OncoCyte Corporation and Abcodia to Collaborate on Breast Cancer Diagnostic Development

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PanC-Dx™ Markers to be Validated Using Pre-Diagnosis Patient Serum Samples Exclusively Provided by Abcodia

ALAMEDA, Calif. & LONDON–(BUSINESS WIRE)–Sep. 15, 2014– OncoCyte Corporation, a subsidiary of BioTime, Inc. (NYSE MKT: BTX), and Abcodia Ltd., a UK-based company focusing on the early detection of cancer, today announced their collaboration focused on the development of OncoCyte's blood-based *PanC-Dx*™ test for early detection of breast cancer.*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. OncoCyte is currently sponsoring four clinical studies of *PanC-Dx*™ in bladder, breast, and lung cancer.

Abcodia has exclusive commercial access to a unique longitudinal biobank of over 5,000,000 serum samples collected through the UK Collaborative Trial for Ovarian Cancer Screening. The biobank was derived from over 200,000 initially healthy volunteers, 50,000 of whom provided samples annually for up to 10 years. Since first recruitment, more than 3,700 individuals have been diagnosed with breast cancer, which generates opportunities to assess serum biomarker changes that occurred years before the diagnosis of breast cancer was made.

The collaboration will begin with an initial study to be completed by the end of 2014. Under the terms of the current agreement, OncoCyte will test the performance of its proprietary *PanC-Dx*™ cancer markers in detecting breast cancer in a set of patient samples selected from the biobank by Abcodia. If the outcome of this initial study is promising, future studies could proceed and expand into the use of a larger cohort to assess OncoCyte's *PanC-Dx*™ cancer markers in a case-controlled longitudinal design. Because of the very large number of samples in the biobank, it may be possible to execute a very large study of *PanC-Dx*™ much more quickly than otherwise would be possible, potentially accelerating the broad commercialization of the test. The performance of the test in detecting the absence, presence, and development of early breast cancer will be considered in determining the intended use for *PanC-Dx*™ and the regulatory approval pathway that OncoCyte will pursue. As part of the initial collaboration, OncoCyte retains all rights to develop and market its proprietary breast cancer diagnostic products.

The early detection of cancer and its precursors is associated with improved outcomes for patients. 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. Current US National Cancer Institute (NCI) guidelines recommend screening mammograms every 1 to 2 years in women 40 years and older, while the American Cancer Society and the National Comprehensive Cancer Network both recommend screening mammography every year starting at age 40. This screening in

women aged 40 to 74 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. *PanC-Dx*™ does not involve radiation exposure and could be indicated for all women regardless of age, and could be performed during the course of regular care with a familiar physician at low cost.

The collaboration with Abcodia represents an expansion of OncoCyte's breast cancer clinical development program, which began early in 2014 with the initiation of an OncoCyte-sponsored 600-patient study at Scottsdale Medical Imaging Laboratories (SMIL) in Scottsdale, Arizona. Data from both studies will be used to support an initial use of the breast cancer diagnostic test by radiologists to aid in determining the malignancy potential of suspicious mammography findings, and by oncologists as a tool for recurrence surveillance in breast-cancer survivors. OncoCyte expects analysis of data from the SMIL cohort should be also completed by the end of 2014.

"A high-performing, blood-based breast cancer screening test would have multiple potential uses and users. Ultimately, our breast-cancer test could be used in conjunction with all screening mammography in order to detect breast cancer early and with a high degree of certainty. Working with Abcodia and using their unique set of longitudinal pre-diagnosis breast cancer samples will be of great value in generating robust validation data to support broader user adoption of our breast cancer diagnostic. We look forward to collaborating with them on this important product," said Joseph Wagner, PhD, OncoCyte's Chief Executive Officer.

"We are pleased to partner with OncoCyte to help assess the utility of *PanC-Dx*™ for the early detection of breast cancer," said Julie Barnes, Abcodia's CEO. "A simple blood test to complement mammography could help to significantly improve early diagnosis and therefore treatment outcomes. Working additionally with our University College London colleagues, we aim to support OncoCyte's mission by designing a useful series of cohort studies that will optimize the market positioning of OncoCyte's interesting technology."

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. 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 Abcodia

Abcodia focuses on the early detection of disease, with exclusive access to a high-quality, large-scale, longitudinal serum biobank that enables efficient and cost-effective biomarker discovery, diagnostic validation and algorithm development. The company's philosophy is based on the notion that measurement of dynamic changes in biomarkers provides a better reflection of disease processes and therefore enables earlier detection which in turn results in better clinical outcomes. Abcodia is commercializing a pipeline of diagnostics for detecting cancer long before symptoms occur, and is actively partnering with academic, biotechnology and pharmaceutical groups to directly support biomarker discovery and diagnostic-test validation across most disease areas; in generating publications to underpin marketing, IP or regulatory submissions; and in risk-stratification and disease-pathway analysis to support therapeutic development. For further information, please visit www.abcodia.com.

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. BioTime is developing *Renevia*™ (a *HyStem*® product) as a biocompatible, implantable hyaluronan and collagen-based matrix for cell delivery in human clinical applications, and is planning to initiate a pivotal clinical trial around *Renevia*™, in 2014. 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 trades publicly under the symbol ASTY.
- **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, including the development of retinal pigment epithelial cells for the treatment of macular degeneration, and treatments for multiple sclerosis.
- **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 three clinical trials 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 shares are traded on the NYSE MKT ticker BTX. For more information, please visit *www.biotimeinc.com*or connect with the company on Twitter, LinkedIn, Facebook, YouTube, and Google+ .

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.

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. and Abcodia Ltd.

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