

Pressure BioSciences to Develop Frontend Sample Preparation for Parabase Genomics' Targeted Next Generation Sequencing Testing Platform

Initial Target of the Parabase Sequencing Service is the Neonatal Intensive Care Unit of U.S. Hospitals with the Goal of Improving Early Diagnosis of Genetic Diseases

SOUTH EASTON, Mass., July 22, 2014 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company") and Parabase Genomics ("Parabase"), (together "the companies"), today announced they have entered into a strategic research and development agreement (the "collaboration"). Under the terms of the collaboration, PBI will develop a front-end, sample preparation method for Parabase's enhanced neonatal molecular diagnostics and newborn confirmatory testing process. The sample preparation method will be based on PBI's patented and enabling Pressure Cycling Technology ("PCT") platform.

Each year around 4 million babies are born in the United States, with approximately 400,000 admitted to the Neonatal Intensive Care Unit ("NICU"). Roughly 150,000 newborns need at least one single-gene test, since many of the approximately 4,000 identified single-gene diseases present in the first month of life. Early diagnosis is critical so that treatment to prevent mortality or lifelong debilitation can be quickly initiated. Unfortunately, it is difficult to diagnose genetic disease in newborns based on symptoms alone as 80% of cases present with nonspecific or similar symptoms that can have upwards of 160 possible different diagnoses. Serially testing single genes in these cases, which is the current state-of-the-art, can take many months and be prohibitively expensive.

Dr. Andy Bhattacharjee, Chief Scientific Officer and Founder of Parabase Genomics, said: "Parabase uses targeted next generation sequencing ("NGS") to offer comprehensive test panels to diagnose single-gene conditions in newborns. Our goal is to improve the standard-of-care in NICUs by replacing hundreds of currently used single-gene-disorder tests with our LifeTime NewbornDx™ sequencing service to simultaneously evaluate 350 genes representing genetic disorders in the newborn period. We plan to do this in a minimally invasive fashion, such as processing dried blood spot specimens that are currently taken from every newborn. In this regard, we are pleased to collaborate with our colleagues at PBI, who have years of experience and expertise in successfully extracting biomolecules like DNA from various sample types with their patented PCT Platform."

Dr. Bhattacharjee continued: "Our process will be optimized for 48-hour results, compared to the 8-16 weeks typically needed to generate a clinical report. This vast improvement in time

to diagnosis should lead to better therapeutic options and patient outcomes, and lower economic burden due to less exploratory testing and shorter hospital stays."

Dr. Alexander Lazarev, Vice President of Research and Development at PBI, commented: "Performing NGS testing on dried blood spot samples is novel and far from trivial. Based on our prior success with similar specimens, we believe the PCT Platform has certain intrinsic capabilities that will enable the extraction and recovery of sufficient amounts of high quality DNA from these specimens for subsequent testing with the LifeTime NewbornDx[™] NGS service."

Dr. Lazarev continued: "We look forward to working with our Parabase Genomics colleagues in helping to develop this important sequencing service, for both its possible impact on improving the lives of children through early diagnosis of genetic diseases, and for its potential commercial success for both our companies."

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. ("PBI") (OTCQB: PBIO) develops, markets, and sells proprietary laboratory instrumentation and associated consumables to the estimated \$6 billion life sciences sample preparation market. Our products are based on the unique properties of both constant (i.e., static) and alternating (i.e., pressure cycling technology, or PCT) hydrostatic pressure. PCT is a patented enabling technology platform that uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels to safely and reproducibly control bio-molecular interactions. To date, we have installed over 250 PCT systems in approximately 160 sites worldwide. There are over 100 publications citing the advantages of the PCT platform over competitive methods, many from key opinion leaders. Our primary application development and sales efforts are in the biomarker discovery and forensics areas. Customers also use our products in other areas, such as drug discovery & design, bio-therapeutics characterization, soil & plant biology, vaccine development, histology, and counter-bioterror applications.

About Parabase Genomics

Parabase Genomics is a privately-held, commercial-stage biotechnology company that uses targeted next generation sequencing to offer comprehensive test panels and exomes to diagnose single-gene conditions in newborns. We currently offer the LifeTime NewbornDx™ and LifeTime RareDx™ gene sequencing services. These are CLIA laboratory-based services primarily serving neonatal intensive care units. Our tests employ end-to-end workflow as well as insurance pre-verification and billing services. We have developed a non-invasive sequencing method using dried blood spots, which is the first of its kind and allows us to process small sample sizes, archival samples, or work in remote locations. Our LifeTime Database™ of rare variants allows us to detect new mutations other tests would miss, thus providing a more accurate diagnosis.

Forward Looking Statements

Statements contained in this press release regarding PBI's intentions, hopes, beliefs, expectations, or predictions of the future are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based upon the Company's current expectations, forecasts, and assumptions that are subject to risks, uncertainties, and other factors that could cause actual outcomes and results to differ materially from those indicated by these forward-looking statements. These risks, uncertainties, and other factors include, but are not limited to, the risks and

uncertainties discussed under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2013, and other reports filed by the Company from time to time with the SEC. The Company undertakes no obligation to update any of the information included in this release, except as otherwise required by law.

For more information about PBI and this press release, please click on the following website link:

http://www.pressurebiosciences.com

Please visit us on Facebook, LinkedIn, and Twitter

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