

*Forward-looking statements: this profile is intended to present a summary of ACT's potential platforms. The information contained 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 (for specifics, please see "risk factors" as described in the company's 10K annual filing). 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.*

## THE COMPANY

**Advanced Cell Technology, Inc.** ("ACT"; OTCBB: ACTC) is a biotechnology company developing cellular therapies for the treatment of diseases that impact millions of people worldwide. The company is currently conducting the **only ongoing, FDA-cleared human embryonic stem cell (hESC)-based human clinical trials**. The two Phase I/II trials, both initiated in July 2011 at UCLA, use retinal pigment epithelial (RPE) cells derived from hESCs to treat forms of macular degeneration, including Dry Age-Related Macular Degeneration (Dry AMD), the leading cause of blindness in people over age 55. ACT also recently initiated the first hESC trial in Europe, a Phase I/II trial for macular degeneration. The company is also developing its **Hemangioblast (HG) platform** for the treatment of blood and cardiovascular diseases, its Phase II-cleared **Myoblast stem cell therapy** for the treatment of chronic heart failure and other cardiac conditions, and other programs.

ACT's principal laboratory and GMP facility is in Marlborough, Mass., and its corporate offices are in Santa Monica, Calif. ACT is led by an experienced management team and a world-class scientific team helmed, respectively, by chairman and CEO Gary Rabin and chief scientific officer Robert Lanza, M.D.

## PATENTS & INTELLECTUAL PROPERTY (IP)

ACT owns or licenses more than 150 patents and patent applications relating to regenerative medicine, and is positioning itself to have a dominant patent position around its stem cell-derived RPE program in leading markets around the world. A table summarizing two of the company's proprietary technologies follows.

ACT Proprietary Enabling Technology	Description
"Embryo-safe" Blastomere	Broad patent on technique
RPE Program	Broad patent on cell production

In 2010 ACT secured three far-reaching patents related to its RPE program, and more recently was issued the first patent for generating hemangioblast cells to treat a broad spectrum of vascular and hematopoietic disorders.

## THERAPEUTIC PLATFORMS

The company's RPE and HG programs are hESC-based, and its Myoblast program for cardiac disease is an adult autologous stem cell therapy. As documented in *NATURE* and *Cell Stem Cell*, ACT developed the "**single-cell blastomere**" technique, the first-ever proven alternative method for successful hESC generation **without harm to the embryo**, for which it holds a broad patent.

### KEY MARKET DATA

**Ticker: ACTC.OB**

**Closing Price 2/21/12: \$ 0.11**

**52-Week Range: \$.08 - .22**

**Market Cap: \$180 M**

**Shares Outstanding: 2.03 B**

**3-Mth Avg. Daily Volume: 16 M**

### RECENT NEWS & ANNOUNCEMENTS

- Feb. 15 - ACT Announces Wills Eye Institute as Additional Site for Clinical Trial for SMD
- Feb. 13 - ACT Announces Third Patient with SMD Treated in Clinical Trial with RPE Cells Derived from Embryonic Stem Cells
- Jan. 30 - ACT Announces Aberdeen Royal Infirmary in Scotland as Additional Site for Clinical Trial Using hESC-Derived RPE Cells for Macular Degeneration
- Jan. 25 - ACT Announces that Additional Patient with SMD Has Undergone Embryonic Stem Cell Transplantation at UCLA's Jules Stein Eye Institute
- Jan. 23 - ACT Published First Report of ESC-Derived Cells Transplanted into Patients
- Jan. 23 - ACT Announces Europe's First Embryonic Stem Cell Transplant in Patient with SMD
- Jan. 17 - Leading Eye Institute to Participate in ACT's ESC Clinical Trial for Macular Degeneration
- Jan. 9 - ACT to Present in the Regenerative Medicine Insight Track at Biotech Showcase 2012
- Dec. 12 - ACT Announces Settlements and Filing of Preliminary Proxy
- Dec. 6 - ACT Announces Two New Appointments to Board of Directors

## THERAPEUTIC PLATFORMS (CONTINUED)

**RPE Program** - ACT has developed a fully-differentiated RPE cell derived from human embryonic stem cells, which can be used as a cellular therapy to treat retinal degenerative diseases. *ACT is currently conducting three Phase I/II clinical trials* to test the safety of the therapy for forms of macular degeneration: Stargardt’s Macular Dystrophy (SMD), and Dry AMD. **Dry AMD represents a \$25-30 Billion market in the US and Europe alone**, and there are no approved therapies currently available for either condition. Four patients have thus far been treated in the two clinical trials at UCLA’s Jules Stein Eye Institute, and one at Moorfields Eye Hospital in London.

Other milestones in ACT’s RPE program include: the NIH proposed expanding its definition of hESCs for funding purposes, in part to accommodate ACT’s lines derived using its patented “embryo-safe” single-cell blastomere technique; and both the FDA and the European Medicines Agency (EMA) both granted ACT’s RPE cells “Orphan” status for treatment of Stargardt’s Disease.

**Hemangioblast Program** - ACT’s Hemangioblast program is for the treatment of blood and cardiovascular diseases. A paper published in *NATURE Methods* revealed the company’s successful generation of functional Hemangioblast cells from human embryonic stem cells, and a paper published in *Cell Research* indicated that hESCs could be a potentially unlimited source of platelets for transfusion.

**Myoblast Program** - ACT’s Myoblast treatment may prove particularly beneficial for patients who have experienced a serious heart attack and are at risk for heart failure. ACT has secured FDA approval to commence with Phase II clinical trials. The Myoblast program has several advantages over currently-available approaches, including symptom management and disease modification.

## THERAPEUTIC PIPELINE

Proprietary Human Therapeutic Programs	Treatment	Target Market	Clinical Stage	Program Status	
				Date	Recent Milestones
RPE (retinal pigment epithelial) program	Cellular therapies for the treatment of Stargardt's disease (SMD: a form of macular degeneration), dry age-related macular degeneration (Dry AMD) and other degenerative retinal diseases.	> 30-40,000 cases of Stargardt's disease in U.S. > Dry AMD represents \$25-30 Billion market in U.S. & Europe alone	Phase I/II Clinical Trials currently underway.	On-going	Two phase I/II clinical trials initiated at UCLA; IRB approval also issued at OHSU for SMD program; regulatory clearance received for first hESC clinical trial in Europe, for SMD
Hemangioblast program	Treatment of Diseases and Disorders of the Circulatory and Vascular Systems	> Specific pool to be determined >20 Million cases of heart damaged or dead- heart tissue resulting from heart attack or disease)	Pre-Clinical	1st half 2012	Published papers showing ability to repair vascular damage in animal models; anticipate IND filing in 2012
Myoblast program	Adult stem cell treatment for advanced cardiac disease	> 5 Million cases of heart failure or advanced heart disease U.S.	Cleared to initiate Phase II clinical trial by FDA.	2012	FDA-approved to commence with Phase II Clinical Trials; seeking funding



## MANAGEMENT TEAM

- **Gary Rabin, Chairman and Chief Executive Officer** – 24-year career in finance & operations
- **Robert Lanza, M.D., Chief Scientific Officer** – 25-year career in biomedical & scientific research
- **Stephen Price, Interim Senior Vice President of Corporate Development** – 17-year career in capital-raising & management
- **Edmund Mickunas, Vice President of Regulatory Affairs** – 29-year career in biotechnology & medical devices
- **Roger Gay, Ph.D., Senior Director of Manufacturing** – 29-year career in clinical manufacturing & product development
- **Matthew Vincent, Ph.D., Director of Business Development** – 21-year career in life science deal-making

## BOARD OF DIRECTORS

- **Robert S. Langer, Sc.D.** – Institute Professor at MIT; author of over 1,100 articles, with nearly 800 issued or pending patents
- **Zohar Loshitzer** – CEO of Presbia, Inc., an ophthalmic device firm, and principal of Orchard Capital, a private equity firm
- **Gregory D. Perry** – CFO and EVP of Immunogen, Inc., a publicly-traded biotechnology firm
- **Gary Rabin, Chairman and Chief Executive Officer** – 24-year career in finance & operations
- **Alan C. Shapiro, Ph.D.** – 40-year career in corporate & international financial management

## CONTACT INFORMATION

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