May 16, 2013

Breakthrough Method for Lipid Analysis in Fecal Material Developed; New Understanding of Diseases/Disorders Related to Gut Function Possible

Pressure BioSciences' PCT Platform Enhances Study Results

SOUTH EASTON, Mass., May 16, 2013 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company") today announced the publication in the journal *Analytical Chemistry* of a study by a team of scientists led by Dr.Bruce Kristal, Associate Professor of Surgery at Harvard Medical School and the Department of Neurosurgery at Brigham and Women's Hospital, entitled: *Method Development for Fecal Lipidomics Profiling.* The long-term goal of the study was to gain a greater understanding of the gastrointestinal ("GI") system, i.e., the gut, and its role in health and disease in certain high-risk patient populations (such as premature infants) by analyzing the full lipid profile in fecal material. Lipids are a group of naturally occurring molecules, including fats and cholesterol, which have been associated with a number of diseases and disorders, such as heart disease, cancer, and obesity.

The importance of understanding and evaluating the GI system is evident with recent scientific advances in diseases such as colon cancer, inflammatory bowel disease, and chronic diarrhea, and in disorders such as autism, allergy, and obesity. It is believed that new and improved laboratory tools that enable a better understanding of gut function could have a significant impact on diagnosing, treating, curing, and preventing such diseases and disorders. Furthermore, the ability to better evaluate GI function, especially through simple and non-invasive means, could have a significant impact on decreasing the cost and increasing the quality of healthcare worldwide.

In their publication, Dr. Kristal and colleagues reported that the combination of PBI's patented pressure cycling technology ("PCT") platform and certain chemicals improved the extraction of lipids from fecal material. They concluded that their new method "opens the door to the use of fecal lipid profiling for both scientific and clinical applications" and that it "provides a reproducible, generally applicable, broad-based, and non-invasive technique for establishing gut function in patients regardless of age or disease."

Further, the authors stated that the study "represents a new paradigm for determining the impact of initial intestinal colonization and for assessing nutritional, infectious, and inflammatory status" in premature infants. They proposed that the method might be useful in other strategies for monitoring the GI system and might help improve care for vulnerable patients with conditions such as inflammatory bowel disease, ulcerative colitis, and gastrointestinal cancers.

Dr. Nate Lawrence, VP of Marketing and Sales for PBI, said, "We believe this novel method can help determine and assess intestinal function, response to nutrition, inflammation, and even the occurrence and/or progression of disease. We further believe that it could have both diagnostic and prognostic implications on vulnerable and difficult-to-study populations, such as premature infants and the elderly. We are thrilled that our PCT platform is an important part of this exciting, potentially paradigm-changing method, one which we believe could play a significant role in future research and clinical applications."

The authors stated that to their knowledge this publication was the first report of full intact lipid extraction from fecal material followed by LC-MS analysis. The analysis of intact lipids is important as it results in better biological information compared to non-intact lipids. LC-MS is a popular method widely-used by research scientists worldwide in the study of proteins and lipids.

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. ("PBI") (OTCQB: PBIO) is focused on the development, marketing, and sale of proprietary laboratory instrumentation and associated consumables based on our proprietary technology – pressure cycling technology. PCT is a patented, enabling technology platform with multiple applications in the estimated $6 billion life sciences sample preparation market. PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels to control bio-molecular interactions. PBI currently focuses its efforts on the development and sale of PCT-enhanced sample preparation systems (instruments and consumables) for mass spectrometry, biomarker discovery, bio-therapeutics characterization, vaccine development, soil and plant biology, forensics, histology, and counter-bioterrorism 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. Such statements include, without limitation, statements regarding the breakthrough method for the extraction and analysis of lipids from fecal material; the importance of understanding and evaluating the GI system; that new and improved laboratory tools could have a significant impact on diagnosing, treating, curing, and preventing diseases and disorders; that the ability to better evaluate GI function, especially through simple and non-invasive means, could have a significant impact on decreasing the cost and increasing the quality of healthcare worldwide; that the new method opens the door to the use of fecal lipid profiling for both scientific and clinical applications and provides a reproducible, generally applicable, broad-based, and non-invasive technique for establishing gut function in patients regardless of age or disease; that the study represents a new paradigm for determining the impact of initial intestinal colonization and for assessing nutritional, infectious, and inflammatory status in premature infants; that the method might be useful in other strategies for monitoring the GI system and might help improve care for vulnerable patients with conditions such as inflammatory bowel disease, ulcerative colitis, and gastrointestinal cancers; that the novel method can help determine and assess intestinal function, response to nutrition, inflammation, and even the occurrence and/or progression of disease; that the new method could have both diagnostic and prognostic implications on populations such as premature infants and the elderly; that the method could play a significant role in future research and clinical applications; that this

publication was the first report of full intact lipid extraction from fecal material followed by LC-MS analysis; that the analysis of intact lipids is better than the analysis of non –intact lipids; and the size of the life sciences sample preparation market. 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: possible difficulties or delays in the implementation of the Company's strategies that may adversely affect the Company's continued commercialization of its PCT-based product line; changes in customer's needs and technological innovations; the Company's and its strategic partners/distributors sales forces may not be successful in selling the Company's PCT product line because scientists may not perceive the advantages of PCT over other sample preparation methods; that other researchers may not be able to replicate the data reported or see the advantages of using the Company's PCT platform in the studies mentioned; and if actual operating costs are higher than anticipated, or revenues from product sales are less than anticipated, the Company may need additional capital beyond June 2013. Further, given the uncertainty in the capital markets and the current status of the Company's product development and commercialization activities, there can be no assurance that the Company will secure the additional capital necessary to fund its operations beyond June 2013 on acceptable terms, if at all. 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, 2012, 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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