September 1, 2015

New Scientific Publication Suggests Pressure BioSciences' PCT Platform Could Play Significant Role in Personalized/Precision Medicine

Key Protein Scientists Report Unique Benefits of the PCT Platform in the Analysis of Critical Samples, Such as Cancer Tissue Biopsies and Stem Cells

SOUTH EASTON, Mass., Sept. 1, 2015 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" and the "Company"), a leader in the development and sale of broadly enabling, pressure cycling technology ("PCT")-based sample preparation solutions to the worldwide life sciences industry, today announced the publication of an article with findings that suggest the Company's PCT Platform could play a significant role in expanding the reach of personalized/precision medicine. This role is based on PCT's unique ability to help reveal and analyze thousands of proteins in small diagnostic samples, such as tissue biopsies extracted in tiny needles from cancer patients, compared to current methods that analyze only hundreds of proteins at best. This significant increase in analyzed proteins could result in a better understanding of the patient's cancer, disease progression, response to therapy, and treatment options.

Dr. Nate Lawrence, Vice President of Marketing and Sales for PBI, said: "The study published by Dr. Shiying Shao and her colleagues showed PCT's ability to help analyze far more proteins in small samples than current methods. The study also highlighted the efficiency, consistency, and accuracy of the PCT platform across many different clinical and research sample types. We are aware of similar data recently generated by other researchers. It is therefore not surprising to us that interest in our PCT product line has grown rapidly over the past year. We believe this increased interest is partly responsible for our guidance that revenue in the third quarter of 2015 will exceed half a million dollars for the first time ever and that revenue for the year 2015 will be the highest annual revenue in the history of PBI."

Dr. Vera Gross, Senior Scientist in R&D at PBI, said: "The analysis of proteins can give valuable information related to a disease or disorder, which can then be used to help prevent, control, and/or cure the condition. Today, the "gold standard" research tool for protein analysis is mass spectrometry ("MS"). Unfortunately, while MS is very sensitive, it requires a larger amount of starting material (cells or tissue) than is sometimes available. This severely limits its use in the clinical and research fields. Many important samples, especially ones like cancer tissue biopsies and stem cells, have historically been too small for efficient MS analysis, thus limiting their usefulness as either diagnostic or research tools."

Dr. Shiying Shao, lead author of the publication, commented: "We recently developed and reported on a method called PCT-SWATH that combines PCT with AB Sciex's SWATH-MS. This method results in highly reproducible mass spectrometry analyses, even in samples that were previously too small to be analyzed by MS. Since it is vital to obtain maximum information from these critically important small starting materials, we evaluated the minimal amount of tissue and cells that can be analyzed by PCT-SWATH. The results were impressive: we found PCT-SWATH could consistently analyze small samples that previously could not be analyzed by MS, like cancer tissue biopsies, flow cytometry-sorted blood cells, genetically-manipulated cells, primary cells that cannot be substantially expanded, and stem cells."

Dr. Tiannan Guo, co-author of the publication, said: "In our study, we found that PCT-SWATH could efficiently and reproducibly measure thousands of proteins from minute and diverse tissue biopsy samples. It is estimated that there are as many as 5 million small needle tissue biopsies performed each year. We believe that MS-based analyses can identify targets for cancer therapy in these biopsy samples. We further believe that MS-based analyses of these samples can help give the physician more and better treatment options, possibly ruling out ineffective therapies or encouraging more productive, less deleterious chemotherapies."

Mr. Richard T. Schumacher, President and CEO of PBI, commented: "We look forward to the continued growth in interest in our PCT product line. We also look forward to the completion of our current PIPE financing, since part of the proceeds will go to significantly expand the size and capabilities of our current sales and marketing team. This we believe will allow us to take better advantage of the very exciting opportunity with PCT-SWATH."

Link to the Publication in the Journal *Proteomics*

The paper was published in the respected, on-line journal *Proteomics.* Lead authors are Dr. Shiying Shao of the Tongji Hospital, Huazhong University of Science and Technology (Wuhan, PR China) and Dr. Tiannan Guo of the Institute of Molecular Systems Biology, ETH Zurich (Zurich, Switzerland). The publication, entitled "Minimal sample requirement for highly multiplexed protein quantification in cell lines and tissues by PCT-SWATH mass spectrometry", is available on-line and can be found via the following link: http://onlinelibrary.wiley.com/doi/10.1002/pmic.201500161/abstract

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 forensic applications.

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, 2014, 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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