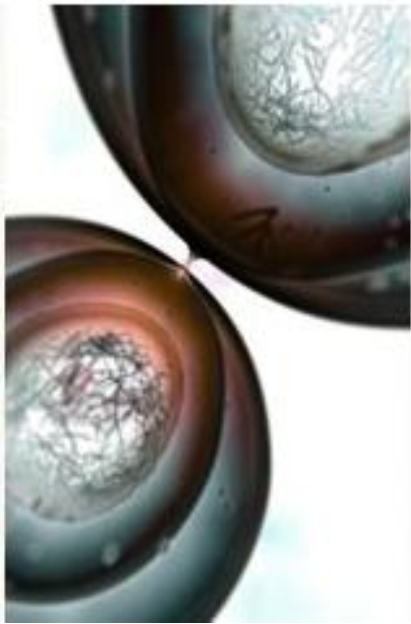
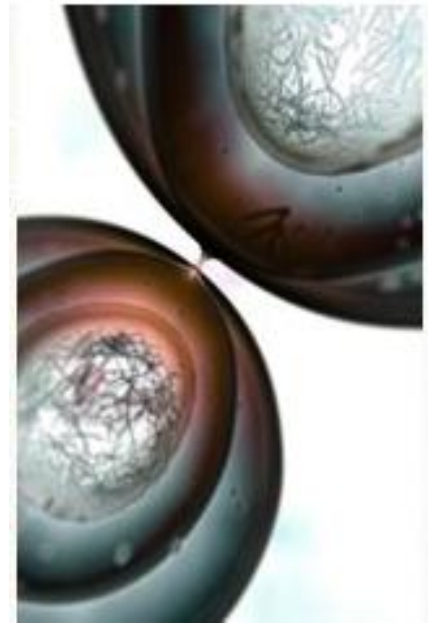


Advanced Cell Technology



Corporate Presentation
October 2010



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.

State of the Company

- Phase I/II ESC trial fully-funded (and not affected by court ruling) and awaiting FDA approval
- “Embryo-safe” cell lines may qualify for federal funding, despite recent court ruling
- Actively pursuing alternatives to accelerate development of programs

ACT Therapeutics

ACT Proprietary Human Therapeutic Programs	Treatment	Clinical Stage
Blastomere Program	Development of embryonic stem cell lines without destruction of embryo	Pre-Clinical
Retinal Pigment Epithelium (RPE) Program	Treatment of Age-related Macular Degeneration (AMD) and Retinal Degenerative Diseases	Clinical IND awaiting FDA approval
Myoblast Program	Treatment of Heart Disease, Heart Attack and Heart Failure	Phase II
Hemangioblast program	Treatment of Diseases and Disorders of the Circulatory and Vascular Systems	Pre-Clinical

Robust Patent Portfolio

- RPE Program
 - Broad protection for production of RPE cells from human ES Cells
 - Includes two issued US Patents
 - Cover use of hESC-derived RPE cells for treatment of retinal degenerative disorders
- Single Blastomere
 - Pending patent application for key technology
- Induced Pluripotency (iPS)
 - ACT has earliest priority date to use of key regulatory factors required for generating iPS cells.
- Transdifferentiation
 - Broad filings directed to transdifferentiation without viral vectors
- SCNT
 - Dominant issued patents
- Parthenogenesis
 - Acquired Infigen patents which are controlling in parthenogenesis

Realizing the fruits of more than a decade of important discoveries....

Institutional Collaborators



Memorial Sloan-Kettering
Cancer Center



Advanced Cell's Institutional Collaborators include:

Casey Eye Institute

Moran Eye Institute

Harvard

Stanford

University of Florida

University of Illinois

Colorado State University

Mayo Clinic

UCSF

Johns Hopkins

Sloan Kettering

University of Iowa

U.C. Berkeley

Current Challenge to hESC Federal Funding

With Crisis, Comes Opportunity

CRISIS

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A time of danger;

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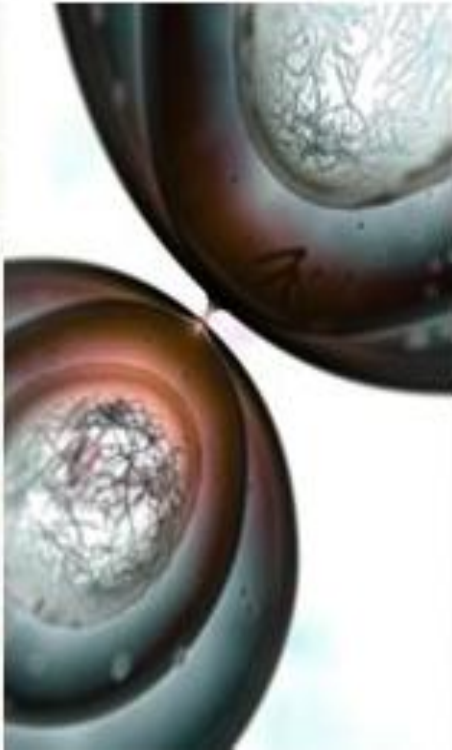
A time of opportunity;

- The Sherley v Selebius case presents a major challenge for the regenerative medicine sector, without a doubt.
 - However, ACT has anticipated this development for some time
- ACT has been taking high-level, face-to-face meetings in DC with all the relevant players, in both houses and on both sides of the aisle, as well as with NIH and HHS.
 - ACT's Single Blastomere technique for isolating hESC's is likely not subject to the language Judge Lamberth used in Preliminary Injunction.
 - ACT stands ready to make these cells available to the research community, if approved.

Blastomere Program: hESCs Without Embryo Harm

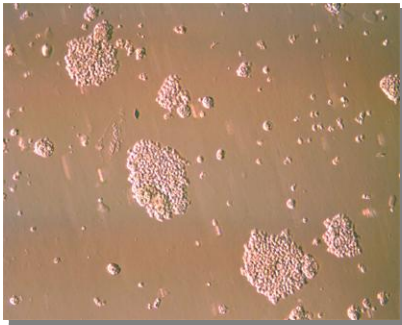
Single Blastomere Technology

- Company scientists successfully generate stem cell lines without destruction of embryo
- Utilizes PGD extraction of single blastomere
- PGD is safe and routine – has been used in thousands of pregnancies in United States and Europe alone.
- Cell lines retain potential to form all cells in the human body.
- Resulting human ES cell lines have been demonstrated to be more robust and reproducible than traditional ICM-derived lines.
- Technology has been reproduced and peer-reviewed on several occasions, and is currently being used in preclinical studies and a product awaiting FDA approval for IND study.



Blastomere Program:

Proven Alternative hESC Method with added Benefits



**Hemangioblasts
Differentiated from
Blastomere hESC Lines**

- Enables Derivation of New hESC Lines via Pre-implantation Genetic Diagnosis (PGD) Method, Preserving Development Potential of the Embryo
- **Offers source of autologous ES cells for donor during his/her life, and closely matched allogeneic source for blood relatives.**
- 4 hESC lines awaiting NIH approval for funding – embryos from which these lines were derived were not destroyed.
- Technology is used to develop RPE cells for our clinical trials for Juvenile Macular Degeneration. (no Federal Funding)
- Technology is used to develop Hemangioblasts – potential source for red blood cells and platelets.



RPE Program: Why RPE?

- Pigmented epithelium cells are easy to identify
- Small dosage vs. other therapies
- The eye is an immune-privileged site, thus no risk of rejection at the injection site

- Ease of administration

- Doesn't require a separate approval by the FDA (universal applicator)
- Procedure is already used by eye surgeons; no new skill set required for doctors

- RPE cell therapy may positively impact over 200 retinal diseases



ACT's RPE Program IND - *Status*

- **Received Orphan Indication**
- **Application for IND Being Reviewed**
- **Initial IND for Stargardt's Disease**
- **Trial Design Dovetails Into Second IND, for Dry AMD**
- **Represents \$25-30 Billion Worldwide Market, With No Effective Therapies Currently Available**

Myoblast Program Highlights

Target Market for Myoblast Program

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 Trials in the U.S.



Myoblast Program: Clinical Trial Summary

	Phase 1 LVAD	Phase 1 CABG	Phase 1b CABG	Phase 1b Catheter
Patients	6 patients	12 patients	12 patients	23 Patients (12 treated, 11 control)
Indication	LVAD Bridge to Transplant	+CABG	+CABG	Catheter Injection
Dose	Single Dose - 300 MM Cells	Escalating – 10, 30, 100 and 300 MM Cells	Single Dose - 300 MM Cells	Escalating - 30, 100, 300 and 600 MM Cells
Primary Endpoint	Safety	Safety	Safety	Safety
Result	Demonstrated cell survival in humans	Dose escalation, Safe at all doses	Survival of cells (cardiac imaging), improved symptoms and function	Safe at all doses, improved symptoms and function

Catheter Trial – Responder Analysis

NYHA Classification at 6 month vs Baseline for all Patients

	Improved	No Change	Worsened
Myoblast	83%	17%	0%
Control	0%	64%	36%

Myoblast Program: Phase II Clinical Trial

- **80 total patients (1:1 treatment vs. control)**
- **Double-blind, placebo-controlled (sham procedure)**
- **Catheter delivery of cells: percutaneous targeted delivery**
- **Three-month, six-month, and 12-month follow-up**
- **Endpoints: Improvement in HF symptoms and Ventricular Volumes**
- **Primary endpoint: Improvement in heart failure symptoms measured by “Kansas City Cardiomyopathy Questionnaire”**
- **Supporting endpoints: Ventricular volumes, Six minute walk test**
- **Interim data analysis at six-months by Independent Review Board**

Hemangioblast Program: Partnership

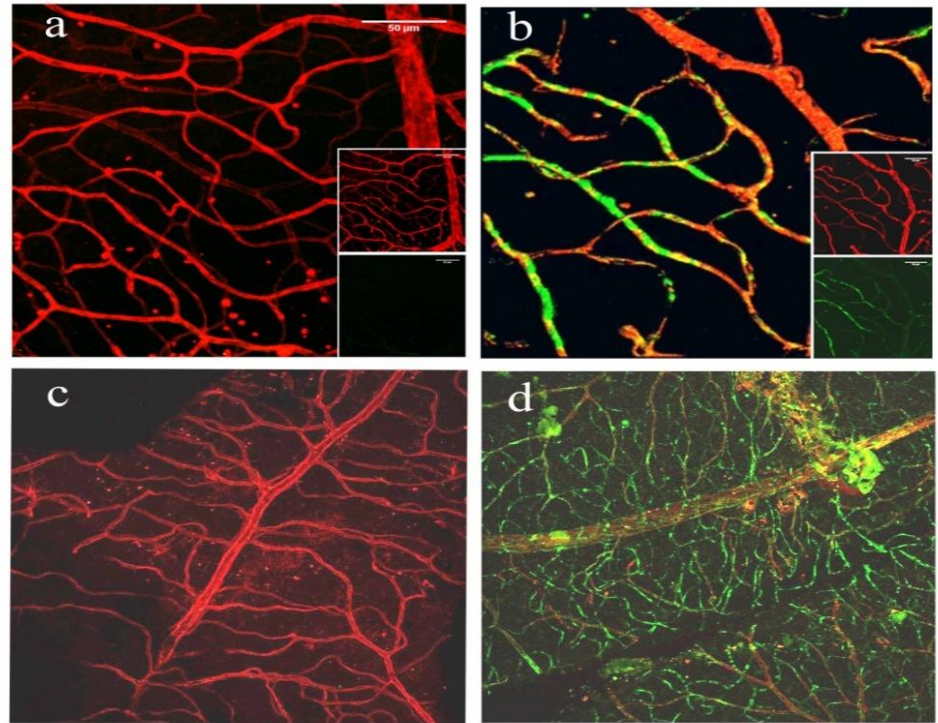
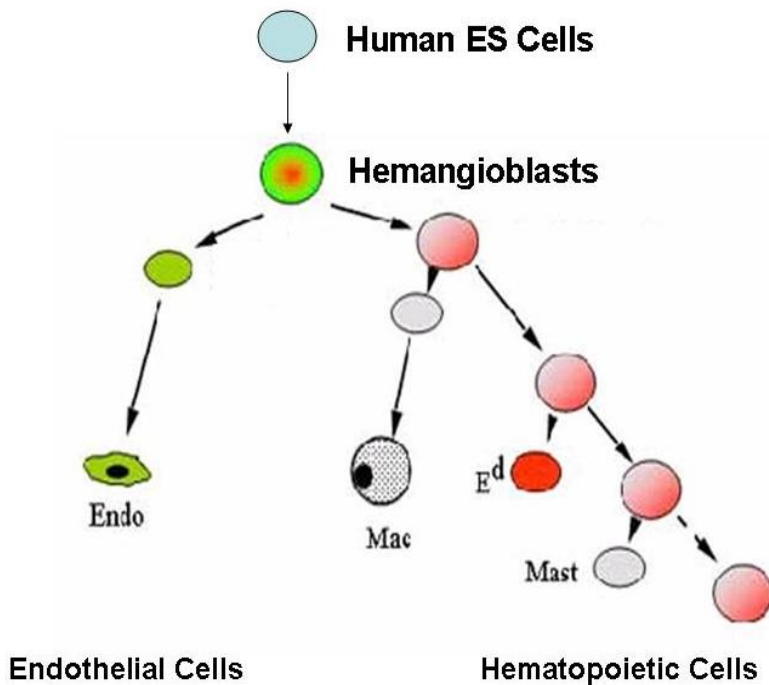


- Joint Venture with leading Korean stem cell developer CHA Biotech Co.
- The J.V., 'Stem Cell & Regenerative Medicine International', is focused on the development of human blood cells and related products

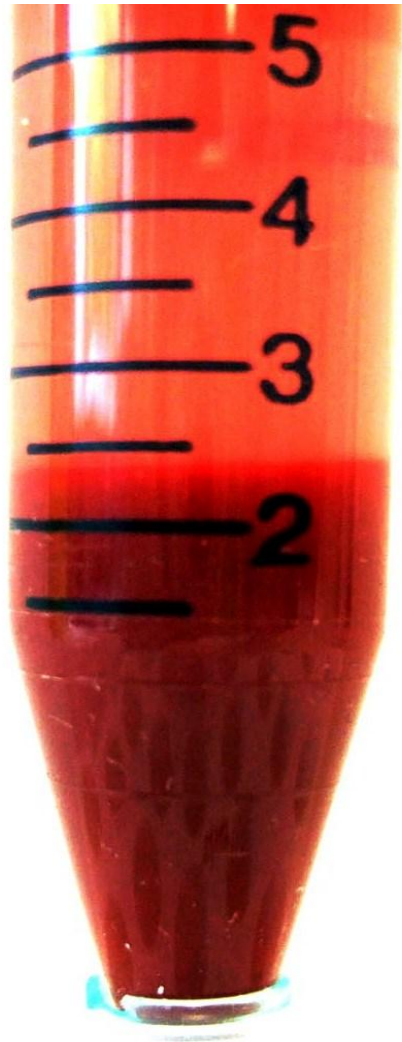


Hemangioblast Program: Overview

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



Hemangioblast Program: Synthesizing Blood Cells



The Advanced Cell Technology Team

World Class Scientific Team Led By

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

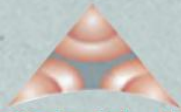
William M. Caldwell IV – Chairman & CEO

Edmund Mickunas – Vice President of Regulatory

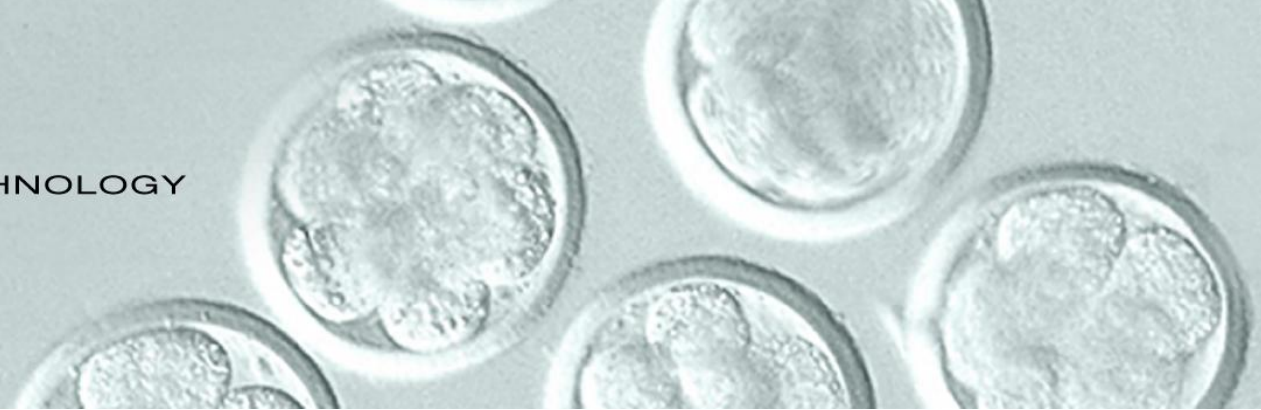
Roger Gay, PhD – Senior Director of Manufacturing

Rita Parker – Director of Operations

Bill Douglass – Director of Corporate Communications & Social Media



ADVANCED **CELL** TECHNOLOGY



Thank you for your time

For more information, visit www.advancedcell.com

Advanced Cell Technology is traded on the OTC BB, symbol: ACTC