December 18, 2018

Major Cancer Research Center Reports Pressure BioSciences' PCT Platform Could Play Major Role in Improving Cancer Diagnosis and Treatment

Publication Cites Significant Benefits from Using the PCT Platform in the Analysis of Cancer Tissue Biopsies

SOUTH EASTON, MA / ACCESSWIRE / December 18, 2018 /Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company") is a leader in the development and sale of broadly enabling, pressure-based instruments, consumables, and platform technology solutions to the worldwide life sciences and other industries. The Company today announced that a team of scientists from the Centre for the Proteome of Human Cancer ("ProCan") has published a recommended, streamlined, proteomic sample preparation protocol built around PBI's Barocycler instrument system, designed to help optimize the identification and use of novel cancer biomarkers for the improved diagnosis and treatment of cancers. ProCan scientists have named the new protocol **A**ccelerated **B**arocycler **L**ysis and **E**xtraction ("ABLE"). While the Company's PCT-based Barocycler system is widely acclaimed for yielding greater diversity and quantities of proteins from biological samples, the ProCan team was motivated initially by its impact in reducing the time, cost, and variable outcomes in tissue sample preparation, often a crucial, laborious, expensive, and under-appreciated but essential part of protein research.

The ABLE method is based on PBI's proprietary pressure cycling technology ("PCT") platform for the rapid breakup of tissue samples and release of the molecules within for analysis. Scientifically described as rapid solubilization and controlled proteolytic digestion, the ABLE protocol offers a standardized, high-throughput, efficient, and reproducible sample preparation method that, when coupled with the SCIEX company's SWATH-MS mass spectrometric analysis method, has the potential to accelerate and strengthen protein analysis, improving cancer characterization in order to provide clinically relevant information on diagnosis and treatment guidance options in a timely manner.

Dr. Natasha Lucas, Senior Scientist at ProCan and lead author of the scientific paper that first described ABLE, said: "The ABLE method optimises the conventional Barocycler protocol, allowing for rapid lysis and digestion of tissue samples and cell lines. For ProCan, this is a great advancement as we are processing 70,000 tumor samples with known clinical outcomes, in an attempt to provide a treatment decision for individual patients and to potentially discover new drug targets. Having a fast turn-around-time for clinical samples is of utmost importance, and this streamlined protocol allows us to go from tumor biopsy to MS (i.e. mass spectrometry) data file in about five hours."

Professor Phil Robinson, Co-Director of ProCan, commented: "The ability to reproducibly

collect proteome-scale data on the smallest size tumor samples, a needle biopsy or thin section, has long been a goal for clinical proteomics. Performing tissue digestion with pressure cycling on PBI's Barocycler system is a major advance that now contributes to realising this potential. The new ABLE protocol on the Barocycler truly enables this step in the pipeline, by bringing down cost and time, thus increasing the throughput to 96 samples per day. This fast and robust sample processing combined with SWATH-based mass spectrometry is revolutionizing our ability to collate significantly more cancer data towards clinical translation."

Dr. Bradford Young, Senior VP and Chief Commercial Officer for PBI, said: "We are pleased that ProCan has developed an advanced sample processing system, featuring the use of our Barocycler instrument system. The ABLE method will enable scientists worldwide to benefit from the advantages of our PCT platform technology for cancer profiling and drug development, as reported by ProCan scientists and their colleagues. We believe the ABLE method has the potential to help transform the way cancer is diagnosed and treated for improved patient outcomes."

Mr. Richard T. Schumacher, President and CEO of PBI, commented: "We believe ProCan's novel ABLE method has the potential to profoundly improve cancer research and discovery, and possibly even cancer diagnostics in the clinical lab. ProCan scientists and colleagues have compellingly presented ABLE as a new standard for adoption as the proteomic sample preparation method of choice in Cancer Moonshot and other life science research facilities worldwide. Our business strategy is focused on immediately taking full advantage of this important technology and commercialization opportunity."

Investor Call: Wednesday, December 19, 2018

The Company will host an Investor Update Conference Call at 4:30 PM EST on Wednesday, December 19, 2018. To attend this live teleconference via telephone, dial-in: (877) 407-8033 (North America), (201) 689-8033 (International). Verbal Passcode: PBIO Investor Update Call. Replay Number (877) 481-4010 (North America), (919) 882-2331 (International). Replay ID Number: 41595. Teleconference Replay Available for 30 days.

About ProCan

The Australian Cancer Research Center Foundation International Centre for the Proteome of Cancer ("ProCan") is located in newly-renovated laboratory facilities at the Children's Medical Research Center ("CMRI") near Sydney, Australia. The goal of ProCan is to transform the way cancer is diagnosed and treated. Using specialized equipment, ProCan will analyze over 70,000 cancer samples from all over the world over the next 5-7 years. This will enable a better understanding of cancer, as well as provide a means of personalized precision diagnosis and treatment, giving clinicians the information they need to decide on the best option for each individual patient. CMRI is an official collaborator of the US National Cancer Institute's Cancer Moonshot initiative, with a key objective to accelerate what would normally take ten years of cancer research to completion in five years.

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 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, PBIO is actively expanding the use of our pressure-based technologies in the following areas: (1) the use of our recently acquired PreEMT 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.

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, 2017, 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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SOURCE: Pressure BioSciences, Inc.