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Pressure BioSciences and The Steinbeis Centre Combine Efforts to Develop Revolutionary Method Based on Optimizing Disease-Fighting Antibodies

Increasing the Understanding of Disease Proteins Recognized by Antibodies Should Accelerate Development of Optimized Drugs, Vaccines, and Diagnostics Across Diseases and Conditions from Cancers to Crohn's and Transplant Rejections to Neurodegenerative Diseases

SOUTH EASTON, MA / ACCESSWIRE / March 4, 2019 / Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" and the "Company"), a leader in the development and sale of pressure-based instruments and platform technologies to the life sciences and other industries worldwide, today announced a collaboration with The Steinbeis Centre for Biopolymer Analysis & Biomedical Mass Spectrometry ("The Steinbeis Centre"), a world-renown German research organization. The collaboration is combining the unique capabilities of PBI's patented pressure cycling technology ("PCT") for sample preparation, protein characterization, and biotherapeutics quality control with the Steinbeis Centre's innovative PROTEX-MS instrument for elucidating structural details of antibody interactions to create an instrument system to accelerate the development of new protein therapeutics and improve existing drug treatments.

The collaborative program will be directed by Dr. Michael Przybylski, Professor of Analytical Chemistry and Biochemistry and Director of The Steinbeis Centre, who explained the selection of PBI's PCT platform: "The high-quality digestion of proteins is an essential initial step in the discovery, analysis, and characterization of potential therapeutic proteins. In the past, we have not been fully satisfied with the results achieved when using traditional protein digestion procedures and instrumentation. However, with PBI's proprietary PCT platform, we now achieve high quality and reproducible digestion of proteins. Consequently, we believe that PCT, in combination with our innovative PROTEX-MS system, could more rapidly lead to the discovery and development of biopharmaceutical treatments for a large number of diseases, resulting in substantial improvements in patient care and outcomes."

The PCT-PROTEX-MS platform will be used to elucidate critical details of how the immune response functions as the body defends against bacteria, viruses, and other harmful molecules, organisms and cells. When an immune response is generated, proteins called antibodies are produced that interact with specific molecules ("antigens") presented by these invaders, by physically fitting and binding (like a key in a lock) with specific regions on these molecules ("epitopes"). Better characterization of these epitopes on specific antigens of the invaders, and how they bind to the antibodies that recognize them, provide valuable insights into how the immune system combats disease, and how to improve the development of targeted protein therapeutics. The past decade has seen a dramatic increase in the use of

targeted antibodies as effective protein therapeutics in auto-immune diseases, cancers, and other life-threatening conditions.

Dr. Alexander Lazarev, Chief Science Officer of PBI, said: "We believe the PCT-PROTEX-MS platform being developed will offer the global research community a powerful new laboratory tool for the rapid and sensitive digestion of protein and peptide antigens followed by measurement of binding affinity (strength) and identification of epitopes captured on immobilized antibodies."

Dr. Lazarev continued: "Furthermore, the potential of this new platform in the rapid discovery of new targeted therapeutics and improvement of existing treatments tailored specifically to individual patients and their conditions offers great promise for a wide range of diseases and conditions, including cancer, arthritis, Crohn's disease, and transplant rejection."

Dr. BradfordA. Young, Chief Commercial Officer of PBI concluded: "We are delighted to becollaborating with a research team of such global stature as The Steinbeis Centreto develop a new platform technology for the characterization of binding siteson antibodies and the potential development of new and/or better proteintherapeutics. This work has very important clinical applications, as it may helpto develop more effective protein drugs with reduced side-effects in cancer,auto-immune, neurodegenerative, and other critical diseases and conditions. We are honoredthat Dr. Przybylski and his team have incorporated our proprietary PCT platformas a critical component of this innovative solution. The results of this collaborationwill provide PBI with another valuable and broad application area for our Barocyclerinstruments, and we anticipate this new instrument system will be of greatinterest to both current and future customers in the monoclonal antibody therapeutics market, expected to reach $218.97 billion by the end of 2023 (Zion Market Research, 2018)."

About the Steinbeis Centre for Biopolymer Analysis & BiomedicalMass Spectrometry

The Steinbeis Foundation for Technology Development is one of Germany's largest and most highly-reputed technology developing organizations. In 2003, it founded the Steinbeis Centre for Biopolymer Analysis and Biomedical Mass Spectrometry. Professor Michael Przybylski is Director of the Centre and Chair of the Analytical Chemistry Laboratory. The Steinbeis Centre's numerous developments and inventions span the disciplines of biopolymer mass spectrometry, combined with protein- and peptide-chemical methods, tertiary structure analysis by protein-chemical modification and mass spectrometry, and the mass spectrometric determination of biopolymer recognition structures. The Steinbeis Centre invented proteolytic extraction/excision-biosensor-mass spectrometry ("PROTEX-MS") for the elucidation of protein-ligand interaction structures and peptide/protein epitopes, and has determined the structure of several membrane proteins, such as Lung Surfactant protein-C. The laboratory's current research is focused on applications of mass spectrometry and peptide biochemistry for structure and mechanism elucidation of neurodegenerative proteins; pathophysiological protein modification; vaccine chemistry; structure and epitope analysis of therapeutic antibodies; affinity-mass spectrometry of biopolymer interaction epitopes; mass spectrometric elucidation of oligomerisation/truncation pathways, and structures of "misfolding"/aggregating proteins in neurodegenerative diseases.

AboutPressure BioSciences, Inc.

Pressure BioSciences, Inc. (OTCQB: PBIO) is a leader in the development and sale of

innovative, broadly enabling, pressure-based solutions for the worldwide life sciences industry. 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 (e.g., cell lysis, biomolecule extraction). Our primary focus is in the development of high pressure-based products for biomarker and target discovery, drug design and development, biotherapeutics characterization and quality control, food science, soil & plant biology, forensics, and counter-bioterror applications. Additionally, we are actively expanding the use of our pressure-based technologies in the following areas: (1) the use of our recently acquired protein disaggregation and refolding technology from BaroFold, Inc. to allow entry into the biologics manufacturing and contract research services sector, and (2) the use of our recently-patented, scalable, high-efficiency, pressure-based Ultra Shear Technology (UST™) platform to (i) create stable nanoemulsions of otherwise immiscible fluids (e.g., oils and water) and to (ii) prepare higher quality, homogenized, extended shelf-life or room temperature stable low-acid liquid foods that cannot be effectively preserved using existing non-thermal technologies. For more information visit: www.pressurebiosciences.com

Forward-Looking Statements

This press release contains forward-looking statements. These statements relate to future events or the Company's future financial performance and involve known and unknown risks, uncertainties and other factors that may cause the Company's industry results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed, implied or inferred by these forward-looking statements. These forward-looking statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Investors can identify these forward-looking statements by words or phrases such as "may," "will," "except," "anticipate," "aim," "estimate," "intend," "plan," "believe," "is/are likely to," "future" or other similar expressions. The Company has based these forward-looking statements largely on its current expectations and projections about future events and financial trends that it believes may affect its financial condition, results of operations, business strategy, and financial needs. These statements are only predictions based on the Company's current expectations and projections about future events. Investors should not place undue reliance on these statements. In evaluating these statements, Investors should specifically consider various factors. Actual events or results may differ materially. These and other factors may cause the Company's actual results to differ materially from any forward-looking statement. 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 and other reports filed from time to time with the Securities & Exchange Commission (SEC). More detailed information about these risk factors are set forth in the Company's filings with the SEC. The Company encourages Investors to review these risk factors. 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 the Companies, please click on the following website link:

http://www.pressurebiosciences.com

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