June 24, 2008

Pressure BioSciences, Inc. Announces $850,000 NIH SBIR Phase II Award for the Development of a New PCT-dependent System for Improved Biomarker Discovery, Diagnostics, and Drug Discovery

SOUTH EASTON, Mass., June 24 /PRNewswire-FirstCall/ -- Pressure BioSciences, Inc. (Nasdaq: PBIO) ("PBI" and "the Company") today announced that it has been awarded a Phase II Small Business Innovation Research (SBIR) Grant (2R44GM079059-02) from the National Institutes of Health (NIH). The Grant will help fund continuing experiments directed towards the development and commercialization of novel, automated, and reproducible methods for the extraction of clinically important protein biomarkers, subcellular molecular complexes, and organelles (such as mitochondria) from cells and tissues using the Company's patented pressure cycling technology ("PCT"). The Grant is for a total of $850,000, to be billed over two years. Final paperwork is expected to be completed within the next several weeks; work on the project is expected to begin shortly thereafter. Dr. Feng Tao of PBI is the Principal Investigator.

Over the past 18 months, the Company and its collaborators have generated initial feasibility data in the use of PCT to extract protein biomarkers, subcellular molecular complexes, and organelles. These studies were partially funded by a $149,000 NIH SBIR Phase I Grant (1R43GM079059-01) awarded PBI in 2006. The new SBIR Phase II Grant is intended to fund additional development in these areas, with the expectation that these studies will ultimately lead to the release of a new, commercially available PCT-based system, with validated protocols, end-user kits, and other consumables intended for the extraction of clinically important protein biomarkers, subcellular molecular complexes, and organelles.

Dr. Bruce S. Kristal of the Department of Neurosurgery, Brigham and Women's Hospital (Boston), and the Company's primary collaborator in the new SBIR Phase II Grant, commented: "Mitochondria are best known for their role in energy production, but they also play critical roles in cellular response to signals, regulating gene expression, and controlling cell death. Mitochondrial dysfunction has been implicated in diabetes, cancer, neurodegenerative disorders, stroke, head injury, and other disorders. As such, mitochondria are recognized as a major potential drug target. We will be testing and developing the ability of PBI's PCT Sample Preparation System ("PCT SPS") to increase the standardization of mitochondrial isolations and to increase yield and quality of mitochondria from tissues difficult to work with, such as muscle and brain. We also will examine the ability of the PCT SPS to facilitate biochemical studies of mitochondrial constituents that are often otherwise limited by solubility concerns. If successful, this work would facilitate drug development in the

above diseases, generally aid research into the roles that mitochondria play in these diseases, and potentially facilitate some research directly into personalized medicine."

Dr. Alexander Lazarev, Vice President of Research and Development at PBI, stated: "This new Grant will allow us to continue our efforts in the development and commercialization of standard, automated, and reproducible PCT-dependent methods for obtaining mitochondria and other organelle preparations. Such methods could prove invaluable in both the simplification and in the acceleration of drug discovery and development. We are also pleased that we will have the opportunity to work with Dr. Kristal, as we regard him as a leading expert in the area of mitochrondrial function and related diseases."

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. (PBI) is a publicly traded company focused on the development of a novel, enabling technology called Pressure Cycling Technology (PCT). PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels (up to 35,000 psi and higher) to control bio-molecular interactions. PBI currently holds 13 US and 6 foreign patents covering multiple applications of PCT in the life sciences field, including such areas as genomic and proteomic sample preparation, pathogen inactivation, the control of enzymes, immunodiagnostics, and protein purification.

Forward Looking Statements

Statements contained in this press release regarding the Company'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 include the finalization of paperwork with the NIH and work commencement; the reported effectiveness of PCT in cell lysis and isolation of subcellular molecular complexes, including organelles; the speed, reproducibility, quality, and simplicity of sample preparation using PCT compared with current sample preparation methods for subcellular fractionation; the adoption of PCT over other sample preparation methods; the expectation that the Company's studies, when continued with the proceeds of the Grant, will lead to a new, commercially available PCT-based system, with validated protocols, end-user kits, and other consumables; and the possibility that these studies may facilitate drug development, generally aid research into the roles that mitochondria play in certain diseases, and potentially facilitate some research directly into personalized medicine. 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 possibility that for unforeseen reasons, the final documentation for the Grant is not completed or the funds under the Grant are not released to the Company; that due to unforeseen technological difficulties, the Company may be unable to develop a new commercially successful PCT-based system for the extraction of protein biomarkers; the possibility that due to the nature of the research being performed, other laboratories and scientists may not find the use of PCT to be as advantageous as demonstrated in the SBIR Phase I report and anticipated in the SBIR Phase II grant proposal; that due to unforeseen future competitive products, services, and technological advances, PCT may not be the preferred method of sample preparation by other scientists and laboratories; and the other 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, 2007, 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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