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Pressure BioSciences and Leica Microsystems Sign Worldwide Co-Marketing Alliance: The Power of Laser Microdissection, PBI's PCT Platform, and Mass Spectrometry Results in Next Generation Analysis of Tumor Biopsy Tissues

Unique Combination of Proprietary Technologies for Innovative Tumor Processing Workflow Expected to Accelerate Cancer R&D with Expanded IDs of Critical Disease State Biomarkers with Higher Precision and Speed

SOUTH EASTON, Massachusetts, June 30, 2020 /PRNewswire/ -- 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 worldwide biotechnology, biotherapeutics, cosmetics, nutraceuticals, and food & beverage industries, today announced that the Company has entered into a worldwide co-marketing agreement with German-based Leica Microsystems CMS GmbH, a Danaher company. This historic alliance is expected to offer transformative new empowerment to cancer research worldwide, by integrating the latest enabling technologies in capturing, isolating, and preparing precious biopsy samples for superior analysis of relevant biomarkers of disease state and treatment response.

Leica Microsystems ("Leica") is a leading global designer and producer of innovative high-tech precision optical systems for the analysis of microstructures. It is one of the market leaders in microscopy, pathology, diagnostics, and surgical microscopes. Users of Leica's instruments and services can be found in both clinical applications and broader life science research, several surgical specialties, disciplines associated with material sciences, the manufacturing industry, forensics services, and in classrooms around the world. Leica is a Danaher company.

PBI and Leica will co-market a novel, enabling technology platform that combines the Leica Laser Microdissection (LMD) System for precise excision of specific, minute sections of biopsy tissue with PBI's Pressure Cycling Technology ("PCT")-based Barocycler System for rapid protein extraction and digestion for sample preparation prior to mass spectrometry analysis. Specifically, both companies will promote an integrated biomarker discovery workflow designed to quickly and efficiently collect tissue sections excised by the Leica LMD

and then drop the samples into PBI's consumable MicroTubes for rapid PCT processing. Proteins are then analyzed by mass spectrometry (MS), the global method-of-choice for high throughput and comprehensive protein analysis.

The integrated workflow of LMD and PCT was developed by Dr. Thomas P. Conrads, a nationally acclaimed protein chemist. Dr. Conrads is the Senior Director of Women's Health Research in the Inova Women's Service Line; he is also Chief Scientific Officer of the Women's Health Integrated Research Center (WHIRC) at Inova Health System.

Dr. Conrads said: "We believe that integrating LMD, PCT, and MS will improve our understanding of the complex tissue microenvironment and better enable identification of new biomarkers. We believe that the insights gained from applying this novel workflow will result in significant improvements in the clinical management of gynecologic and other cancers."

The global cancer biomarker market is expected to [reach \\$136.5 billion by 2023](#).

Ms. Roxana McCloskey, PBI's Global Director of Sales & Marketing, said: "The generation of reliable and reproducible data from biopsy samples is difficult, as it requires the integration of multiple and varied laboratory processes, particularly tissue extraction, sample preparation, and analysis. The innovative LMD-PCT workflow enables the reproducible and rapid extraction of proteins from precious clinical samples by combining the precision of the Leica LMD system with PBI's versatile PCT sample preparation platform. The ability to co-market the workflow offers the opportunity for the combined sales and marketing forces of Leica and PBI to extend the integrated LMD-PCT systems into additional research centers globally that are focused on clinical proteomics, cancer research, biomarker discovery, and precision medicine."

Dr. Falk Schlaudraff, Head of Application Management of Leica Microsystems, commented: "Biomarkers can be used as indicators of certain diseases, such as cancer. They also improve our understanding of the complex tumor microenvironment. There are distinct molecular differences between tumor and non-tumor regions, as well as in the tumor itself. These critical differences can only be deciphered by isolating specific, minute sections of these regions. The combined LMD and PCT systems allow for this separation with high accuracy and speed. Downstream molecular analysis of the different regions will be meaningful since they can be analyzed separately and not as a mixture. We are very excited to combine our LMD system with the power of PCT."

Mr. Richard T. Schumacher, President and CEO of PBI, concluded: "We are delighted to see PBI's PCT-based Barocycler system featured in a pivotal position in this important new tumor processing workflow. Based on results to date, we believe the number of laboratories worldwide performing laser microdissection followed by mass spectrometric analyses will increase at a steady and significant rate, that our Barocycler system will fulfill a critical part of this workflow, that our combined marketing and sales capabilities will result in increased market exposure and acceptance, and that the adoption of this novel new workflow should result in a measurable increase in Barocycler sales before the end of 2020."

About Leica Microsystems

Leica Microsystems develops and manufactures microscopes and scientific instruments for

the analysis of microstructures and nanostructures. Widely recognized for optical precision and innovative technology, the company is one of the market leaders in compound and stereo microscopy, digital microscopy, confocal laser scanning and super-resolution microscopy with related imaging systems, electron microscopy sample preparation, and surgical microscopy. Leica Microsystems is a Danaher company.

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 and other industries. 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 control biomolecular interactions safely and reproducibly (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, 2019, 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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