

*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 human embryonic stem cell (hESC)-based human clinical trials in the US and the first such trial in the EU**. The three trials 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. Additionally, the company is developing its **induced pluripotent stem (iPS) cell-derived human platelet program, Hemangioblast (HG) platform** for the treatment of blood and cardiovascular diseases, its **Mesenchymal Stem Cell (MSC)** program for manufacturing MSCs, and other **Ocular** 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, including broad intellectual property (IP) holdings around its "embryo-safe" single-cell blastomere technique and its stem cell-derived RPE program, as well as significant IP holdings related to induced pluripotent stem (iPS) cells. A table summarizing two of the company's IP positions follows.

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

Since 2010 ACT has secured three broad 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.

## PROGRAMS AND THERAPEUTIC PLATFORMS

The company's RPE and HG programs are both hESC-based. As documented in *NATURE* and *Cell Stem Cell*, ACT developed the "embryo-safe" single-cell blastomere technique, the first-ever proven alternative method for successful generation of hESCs **without harm to the embryo**, for which it holds a broad patent.

### KEY MARKET DATA

**Ticker: ACTC.OB**

**Closing Price 5/1/13: \$.07**

**52-Week Range: \$.05 - .10**

**Market Cap: \$161 M**

**Shares Outstanding: 2.19 B**

**3-Month Avg. Daily Volume: 6 M**

### RECENT NEWS & ANNOUNCEMENTS

Apr. 23 – ACT Initiates Higher-Dosage Patient Treatment in European Clinical Trial for Macular Degeneration

Apr. 16 – ACT to Present at Regen Med Investor Day 2013

Apr. 15 – ACT Treats First Patient with Better Vision in Clinical Trial for SMD

Apr. 1 – ACT Initiates Treatment of Higher-Dosage Cohort in Clinical Trials for Dry Age-Related Macular Degeneration and Stargardt's Macular Dystrophy

Mar. 22 – ACT's Chief Scientific Officer Dr. Robert Lanza to Deliver the Nerem Lecture 2013 at the 17th Annual Hilton Head Workshop

Mar. 14 – ACT Receives Approval from DSMB to Initiate Treatment of Third Patient Cohort in All Three Clinical Trials

Mar. 12 – ACT's Dr. Robert Lanza Voted Top 4 "Most Influential People on Stem Cells"

Mar. 8 – Advanced Cell Technology to Present at BIO-Europe Spring 2013

Mar. 7 – Advanced Cell Technology Announces Fourth-Quarter and Year-end Results

## PROGRAMS AND THERAPEUTIC PLATFORMS (CONTINUED)

**RPE Program** - ACT has developed a fully-differentiated RPE cell derived from hESCs, which can be used as a cellular therapy to treat retinal degenerative diseases. *ACT is currently conducting three Phase I clinical trials* in the US and EU to test the safety of the therapy for forms of macular degeneration: Stargardt’s Macular Dystrophy (SMD) and Dry AMD. **Dry AMD is the leading cause of blindness in people over age 55, representing a \$25-30 Billion potential market in the US and Europe alone.** Preliminary results from the two US trials were published in *The Lancet* in early 2012. The Company is also preparing to initiate a Phase I clinical trial for myopic macular degeneration (MMD), specifically for forms of severe myopia of the type that causes fissures in the RPE layer of the eye.

**iPS cell-derived Platelet Program** – Dubbed a “revolutionary human stem cell trial” and one of “10 ideas that will shape the year” by *New Scientist* magazine, ACT’s platelet program aims to compare normal and iPS cell-derived platelets (small blood components that help the clotting process) in eight healthy volunteers, and analyze recovery and survival. The company hopes to initiate the first-ever clinical trial using these promising cells, later this year.

**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.

**MSC Program** – ACT is developing a method for scaled manufacturing of Mesenchymal Stem Cells (MSCs) from renewable pluripotent stem cell sources. This involves expanding hESC-and IPS-derived MSCs to large numbers in-vitro. MSCs can migrate to injury sites in the eye, exert local immunosuppressive effects, and repair damaged tissue. ACT has a proprietary, scaled manufacturing method for generating “young” MSCs from hESC and iPS lines. This permits the use of a single allogeneic MSC bank to manufacture MSCs. Moreover, hESC-and iPS cell-derived MSCs are far more potent immunomodulators than adult-derived MSCs.

**Ocular Programs** – ACT is developing therapeutic platforms using corneal endothelial cells for use in treating corneal blindness, as well as retinal neural progenitor cells for use in treating glaucoma.

## THERAPEUTIC AND PROGRAM PIPELINE

Proprietary Programs	Description/ Treatment	Target Market	Clinical Stage	Program Status
RPE (retinal pigment epithelial) program	Cellular therapies for treatment of SMD, dry AMD, myopic macular dystrophy (MMD), and other degenerative retinal conditions.	<ul style="list-style-type: none"> <li>&gt; Dry AMD (\$25-30B market in US &amp; Europe alone)</li> <li>&gt; Over 50,000 cases of SMD in US and Europe</li> <li>&gt; Patients with severe MMD with fissures in RPE layer</li> </ul>	Phase I (dry AMD trial and SMD trials in US and Europe)  Pre-clinical (MMD)	Three Phase I clinical trials ongoing in US and Europe, for SMD and dry AMD.  Phase I trial for MMD to be initiated in coming months.
Hemangioblast program	Treatment of Diseases and Disorders of the Circulatory and Vascular Systems	<ul style="list-style-type: none"> <li>&gt; Specific pool to be determined</li> <li>&gt;20 Million cases of heart damaged or dead- heart tissue from heart attack or disease</li> </ul>	Pre-Clinical	Published papers showing ability to repair vascular damage in animal models; anticipate IND filing in 2012
MSC program	Proprietary scaled manufacturing of Mesenchymal Stem Cells (MSCs) from hESC and iPS cell lines	Researchers and companies conducting clinical programs	Development-stage	Pre-manufacturing stage
iPS cell-derived Platelet Program	Comparison of normal & iPS cell-derived platelets; analysis of recovery and survival	Wound repair; thrombocytopenia; individuals in need of blood donations	Pre-clinical	Pre-IND

## MANAGEMENT TEAM

- **Gary Rabin, Chairman and Chief Executive Officer** – 24-year career in finance and operations
- **Robert Lanza, M.D., Chief Scientific Officer** – 25-year career in biomedical and scientific research
- **Edmund Mickunas, Vice President of Regulatory Affairs** – 29-year career in biotechnology and medical devices
- **Kathy Singh, Controller** – 15-year career in accounting
- **Roger Gay, Ph.D., Senior Director of Manufacturing** – 29-year career in clinical manufacturing and product development
- **Rita Parker, Director of Operations** – 20-year career in management
- **Matthew Vincent, Ph.D., Director of Business Development** – 21-year career in life science deal-making

## BOARD OF DIRECTORS

- **Michael Heffernan** – 25-year career in the pharmaceutical and related healthcare industries
- **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, with 24-year career in finance & operations
- **Alan C. Shapiro, Ph.D.** – 40-year career in corporate and international financial management

## CONTACT INFORMATION

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