



OncoCyte to Present Cancer Diagnostic Clinical Study Data at AACR Annual Meeting

Feb 06, 2015

- BioTime subsidiary's data collected from prospective clinical studies in bladder and breast cancer -

ALAMEDA, Calif.-(BUSINESS WIRE)-Feb. 6, 2015- BioTime, Inc. (NYSE MKT:BTX) and its subsidiary OncoCyte Corporation today announced that two abstracts, summarizing clinical studies of OncoCyte's *PanC-Dx*[™] diagnostic products for bladder and breast cancer, have been accepted for poster presentation at the American Association for Cancer Research (AACR) Annual Meeting being held April 18-22, 2015 in Philadelphia. *PanC-Dx*[™] is a class of non-invasive cancer diagnostics based on OncoCyte's proprietary set of cancer markers, which were discovered by company scientists through an analysis of broad gene expression patterns in numerous cancer types. These markers are the subject of multiple pending patent claims filed in numerous countries worldwide and are owned by OncoCyte.

"Solid diagnostic test performance data derived from large prospective clinical studies is crucial for adoption of novel diagnostic tests by clinicians and payers," said Joseph Wagner, PhD, OncoCyte's Chief Executive Officer. "We are excited by the opportunity to present data from clinical trials of the bladder and breast cancer diagnostics that we are developing. These tests are designed to be accurate and less invasive methods to detect and monitor the presence of cancer as compared to current cancer diagnostic procedures."

"The *PanC-Dx*[™] clinical data presentations at the upcoming AACR Annual Meeting are the first of multiple, significant milestones that BioTime and its subsidiaries expect to achieve in 2015. These presentations of clinical data reflect our steady progress toward commercializing cancer diagnostic products aimed at addressing large and growing markets," said Dr. Michael D. West, Ph.D., BioTime's Chief Executive Officer.

The first presentation will provide a summary of the clinical data and assay development progress of OncoCyte's bladder cancer diagnostic test. Data obtained from two prospective clinical studies will be presented. The goal of the first study, recently completed at a leading medical institution with an international reputation for excellence and discovery, was to assess the performance of OncoCyte's proprietary diagnostic technology in detecting the most common type of bladder cancer, urothelial carcinoma (UC) (previously designated transitional cell carcinoma). Study investigators collected approximately 100 urine samples from patients undergoing urine cytology for the diagnosis of either primary or recurrent bladder cancer. Patient urine samples were assessed microscopically for the presence of cancer cells using the current standard-of-care method of cytopathology; in parallel, OncoCyte scientists analyzed the remaining portion of the urine samples for gene expression, including

expression of OncoCyte's proprietary *PanC-Dx*[™] markers. A statistical analysis was performed and a panel of markers that discriminates UC from non-cancerous conditions was identified.

The goal of the second bladder cancer clinical trial, which will involve up to 1,400 patient samples obtained from at least four and as many as nine large urology clinics located throughout the United States, is to compare the performance the marker panel derived from the first clinical study to the performance of cystoscopy. Investigators in the trial are collecting urine samples from patients undergoing cystoscopy for the diagnosis of either primary or recurrent bladder cancer. Cystoscopy and biopsy results will be compared to the performance of OncoCyte's proprietary diagnostic test panel. Thus far over 450 patients have been enrolled in this study; enrollment should be completed in 2015.

Overall markets for bladder cancer diagnostics are large and growing. Based on National Cancer Institute statistics released in 2012, it was estimated that in 2013 over 72,000 new cases of bladder cancer would occur in the United States and a total of over 550,000 men and women alive would have a history of bladder cancer and be subject to recurrence surveillance testing using cystoscopy or urine cytology.

The second presentation will provide a summary of the clinical data and assay development progress of OncoCyte's breast cancer diagnostic test. Data obtained from a large, prospective clinical study involving 600 patients being conducted at Scottsdale Medical Imaging Laboratories will be presented. The goal of this study which has nearly completed enrollment, is to assess the performance of OncoCyte's proprietary diagnostic technology in discriminating patients with malignant breast lesions from those with negative or benign findings. Study investigators are collecting blood samples from patients undergoing screening or diagnostic mammography. Patient blood samples are being assessed for expression of OncoCyte's *PanC-Dx*[™] markers using proprietary assays and the results compared to radiological and pathology findings.

Mammography has been widely used since the 1970s for breast cancer screening in asymptomatic women; in 2010 over 30 million screening mammograms were performed in the US alone. The American Cancer Society and the National Comprehensive Cancer Network both recommend screening mammography every year starting at age 40, which has been associated with relative reduction in breast cancer mortality of 15% to 20%. However, the NCI estimates that approximately 20% of all breast cancers are not detected by mammography during annual screening which indicates there is an unmet need for a breast-cancer screening test with superior specificity and sensitivity when compared to standard screening mammography.

About OncoCyte Corporation

OncoCyte, a majority-owned subsidiary of BioTime, Inc., is developing novel products for the diagnosis and treatment of cancer in order to improve the quality and length of life of cancer patients. Based on large unmet need, market size, and data generated thus far from patient sample screening, OncoCyte is initially focusing its efforts on developing *PanC-Dx*[™] diagnostic products for use in detecting breast, bladder, and lung cancers. *PanC-Dx*[™] is a class of non-invasive cancer diagnostics based on a proprietary set of cancer markers characterized, in part, by broad gene expression patterns in numerous cancer types. The *PanC-Dx*[™] biomarkers were discovered as a result of ongoing research within OncoCyte and BioTime on the gene expression patterns associated with embryonic development. This research has demonstrated that many of the same genes associated with normal growth during embryonic development are abnormally reactivated by cancer cells. These genes regulate such diverse processes as cell proliferation, cell migration and blood vessel formation. Many of these genes have not been previously associated with cancer. Moreover, expression of a large subset of these genes is conserved across numerous cancer types (e.g. cancers of the breast, colon, ovaries, etc.), suggesting these genes may control fundamental processes during cancer growth and progression. In addition to their potential

value in developing diagnostic biomarkers, an understanding of the pattern of expression of these genes may also enable the development of powerful new cancer therapeutics that target rapidly proliferating cancer cells.

About BioTime

BioTime is a biotechnology company engaged in research and product development in the field of regenerative medicine. Regenerative medicine refers to therapies based on stem cell technology that are designed to rebuild cell and tissue function lost due to degenerative disease or injury. BioTime's focus is on pluripotent stem cell technology based on human embryonic stem ("hES") cells and induced pluripotent stem ("iPS") cells. hES and iPS cells provide a means of manufacturing every cell type in the human body and therefore show considerable promise for the development of a number of new therapeutic products. BioTime's therapeutic and research products include a wide array of proprietary *PureStem*[®] progenitors, *HyStem*[®] hydrogels, culture media, and differentiation kits. *Renovia*[™] (a *HyStem*[®] product), is now in a pivotal trial in Europe as a biocompatible, implantable hyaluronan and collagen-based matrix for cell delivery in the treatment of HIV-related lipoatrophy. In addition, BioTime has developed *Hextend*[®], a blood plasma volume expander for use in surgery, emergency trauma treatment and other applications. *Hextend*[®] is manufactured and distributed in the U.S. by Hospira, Inc. and in South Korea by CJ HealthCare Corporation, under exclusive licensing agreements.

BioTime is also developing stem cell and other products for research, therapeutic, and diagnostic use through its subsidiaries:

- [Asterias Biotherapeutics](#), Inc. is developing pluripotent stem-cell based therapies in neurology and oncology, including AST-OPC1 oligodendrocyte progenitor cells in spinal cord injury, multiple sclerosis and stroke, and AST-VAC2, an allogeneic dendritic cell-based cancer vaccine. Asterias Series A common stock is traded on the NYSE MKT under the symbol AST.
- BioTime Asia, Ltd., a Hong Kong company, may offer and sell products for research use for BioTime's ESI BIO Division.
- [Cell Cure Neurosciences](#) Ltd. is an Israel-based biotechnology company focused on developing stem cell-based therapies for retinal and neurological disorders. *OpRegen*[™] is currently in a Phase I/IIa clinical trial for the treatment of the dry-form of age-related macular degeneration.
- [ESI BIO](#) is the research and product marketing division of BioTime, providing stem cell researchers with products and technologies to enable them to translate their work into the clinic, including *PureStem*[®] progenitors and *HyStem*[®] hydrogels.
- [LifeMap Sciences](#), Inc. markets, sells, and distributes *GeneCards*[®], the leading human gene database, as part of an integrated database suite that also includes the *LifeMap Discovery*[®] database of embryonic development, stem cell research, and regenerative medicine, and *MalaCards*, the human disease database.
- [LifeMap Solutions](#), Inc. is a subsidiary of LifeMap Sciences focused on developing mobile health (mHealth) products.
- [OncoCyte](#) Corporation is developing products and technologies to diagnose and treat cancer, including *PanC-Dx*[™], with four clinical studies currently underway.
- [OrthoCyte](#) Corporation is developing therapies to treat orthopedic disorders, diseases and injuries.
- [ReCyte Therapeutics](#), Inc. is developing therapies to treat a variety of cardiovascular and related ischemic disorders, as well as products for research using cell reprogramming technology.

BioTime common stock is traded on the NYSE MKT under the symbol BTX. For more information, please visit www.biotimeinc.com or connect with the company on [Twitter](#), [LinkedIn](#), [Facebook](#), [YouTube](#), and

Forward-Looking Statements

Statements pertaining to future financial and/or operating results, future growth in research, technology, clinical development, and potential opportunities for BioTime and its subsidiaries, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements. Any statements that are not historical fact (including, but not limited to statements that contain words such as “will,” “believes,” “plans,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, and maintenance of intellectual property rights. Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the business of BioTime and its subsidiaries, particularly those mentioned in the cautionary statements found in BioTime’s Securities and Exchange Commission filings. BioTime disclaims any intent or obligation to update these forward-looking statements.

To receive ongoing OncoCyte corporate communications, please click on the following link to join our email alert list: <http://investors.oncocyte.com/information-request/email-alerts>

Source: BioTime, Inc.

BioTime, Inc.

Judith Segall, 510-521-3390 ext. 301

jsegall@biotimemail.com

or

Investor Contact:

EVC Group, Inc.

Gregory Gin, 862-236-0673

ggin@evcgroup.com

James Dawson, 646-445-4800

jdawson@evcgroup.com

Doug Sherk, 415-652-9100

dsherker@evcgroup.com