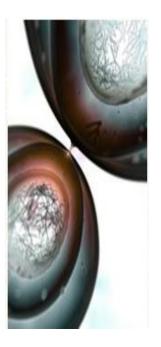


# Advanced Cell Technology



At The Forefront of Stem Cell Therapy

**January 2011 Corporate Presentation** 



#### Cautionary Statement Concerning Forward-Looking Statements

This presentation is intended to present a summary of ACT's ("ACT", or "Advanced Cell Technology Inc", or "the Company") salient business characteristics.

The information herein contains "forward-looking statements" as defined under the federal securities laws. Actual results could vary materially. Factors that could cause actual results to vary materially are described in our filings with the Securities and Exchange Commission.

You should pay particular attention to the "risk factors" contained in documents we file from time to time with the Securities and Exchange Commission. The risks identified therein, as well as others not identified by the Company, could cause the Company's actual results to differ materially from those expressed in any forward-looking statements.

### At The Forefront of Regenerative Medicine

- Method of Producing human embryonic stem cells (hESCs) without Harm to Embryo
- Commencing 2 of 3 Human Clinical Trials using hESCs Ever Approved by FDA in coming months
  - Stargardt's Disease
  - Dry AMD (Dry Age-Related Macular Degeneration)
- Myoblast Program for Heart Failure approved for Phase II
- Seeking to File IND for our Hemangioblast Program



### **Blastomere Program**



- Method for generating hESCs without harm to the embryo
- Uses routine method similar to pre-implantation genetic diagnostics (PGD)
- PGD is routine used in thousands of pregnancies every year
- Published in Nature and Cell Stem Cell
- NIH proposing expanded funding to accommodate ACT's blastomere-derived lines.







Therapeutic Programs	Indication	Clinical Stage
Retinal Pigment Epithelium (RPE) Program	Stargardt's Macular Dystrophy Dry AMD	IND approved Nov. 2010 Phase I to begin 1 <sup>st</sup> Half 2011 IND approved Jan. 3, 2011 Phase I to begin 1 <sup>st</sup> Half 2011
Myoblast Program	Heart Disease, Heart Attack and Heart Failure	Phase I successfully completed FDA-approved for Phase II
Hemangioblast Program	Diseases and Disorders of Circulatory and Vascular System	Preclinical Anticipate IND filing 2011



## RPE Program: Why the Eye? Why RPE Cells?



- Eye is immune-privileged
- RPE cells are pigmented so <u>easy to identify</u> (no need for staining)
- <u>Small dosage</u> vs. other therapies

#### • Ease of administration

- Doesn't require separate approval by the FDA
- Procedure already used by eye surgeons; no new skill set required for doctors

# RPE cell therapy could positively impact over 200 retinal diseases

### Dry AMD and Stargardt's Disease Programs

#### Dry AMD

- The most common form of Age-Related Macular Degeneration (as high as 90 percent)
- Affects 10-15 Million Americans
- <u>No</u> Approved Therapies available
- \$25-30 Billion market in US and Europe alone
- FDA-approved for Phase I/II clinical trial; will start first half 2011

Stargardt's Disease

- Affects at least 30,000 Americans
- FDA Orphan Status; 7 years of Market Exclusivity
- FDA-approved for Phase I/II clinical trial; will start first half 2011
- Applying for similar Orphan Status in Europe

### Myoblast Program

Adult Stem Cells for Treatment of Heart Failure

#### **Target Market**

Sufferers of Heart Failure, Chronic Heart Failure and patients with scarred or ischemic (dead) heart tissue caused by or related to heart attack

#### **Program Status**

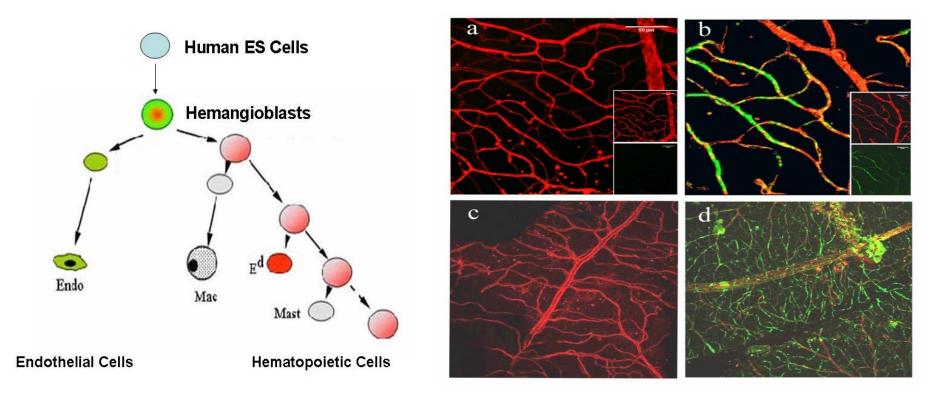
**Clearance from FDA to Proceed with Phase II Clinical Trial** 





#### Hemangioblast Program Synthesizing Blood Cells

The HG cell is the precursor to all cell types in the circulatory and vascular systems





## Hemangioblast Program



- Investigating using HG cells to treat cardiovascular disease, stroke and cancer
- Can generate large numbers, documented in *Nature Methods*
- Joint Venture with leading Korean stem cell developer CHA Biotech

# nature methods

### Intellectual Property

#### **RPE Cells**

- Worldwide Patent Filings
- Dominant Patent Position for Treating Retinal Degeneration
  - <u>One issued patent</u> broadly covers methods for treating retinal degeneration using human RPE cells differentiated from hESCs.
- Broad IP Coverage for Manufacturing RPE Cells from hESCs
  - <u>Two other patents</u>

#### **Blastomere Technology**

- Worldwide Patent Filings
- Pending domestic patent applications



### **Solid Financial Footing**

#### **Most Stable Financial Situation In Company History**

- 12/31 Announced \$25 Million Funding Commitment
- \$15 Million on Balance Sheet
- More Available
- Virtually Debt-Free
- Able to pay for both clinical trials, but that will likely not be necessary:
- Anticipate additional non-dilutive funding
  - Federal and state grants
  - Other grant and loan sources

### The Advanced Cell Technology Team

#### World Class Scientific Team

Dr. Robert Lanza, M.D. – Chief Scientific Officer

Dr. Jonathan Dinsmore, Ph.D. – Myoblast Project Advisor

Matthew Vincent, Ph.D. – Business Development and IP Strategy

#### **Seasoned Management Team**

Gary Rabin – Interim CEO Stephen Price – Interim SVP – Corporate Development Edmund Mickunas – Vice President of Regulatory Roger Gay, PhD – Senior Director of Manufacturing Rita Parker – Director of Operations Bill Douglass – Director of Corporate Communications & Social Media



# **ONCOMPANY FINANCE CONFERENCE**

## Thank you for your time

For more information, visit www.advancedcell.com