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Pressure BioSciences Unveils Barocycler 2320EXT at Major Scientific Meeting; Next Generation PCT-based Instrument Expected to be Centerpiece of the Recently Announced Co-Marketing Agreement with Global Life Sciences Analytical Technologies Leader SCIEX

Compelling Advantages of Pressure BioSciences' Patented PCT Platform Prominently Featured in Multiple Presentations at Same International Conference

SOUTH EASTON, Mass., July 13, 2016 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company") today announced the unveiling of the newest addition to their product line based on their patented and powerful pressure cycling technology ("PCT") platform, the Barocycler 2320EXTREME ("2320EXT"). The product unveiling took place during the recent annual conference of the American Society for Mass Spectrometry ("ASMS") in San Antonio, TX. The Company also announced that scientists from six separate research groups made presentations on the Company's PCT-based product line at the same international conference. Results presented indicated that the Company's PCT-based instruments and consumables, when used in the preparation of samples for mass spectrometric analysis, resulted in critically enabling qualitative and quantitative improvements and/or improved time or cost efficiency. Presentations were made by scientists from the Children's Medical Research Institute (Sydney, Australia), the Johns Hopkins University School of Medicine, the Center for Food Safety and Applied Nutrition - Food and Drug Administration (FDA/CFSAN), Northwestern University, and Pressure BioSciences together with Protifi LLC.

The ASMS Conference is one of the largest annual meetings of mass spectrometry professionals worldwide. The Company took advantage of this opportunity to unveil the Barocycler 2320EXTREME. This newest addition to PBI's product line was designed with a number of new and enhanced features and benefits that should enable scientists better access to the biomolecules (e.g., proteins, lipids, nucleic acids) in samples being studied, with the potential to result in new biological insights and discoveries, and rapid growth for PBI. The Barocycler 2320EXT is expected to become the centerpiece of the recently announced co-marketing agreement with global life sciences analytical technologies leader SCIEX.

Dr. Nate Lawrence, Vice President of Marketing and Sales, said: "Our participation in the recent ASMS Conference greatly exceeded our expectations, both in relation to the unveiling of the new Barocycler 2320EXT, and to the number and content of presentations by well-respected scientific groups on the advantages/benefits of our PCT-based product line when used in the critical area of sample preparation."

Dr. Lawrence continued: "We had nearly 1,000 attendees visit our exhibition booth and hospitality suite. A number of these visitors were genuinely interested in learning about the advantages of PCT, and the features and benefits of the new Barocycler 2320EXT. We are actively following up with these contacts, and expect that some of these scientists/groups will become PBI customers in the near future."

Mr. Richard T. Schumacher, President and CEO of PBI, commented: "In addition to the successful unveiling of the Barocycler 2320EXT, five well-respected research groups presented data supporting the advantages of the PCT Platform, including our colleagues at CMRI in Sydney, Australia. CMRI will be analyzing approximately 70,000 tumor biopsy samples over the next seven years with PCT-SWATH, the method that combines PBI's PCT platform for sample preparation with SCIEX's SWATH Acquisition. This combination of technologies has the potential to vastly accelerate proteomic research, which could increase the opportunities to discover new biomarkers, potentially resulting in significant improvements in healthcare worldwide."

The following is a short summary of the presentations at the annual ASMS conference that related to PBI's PCT platform.

CMRI. Dr. Phil Robinson and colleagues presentation was entitled "PCT-SWATH Enables Industrialized Proteomics". Funded by a $10 million grant from the Australian Cancer Research Foundation, Dr. Robinson co-heads a research effort ("ProCan") that plans to test approximately 70,000 cancer tumor samples over the next seven years with state-of-the-art protein profiling instruments and other tools. Data from their studies are expected to enable discoveries around the causes of cancer, provide guidance on cancer treatment options, and produce standard operating procedures in cancer testing laboratories worldwide. Dr. Robinson stated that the ability to maximize the number of proteins recovered from each sample will be a key to their success, particularly since ProCan researchers will be using the small amounts of tissue often available from clinical tumor biopsy samples. Dr. Robinson noted that in the past the small size of tumor biopsy samples has limited the use of mass spectrometry-based protein analysis in clinical research, but that the PCT platform will allow researchers to analyze such samples by mass spec going forward, resulting in the generation of large amounts of valuable data.

Johns Hopkins University School of Medicine. Dr. Akhilesh Pandey and colleagues presented "Rapid identification of carbapenem-resistant *Klebsiella pneumoniae* using high resolution tandem mass spectrometry". Current methods used in clinical microbiology laboratories for the identification of microbes are unable to provide information regarding associated antimicrobial resistance mechanisms. As highly drug-resistant bacteria are becoming increasingly endemic, rapid and accurate methods for identifying resistant genes are critical. The authors found that the rapid and accurate detection of drug-resistant *K. pneumoniae* isolates was possible with high-resolution tandem mass spectrometry. The authors used PBI's PCT platform for the processing of both protein and DNA from their samples.

FDA/CFSAN. Dr. Shu-Hua Chen and colleagues presented "A peptide-based LC-MS/MS method for detection and identification of Salmonella serovars". Conventional methods for *Salmonella* identification involve multiple steps that typically require 5-7 days. The authors' goal in the study was to develop new test methods that could significantly decrease the time for detection of *Salmonella* while increasing sensitivity and specificity, particularly in food matrices. Preliminary data were encouraging. The authors used PBI's PCT platform for the extraction of strain-specific peptide markers from bacterial cells.

Northwestern University. Dr. Daniel Ladror and colleagues presented "Application of Adductomics for Investigating Biomarkers Associated with Ovarian Cancer". Ovarian cancer is the fifth most prevalent cancer among women and is the leading cause of gynecological deaths in the U.S. Unfortunately, ovarian cancer often shows no symptoms until the disease has progressed to advanced stages. Thus, the identification of sensitive and specific ovarian cancer biomarkers is crucial. The authors used mass spectrometry to analyze ovarian cancer samples and healthy controls in their attempt to identify potential biomarkers of ovarian cancer. Preliminary data were encouraging. The authors used PBI's PCT platform for accelerated protein digestion.

PBI and Protifi. Drs. Vera Gross and Alexander Lazarev of PBI, and their colleague Dr. John Wilson of Protifi, presented "Improved proteolytic digestion under high pressure: rapid digestion with improved sensitivity and sequence coverage". High quality proteomic data requires high quality sample preparation, including complete and efficient sample digestions. No amount of improvements in the hardware or software for data acquisition and analysis will compensate for poor quality sample preparation. The authors presented a systematic comparison between samples digested with and without pressure. Results strongly suggested that the use of PCT increased the quantitative recovery of observed peptides and significantly improved sequence coverage, while also significantly reducing sample preparation time.

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 275 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.

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, 2015, 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
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