

BIOTIME INC
Form 8-K
April 30, 2009

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): April 29, 2009

BioTime, Inc.

(Exact name of registrant as specified in its charter)

California
(State or other
jurisdiction of
incorporation)

1-12830
(Commission File Number)

94-3127919
(IRS Employer
Identification No.)

1301 Harbor Bay Parkway
Alameda, California 94502
(Address of principal executive offices)

(510) 521-3390
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Statements made in this Report that are not historical facts may constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those discussed. Such risks and uncertainties include but are not limited to those discussed in this report and in BioTime's Annual Report on Form 10-K filed with the Securities and Exchange Commission. Words such as “expects,” “may,” “will,” “anticipates,” “intend,” “plans,” “believes,” “seeks,” “estimates,” and similar expressions identify forward-looking statements.

Section 8 – Other Events

Item 8.01 – Other Events

On April 29, 2009, the California Institute of Regenerative Medicine (CIRM) awarded us a \$4,721,706 grant for a stem cell research project related to our ACTCellerate™ embryonic stem cell technology. Our grant project is titled “Addressing the Cell Purity and Identity Bottleneck through Generation and Expansion of Clonal Human Embryonic Progenitor Cell Lines.” The overall objective of the research project is to generate tools useful in applying ACTCellerate™ technology to the manufacture of patient-specific therapeutic products.

Our CIRM-funded research project will address the need for industrial scale production of pure therapeutic cells. Our technologies in regenerative medicine are based on the power of human embryonic stem (hES) cells and induced pluripotent stem (iPS) cells to become all of the cell types of the human body. hES and iPS-derived cells are generally difficult and costly to manufacture in large quantities, especially with the purity required for therapeutic use. Purity and precise identification of the desired therapeutic cells are essential for cell therapy because unlike a drug which may persist in the body for a matter of hours or days, a cell can persist in the body for a lifetime. Contamination of hES- or iPS-derived cells with the wrong cells could lead to toxicities resulting from normal but inappropriate tissue growth or tumor formation.

ACTCellerate™ technology addresses the challenges of manufacturing purified cells of known identity by allowing the isolation of novel, highly-purified embryonic progenitor cells (hEPCs). Embryonic progenitors are cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. Progenitor cells may possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapy. The progenitor cells are relatively easy to manufacture on a large scale and in a purified state, which may make it advantageous to work with these cells compared to the direct use of hES or human iPS cells. We already have isolated and expanded a number of hEPCs that may be used in the funded research program.

Because hEPCs are clonal, meaning that they are derived from a single cell, they have the potential to grow as a pure cell line. However, the production of hEPCs for human therapeutic use will require a means of ascertaining that the cells being used are in fact the correct cells. Our research program proposes to map the surface markers on hEPC lines so that we can identify a molecular signature specific to a given hEPC line. The molecular signature will be the key to verifying the correct identity of cells intended to be used in therapy, and

will facilitate purification of hEPCs from any hES or iPS cell line. We will seek to identify antibodies and other cell purification reagents that will reveal the molecular signature of the desired hEPCs. The successful completion of our proposed project will provide well characterized hEPCs that are precursors of therapeutic cells such as nerve, blood vessel, heart muscle, and skin.

CIRM's independent reviewers who recommended funding of the grant concluded that our research project "addresses an unmet need in the field, is innovative, and has sound scientific rationale. If successful, the applicant's work would benefit the field by providing: 1) a shared bank of standardized good manufacturing practice (GMP)-produced hEPCs with methods for industrial scale up of the lines; 2) peptide and antibody reagents with protocols for identification and isolation of hEPCs; and 3) reagents and protocols for differentiating hEPCs to clinically relevant cells. Reviewers concurred that these resources would help advance stem cell therapies to the clinic."

The CIRM grant will provide up to \$4.7 million of funding for this research project over a period of three years, with \$1.6 million expected to be available during the first 12 months. We expect that the first funds will be available some time during the summer of 2009 and that work on the project will be ready to begin upon the receipt of funding.

CIRM was established in 2005 to fund over \$3 billion dollars of research in the field of stem cell biology in California. In particular, it aims to support and advance stem cell research and regenerative medicine under the highest ethical and medical standards for the discovery and development of cures, therapies, diagnostics and research technologies to relieve human suffering from chronic disease and injury. With this level of funding, CIRM is the largest source of funding for embryonic and pluripotent stem cell research in the world. CIRM's website can be found at <http://www.cirm.ca.gov>.

Section 9 – Financial Statements and Exhibits

Item 9.01 – Financial Statements and Exhibits.

Exhibit Number	Description
99.1	Press Release Dated April 30, 2009

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

BIOTIME, INC.

Date: April 30, 2009

By /s/ Steven A. Seinberg
Chief Financial Officer

Exhibit Number	Description
99.1	Press Release Dated April 30, 2009