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Number of Published Scientific Papers Citing the Advantages of Pressure BioSciences' PCT Platform Remained Strong in 2019

For the Second Straight Year, Over 20 Journal Articles Highlight the Benefits of PBI's Patented PCT Platform in Such Critical Areas of Research as Cancer, Food Safety, and Proteomics

South Easton, Massachusetts--(Newsfile Corp. - January 9, 2020) - Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company"), a leader in the development and sale of broadly enabling, pressure-based instruments, consumables, and platform technology solutions to the life sciences and other industries, today announced that in 2019 - for the second straight year - over 20 scientific papers highlighting the advantages of PBI's patented pressure cycling technology ("PCT") platform were published worldwide. Authored by independent scientists from academia, government, and industry, these publications highlighted the powerful and enabling benefits of the PCT Platform in such critical areas as cancer research, food safety, and proteomics.

As in previous years, several papers were authored by scientists who are considered Key Opinion Leaders ("KOLs") in their respective scientific field. High quality papers authored by KOLs that are published in well-known, respected journals are an integral part of PBI's marketing strategy.

Ms. Roxana McCloskey, PBI's Global Director of Sales & Marketing, commented: "PCT-related scientific papers published in 2019 highlighted new and/or improved applications of the PCT Platform in a number of important and exciting areas of research, including cancer, food safety, and proteomics. We are particularly pleased that several publications described protocols for combining the PCT Platform with existing technologies from other companies to fill a significant unmet need for high throughput protein processing of cancer biopsy tissues."

Ms. McCloskey continued: "These new protocols highlight the advantages and power of PCT, the flexibility of the PCT Platform to meet the unique requirements of different research laboratories, and the ability of the PCT Platform to integrate well with other manufacturers' laboratory equipment. We are currently in discussions with several manufacturers of such equipment, believe that these discussions will lead to collaborative marketing, selling, and/or co-development programs with these manufacturers in early 2020, and that such collaborative programs will result in increased sales of the PCT Platform in 2020 and beyond."

Cancer Research

Several publications reported the use of the PCT Platform to rapidly release molecules for analysis from tissue samples. PCT's ability to help reveal thousands of proteins from small diagnostic samples, such as minute cancer tissue biopsies, could result in better understanding of patients' cancers, disease progression, response to therapy, and treatment options.

Important advancements were published by several groups in the use of the PCT Platform to extract proteins from formalin fixed paraffin embedded (FFPE) tissue. FFPE preserved tissue samples are an invaluable resource for retrospective studies of disease progression and response to therapy, because the disease outcome associated with the tissue and patient's treatment history are known. Studies on FFPE samples could accelerate discoveries of new therapies, drugs, and preventive strategies. However, the analysis of FFPE samples has to date been problematic. Significantly, several 2019 publications reported excellent results using the PCT Platform for the extraction and recovery of proteins for analysis from FFPE samples.

One publication described a novel workflow by Dr. Thomas Conrads and colleagues (Inova Women's Hospital, Fairfax County, VA) that integrated the Leica Microsystems' laser microdissection (LMD) platform and PBI's PCT Platform, enabling micro-scale analytics on a ThermoFisher Scientific mass spectrometry (MS) instrument. Dr. Conrads believes that insights gained from applying this novel workflow could result in significant improvements in the clinical management of gynecologic cancers.

The global cancer biomarker market is expected to exceed $157 billion by 2022 (MarketWatch - January 8, 2019).

Food Safety

Journal publications reported important applications for killing food-borne bacteria, such as salmonella, using PBI's ultra-high-pressure HUB instrument system. In addition, PBI's HUB system was also highlighted in a chapter of a book entitled *Advances in Prevention of Foodborne Pathogens of Public Health Concern during Manufacturing.* We believe that publications such as these, which highlight the use of PBI's high pressure-based instruments in developing methods to prevent food-borne pathogen outbreaks, will lead to increased sales of our PCT Systems in the very large food safety industry.

According to information on the PHM Laboratory website at Tennessee State University, foodborne diseases cost an estimated 420,000 lives every year around the globe and are collectively responsible for the loss of over 33 million years of healthy living annually. Additionally, one out of six Americans experiences illnesses from these pathogens every year, leading to about 128,000 hospitalizations and over 3,000 deaths annually.

Proteomics

Several papers in 2019 reported on the use of PCT Platform for proteomic research. The proteome consists of all the proteins made or modified by an organism. Studies of proteins using PBI's high pressure PCT Platform included protein structure, drug delivery, and disease states. Such studies could eventually lead to the routine use of the PCT Platform in clinical diagnostics and precision medicine, a market that is expected to reach $217 billion by 2028 (BIS Research, 2019).

Mr. Richard T. Schumacher, President and CEO of PBI, said: "We are pleased that the number of PCT-related publications in 2019 exceeded 20 for the second year in a row. We are also pleased with the wide range of applications highlighted in the publications, as these applications fulfill needs in many large and growing markets. For example, it is estimated that by 2025, the combined projected market sizes for cancer research, biomarker discovery, and proteomics could be in excess of $200 billion (Zion Market Research, 2019). In addition, the food safety testing market is projected to grow to $24.6 billion by 2023 (MarketsandMarkets, January 2019)."

Mr. Schumacher concluded: "We believe that the credibility gained through scientific papers such as the more than 20 published in 2019, and the supportive data and new applications that the authors developed and presented in their publications, will enable PBI to better address a number of very large and growing markets, which we expect will result in increased sales of our PCT Systems going forward."

About Pressure 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 PCT-based products for biomarker and target discovery, drug design and development, biotherapeutics characterization and quality control, soil & plant biology, forensics, and counter-bioterror applications. Additionally, major new market opportunities have emerged in the use of our pressure-based technologies in the following areas: (1) the use of our recently acquired, patented technology from BaroFold, Inc. (the "BaroFold" technology) to allow entry into the bio-pharma contract 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.

Forward Looking Statements

This press release contains forward-looking statements. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's actual 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. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "would," "expects," "plans," "intends," "anticipates," "believes," estimates," "predicts," "projects," "potential" or "continue" or the negative of such terms and other comparable terminology. These statements are only predictions based on our current expectations and projections about future events. You should not place undue reliance on these statements. In evaluating these statements, you should specifically consider various factors. Actual events or results may differ materially.

These and other factors may cause our 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 on Form 10-K for the year ended December 31, 2018, 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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