OncoCyte's Collaborators at The Wistar Institute Present Positive Clinical Interim Results of Blood-Based Diagnostic Test for Non-Invasive Detection of Lung Cancer

May 19, 2015

Data Presented at the 2015 American Thoracic Society International Conference

ALAMEDA, Calif.–(BUSINESS WIRE)–May 19, 2015– BioTime, Inc. (NYSE MKT:BTX) and its subsidiary OncoCyte Corporationtoday announced the presentation of positive interim clinical results demonstrating the high level of observed sensitivity and specificity in the assayed samples of a simple blood-based test designed to aid physicians in the early detection of lung cancer. The large, prospective clinical study was conducted by The Wistar Institute, an international leader in basic biomedical research. The test was developed in the laboratory of Louise Showe, PhD, professor in the Molecular and Cellular Oncogenesis program of The Wistar Institute's NCI-designated cancer center. Andrew Kossenkov, PhD, a senior member of Dr. Showe's laboratory and Managing Director of Wistar's Bioinformatics Facility, will present interim results from the study at the American Thoracic Society (ATS) International Conference during an oral presentation beginning at2:45 PM MDT on Tuesday, May 19, 2015.

As part of the study, clinical investigators used a simple collection system that is approved by the U.S. Food and Drug Administration (FDA) to prepare over 600 peripheral blood samples from patients determined to be at high risk for developing lung cancer based on age and smoking history. These patients were undergoing either low-dose computed tomography (CT) scanning for lung cancer or were recently diagnosed with lung cancer. Wistar scientists then assessed the expression of messenger RNA and micro RNA in the initial training set of 242 samples and developed a classifier of 145 markers (125 mRNAs plus 20 micro RNAs) that most accurately distinguished patients with malignant nodules from those with benign or no findings. The classifier was then assessed in an independent test set of 103 samples. Performance of the classifier was evaluated using several criteria, including Receiver Operating Characteristic (ROC) area under the curve (AUC) analysis, and yielded an AUC of 0.88 (sensitivity of 76% with a specificity of 88%) in the test set. Analysis of the full patient sample set is near completion.

In October 2013, OncoCyte entered into a Sponsored Research Agreement with The Wistar Institute to identify, develop and test potential lung cancer biomarkers collaboratively with Dr. Showe's laboratory. OncoCyte has exercised options to obtain exclusive licenses to any inventions, discoveries or technology developed in the course of the collaborative research, including the technology presented today at the ATS International Conference, and expects to negotiate definitive license agreements with Wistar.

Lung cancer remains a primary cause of cancer-related death in part because there is no effective diagnostic test to screen patients for lung cancer at an early stage. Annual screening for lung cancer in certain high-risk patients was recently recommended by the United States Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the

evidence of effectiveness and develops recommendations for clinical preventive services. The Task Force recommended screening using low-dose computed tomography (CT). Although low-dose CT has demonstrated high sensitivity in detecting early-stage lung cancer in large clinical studies, it also has a relatively high false-positive rate of approximately 25%. False positives can lead to unnecessary costs and side effects because of the need for invasive diagnostic procedures such as lung biopsies.

“Large-scale screening of patients at high risk for lung cancer, estimated to represent over seven million patients per year in the United States, could reduce overall lung cancer mortality through earlier detection. However, the high number of false-positive low-dose CT tests could lead to over a billion dollars a year in unnecessary costs to the United States health care system as a result of associated follow-up testing. Physicians, payers, and patients may therefore welcome a simple to use, low-cost, blood-based test that can help guide patient-management decisions by noninvasively ruling out the presence of cancer. The data presented today by our Wistar collaborators demonstrates that a high performance, blood-based screening diagnostic for the early detection of lung cancer may be attainable,” said Joseph Wagner, PhD, OncoCyte’s Chief Executive Officer.

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 andBioTime on the gene expression patterns associated with embryonic development. Additional markers were discovered by collaborators as the Wistar Institute. 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, Inc., a pioneer in regenerative medicine, is a clinical-stage biotechnology company. BioTime and its subsidiaries are leveraging their industry-leading experience in pluripotent stem cell technology and a broad intellectual property portfolio to facilitate the development and use of cell-based therapies and gene marker-based molecular diagnostics for major diseases and degenerative conditions for which there presently are no cures. The lead clinical programs of BioTimeand its subsidiaries include *OpRegen*®, currently in a Phase I/IIa trial for the treatment of the dry form of age-related macular degeneration; *AST-OPC1*, currently in a Phase I/IIa trial for spinal cord injuries; *Renevia*™, currently in a pivotal trial in Europe as an injectable matrix for the engraftment of transplanted cells to treat HIV-related lipoatrophy; and *PanC-Dx*™ cancer diagnostics, nearing the completion of initial clinical studies for the detection of bladder, breast, and lung cancers.*AST-VAC2*, a cancer vaccine, is in the pre-clinical trial stage.

BioTime's subsidiaries include the publicly traded Asterias Biotherapeutics, Inc. (NYSE MKT:AST), developing pluripotent stem cell-based therapies in neurology and oncology, including *AST–OPC1* and *AST-VAC2*; Cell Cure Neurosciences Ltd., developing stem cell-based therapies for retinal and neurological disorders, including *OpRegen®*; OncoCyte Corporation, developing *PanC-Dx*™ cancer diagnostics; LifeMap Sciences, Inc., developing and marketing an integrated on-line database resource for biomedical and stem cell research; LifeMap Solutions, Inc., a subsidiary of LifeMap Sciences, developing mobile health (mHealth) products; ES Cell International Pte Ltd, which has developed cGMP-compliant human embryonic stem cell lines that are being marketed by BioTime for research purposes under the ESI BIO branding program; OrthoCyte Corporation, developing therapies to treat orthopedic disorders, diseases and injuries; and ReCyte Therapeutics, Inc., developing therapies to treat a variety of cardiovascular and related ischemic disorders.

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 Google+.

About The Wistar Institute

The Wistar Institute is an international leader in biomedical research with special expertise in cancer research and vaccine development. Founded in 1892 as the first independent nonprofit biomedical research institute in the country, Wistar has long held the prestigious Cancer Center designation from the National Cancer Institute. The Institute works actively to ensure that research advances move from the laboratory to the clinic as quickly as possible. Wistar Science Saves Lives. On the Web at www.wistar.org.

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. BioTimedisclaims any intent or obligation to update these forward-looking statements.

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