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Suggested Workflow to Accelerate the Discovery of New Biomarkers for Early Diagnosis and Prediction of Complications in Diabetes Includes Pressure BioSciences' Novel PCT Platform

Publication by Chinese and Swiss Researchers Discusses the Importance of Identifying New Protein Biomarkers to Significantly Improve Clinical Management of Diabetes

SOUTH EASTON, Mass., July 13, 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 in the internationally recognized journal *Biochimica et Biophysica Acta*. In the article, the authors reviewed the current status of biomarker discovery in diabetes mellitus ("diabetes") and provided insights into the need for, limitations, and possible solutions for biomarker discovery and validation in the field of diabetes research. The authors were Dr. Shiying Shao of the Tongji Hospital, Huazhong University of Science and Technology (Wuhan, PR China) and Drs. Tiannan Guo and Ruedi Aebersold of the Institute of Molecular Systems Biology, ETH Zurich (Zurich, Switzerland).

Diabetes is a common metabolic disorder that currently affects several hundred million people worldwide. It is estimated that the number of individuals with diabetes could increase to approximately 366 million by the year 2030. Unfortunately, even with the advances that have resulted from diabetes research over the past few decades, a number of significant clinical issues remain for the diabetic patient, including renal, retinal, and neurological complications. Thus, the discovery of new biomarkers for the early diagnosis, progression, and underlying pathway dysfunction of diabetes is vital to help improve clinical outcome.

Dr. Shiying Shao, lead author of the review article, commented: "Prediction and early detection of diabetes offer the potential to delay or even reverse the diabetic process. Unfortunately, currently available diagnostic markers fail to achieve these goals. Thus, it is imperative to identify new biomarkers that offer physicians the ability to evaluate both the necessity and course of medical intervention."

Professor Ruedi Aebersold, co-author of the review article, said: "PCT is a promising sample preparation technology that permits the fast and robust preparation of protein samples from minute amounts of specimen with minimal technical variation. Mass spectrometry ("MS")-based proteomics, such as the SWATH-MS system we developed jointly with AB Sciex,

stands out as a promising new approach that can be used to explore and potentially discover and validate novel diabetic protein biomarkers."

Dr. Tiannan Guo, co-author of the review article, said: "MS-based proteomics is evolving rapidly. Although it has penetrated into many branches of biomedical research, obsolete methods still frequently appear in diabetes research literature. We believe that a workflow that combines PCT sample preparation with SWATH-MS next generation proteomics ("PCT-SWATH") may offer vastly improved reproducibility, sensitivity, and proteome coverage to the diabetes research field."

Mr. Richard T. Schumacher, President and CEO of PBI, stated: "The incidence of diabetes is increasing at an alarming rate worldwide. Together with the authors of this review article, we believe that current diagnostic markers for early diagnosis and progression to complications in diabetes are inadequate, and that new, next generation methods for the discovery and validation of such biomarkers are needed. We look forward to working with the authors, their colleagues, and other researchers around the world, in the development and expansion of the PCT-SWATH workflow in the important field of diabetes research."

About the Review Article
Mass spectrometry-based proteomic quest for diabetes biomarkers.
Shiying Shao, Tiannan Guo, Ruedi Aebersold.
Biochim Biophys Acta. 2015 Jun;1854(6):519-527. doi: 10.1016/j.bbapap.2014.12.012.
PMID: 25556002

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.

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