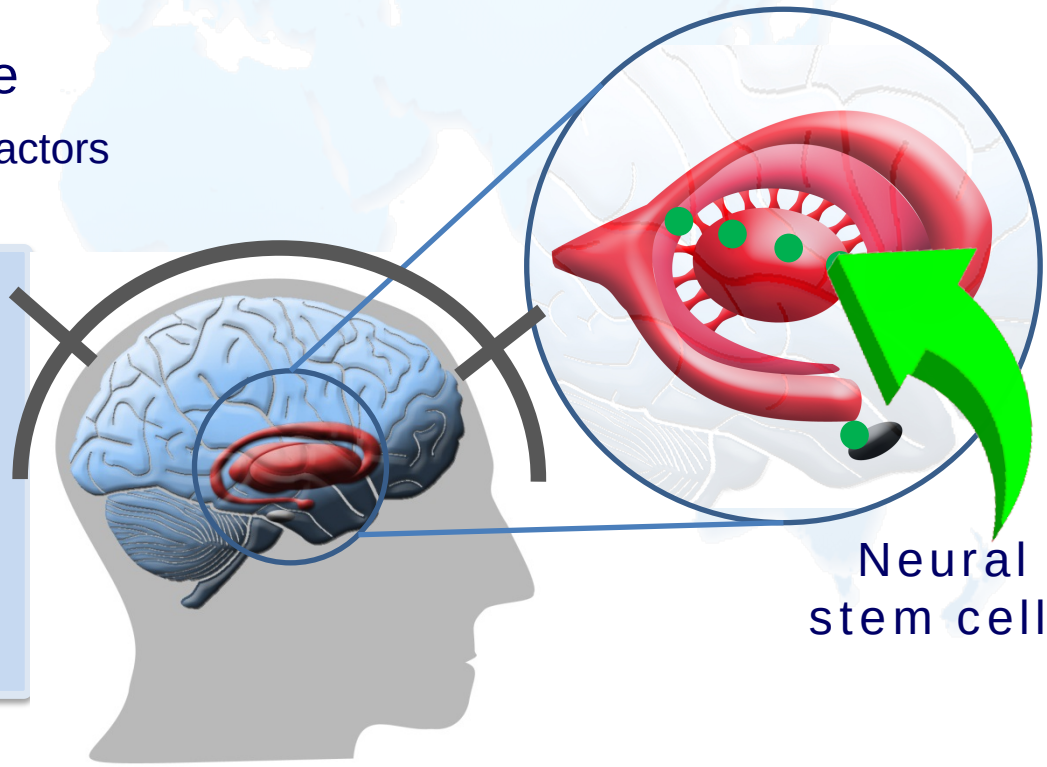
- Motor symptoms arise as a consequence of the degeneration of dopamine neurons in SNPC
- Greater than 50-70% of SNPC neurons degenerate prior to the appearance of overt symptoms

New Treatment for Parkinson's Disease

One-time MRI-guided injection of NSC

- *Disease modifying*
- Rebuild nigro-striatal pathway
  - Migrates and innervate
  - Produce DA neurons
- Prevent further damage
  - Express neuro-protective factors

Standard neurosurgical procedure



Previous human trials using fetal tissue with over 400 patients showed:

- Generally good safety and efficacy
- Cells persist > 10 years

Lack of donors

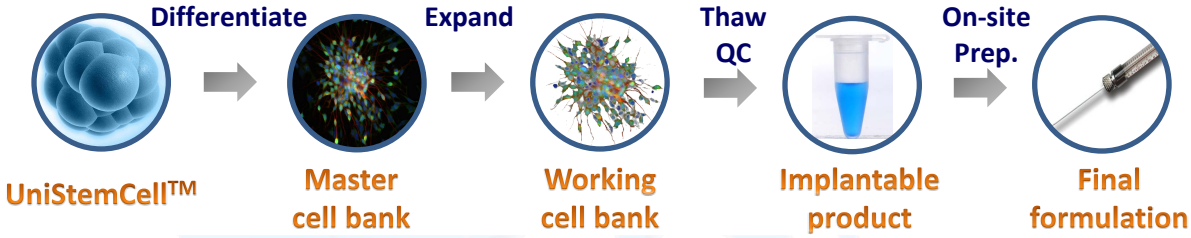
Ethically controversial

Graft induced dyskinesias

cGMP Manufacturing of NSC

Highly optimized GMP process

- Virtually unlimited quantities of NSC
- Produces extremely pure cell populations
- Patented

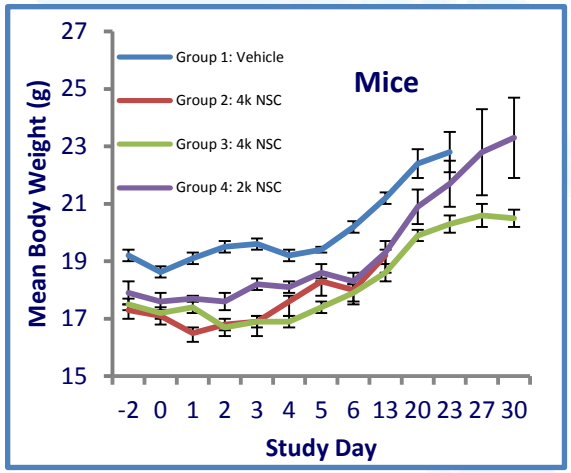


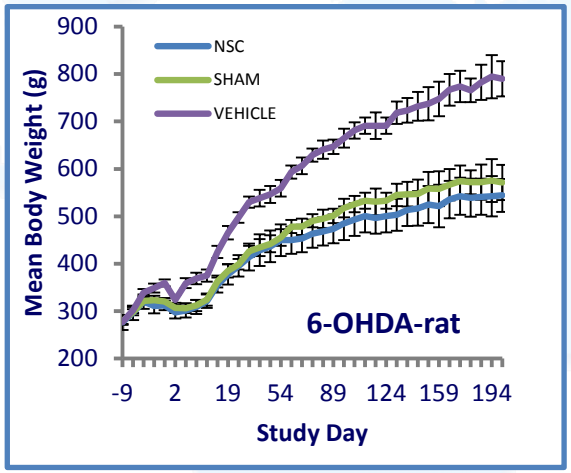
Ideal product characteristics

- Cryopreservable
- Centralized manufacturing
- Easily scalable

Pre-Clinical Shows Good Safety Profile

Body weights remains within normal ranges



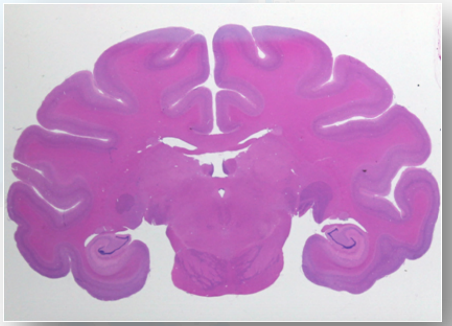


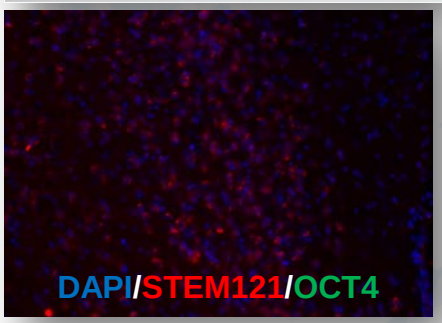
No visible tumors or pluripotent cells

Necropsies showed organs to be normal

Biodistribution indicates no human cells in peripheral organs

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.

Pre-clinical Evidence of Efficacy

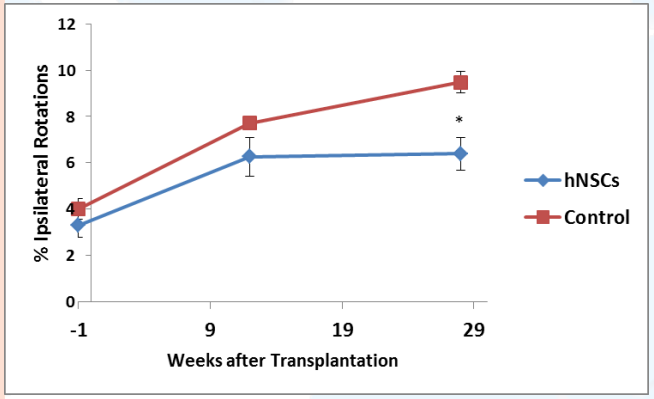
Unilateral implantation of hNSCs into the striatum of 6-OHDA-lesioned rats demonstrates functional activity post-transplantation

hNSC transplanted animals showed significant slow down in the progression of the disease and increased dopamine levels compared to sham control rats

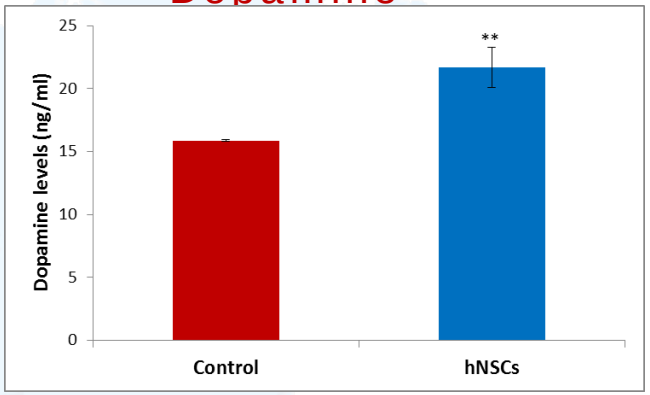
hNSCs successfully survived and engrafted 28 weeks post-transplantation and migrated from site of implantation to the substantia nigra. A small percentage of hNSC differentiated into DA neurons

hNSC therapy was safe and well-tolerated by the animals as determined by necropsy, histology, and biodistribution analysis

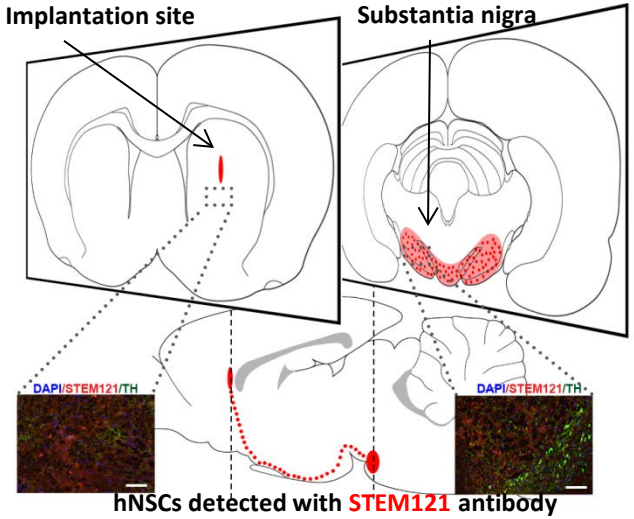
Slows Disease Progression



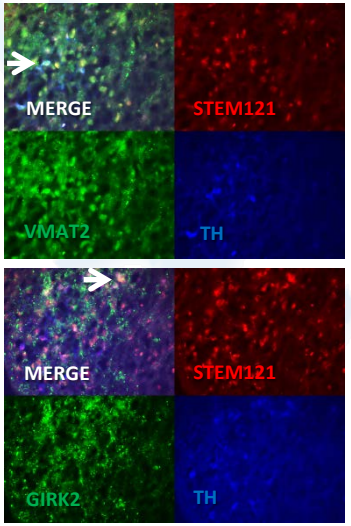
Increases Brain Dopamine



Engraftment and migration

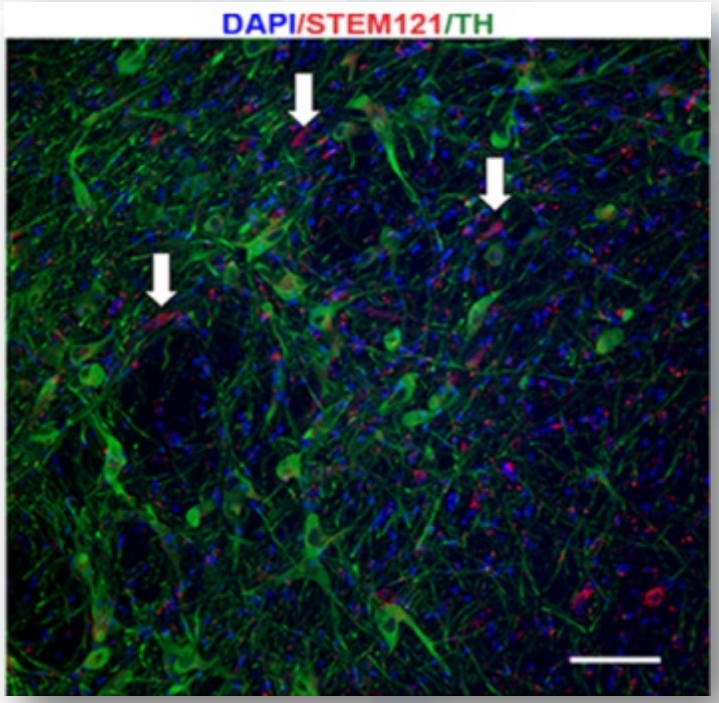


Differentiates into DA neurons *in situ*



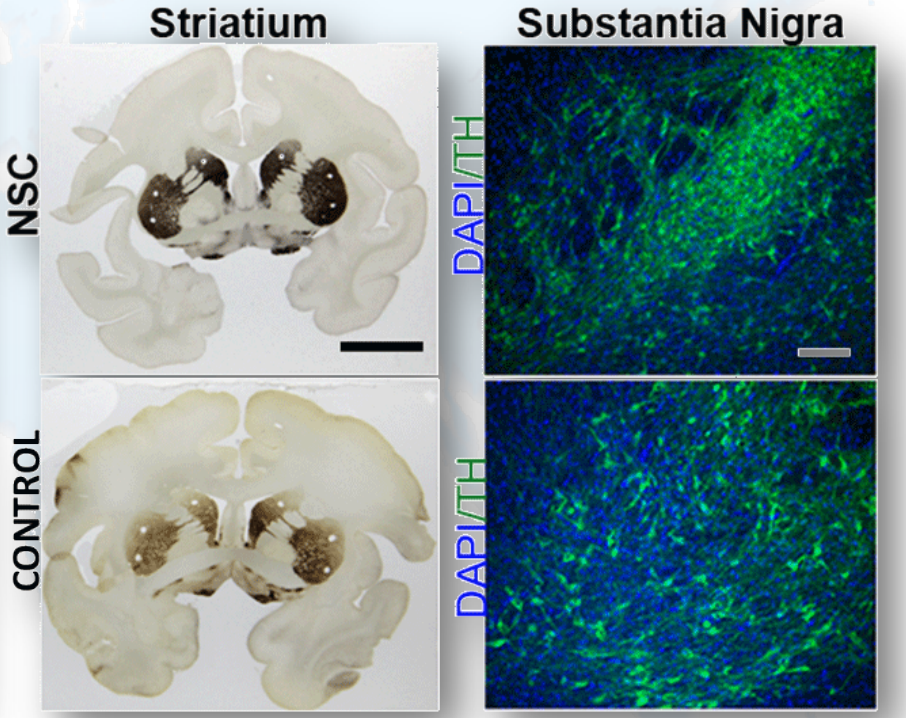
Primate Proof of Concept

NSCs integrate around host DA neurons



Green = host DA neurons
Red = human NSC

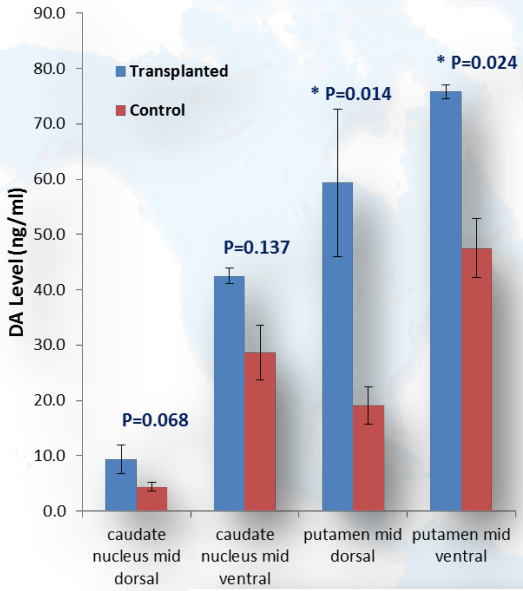
Greater density of DA neurons and higher DA production



Green = host DA neurons

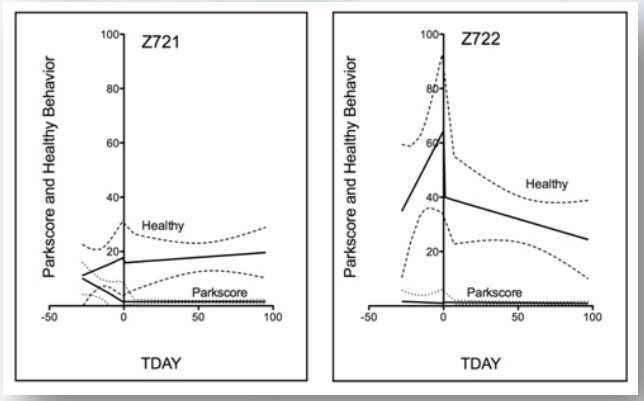
Functional Activity Established

3 Month study



Elevated DA levels *post mortem*

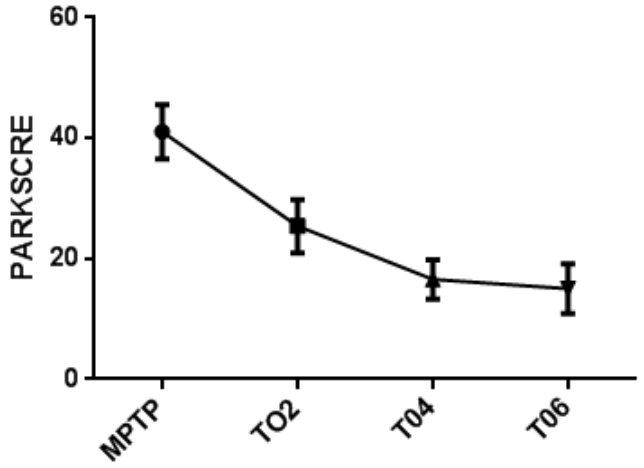
Stable Park and Health scores



(n=6, asymptomatic)

12 Month Study

18 severely symptomatic African green monkeys

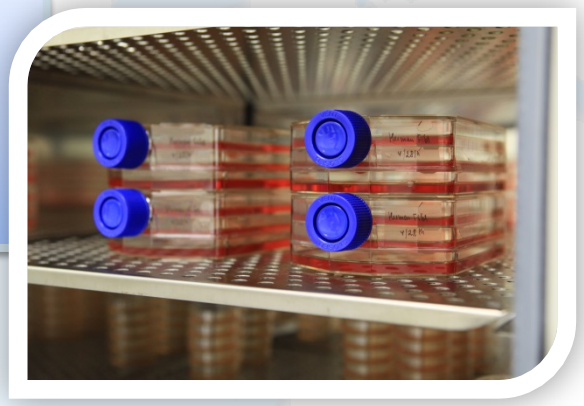


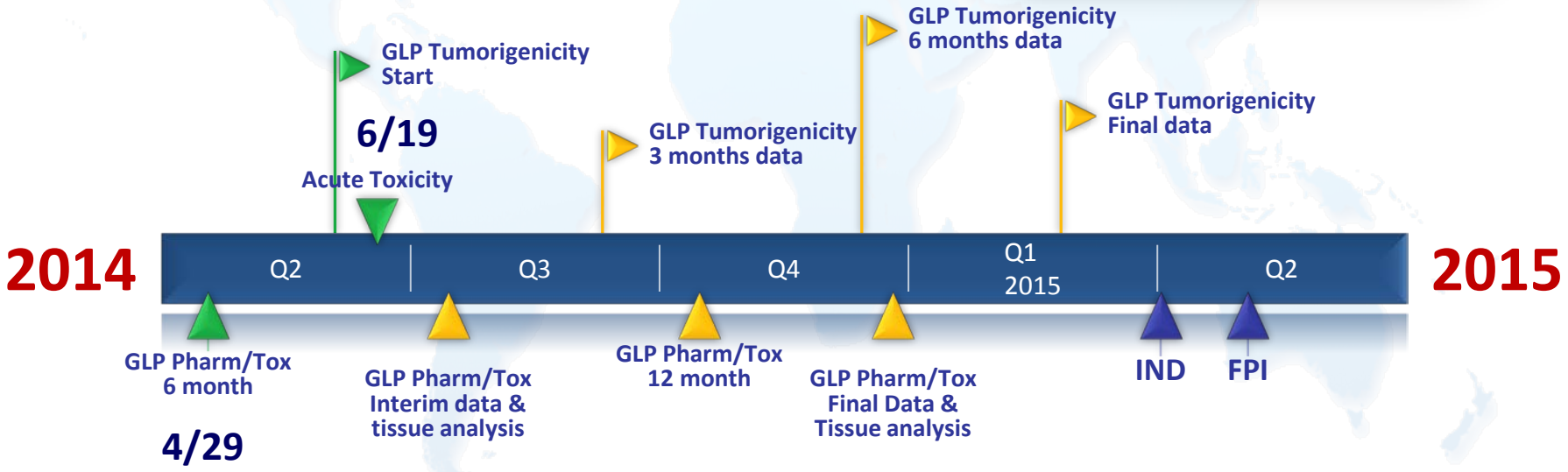
*Prof. Gene Redmond, Yale School of Medicine

Return of Normal Behaviors

Parkinson's Disease Milestones

- ✓ Manufacturing optimized
- ✓ Good Pre-clinical safety
- ✓ Primate proof of concept





Expanding beyond PD

Pipeline of follow-on indications

NSCs

Indication	Market Potential	Current approach
Stroke[1]	600,000 strokes / year $500 million / year	3 hour treatment window
Spinal cord injury[2]	12,000 case / year $360 million / year	No effective treatment
Dry AMD	15 million in US $20 billion	None
CytoHep	Metabolic liver disease	Transplant
CytoRet and CtyoCor	Forms of blindness	None

1. Global Data 2012
2. CDC data

Strategic Partners

Rohto Pharmaceutical Company Inc.

Ophthalmology indications

Duke University

Parkinson's clinical program

Prof. Stacy MD, Vice Dean of Clinical Research

- World-renowned movement disorder expert

Academic

Dr. Evan Y. Snyder, MD PhD, Sanford-Burnham

Dr. D. Eugene Redmond Jr. MD - Yale

Dr. Jeanne Loring, PhD - Scripps

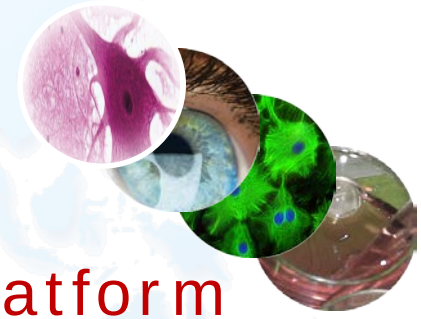
ISCO Growth Opportunities

Fast growing commercial subsidiaries

- Revenues +30% (2012 – 2013)
- Gross Profit 73%

Pipeline addressing large unmet medical needs

- Pre-clinically validated targets
- Upcoming catalysts



Broadly applicable platform

- Almost inexhaustible source
- Ethically superior
- Good IP, distinct advantages in EU

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