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Pressure BioSciences' BaroFold Platform Unleashes Hidden Growth Engine as Strong Demand for Protein Therapeutics Leverages PBI's Protein Refolding Technology

Titans and Emerging Leaders of Biopharma Struggling with Protein Misfolding and Aggregation Issues that Threaten Enormous Revenue Potentials Are Turning to PBI's Uniquely Enabling BaroFold Solution

REMINDER: PBI to Participate in the Benzinga Virtual ALL ACCESS Investor Event Today at 11:20 am ET.

SOUTH EASTON, MA / ACCESSWIRE / November 4, 2021 /Pressure BioSciences, Inc. (OTCQB:PBIO) ("PBI" and the "Company"), a leader in the development and sale of innovative, broadly enabling, high pressure-based instruments, platform technologies, and related consumables for the worldwide life sciences, agriculture, food & beverage, and other key industries, today announced the strategic expansion of its patented BaroFold technology platform, with continued growth in services, sales and leasing.

Because of their high degree of specificity, proven efficacy, and minimal side effects, proteins have become the biological molecule of choice in therapeutic drug development. The global protein therapeutics market is expected to reach US $233 billion by 2027. Unfortunately, the manufacture of proteins as biological therapeutics is time-consuming, complex, and struggles with persistent challenges.

Dr. Alexander V. Lazarev, PBI's Chief Science Officer, said: "The biosimilars market for generic biotherapeutics is rapidly expanding worldwide and it demands lower costs of biotherapeutics. Biomanufacturing throughput and production costs can be slashed significantly if protein drugs are expressed in bacterial cells. Traditionally, bacterial systems were considered inferior to the cell cultures obtained from higher organisms due to higher incidence of certain issues, such as the formation of aggregates and the "misfolding" of polypeptides that fold in a specific pattern to give a protein its function. PBI's BaroFold™ technology platform, based on the innovative use of high pressure and protected by the Company's eight issued patent families, offers a uniquely gentle, exquisitely controllable, and cost-effective way to address these manufacturing challenges. To capitalize on this opportunity, PBI launched the BaroFold Biopharma Services Business ("BaroFold Services") in 2019."

Dr. Vera Gross, Director of Applications Development, commented: "The BaroFold platform can be applied to the development, production, and post-storage remediation of many

different therapeutic proteins. The technology is scalable and practical for standard bioprocess environments. To put it simply, the BaroFold process uses physics where traditional processes use chemistry with arduous procedures and difficult cleanups. This means that the use of aggressive and toxic chemicals in the protein manufacturing process can be replaced in whole, or in part, by the use of high hydrostatic pressure. Thus, with this unique technology platform, we help our biopharma clients create and manufacture high quality novel protein therapeutics and biosimilars, while also lowering the cost of production and the environmental costs of chemical use and disposal. The benefits of the BaroFold platform are manifest in feedback from our customers and in their repeat business."

PBI's BaroFold Services business has grown significantly over the past two-plus years, from one customer in 2019, to two customers in 2020, to four in 2021. Current customers run the gamut from well-funded startups to multi-billion-dollar global biopharmaceutical companies. Such companies contract PBI to develop bioprocess steps utilizing the BaroFold Platform that can increase quality, reduce manufacturing costs, improve processing yields, and reduce the time to market for their planned protein-based therapeutics, each with sales potential from millions to a billion dollars, or more.

Mr. John B. Hollister, Director of Sales and Marketing, added: "The benefits of the BaroFold platform allow us to work with biopharma customers from the early stages of a protein drug's development. Initial contracts with the customer's R&D team will focus on showing Proof of Concept (POC). Once POC is demonstrated, we will continue to contract BaroFold Services as drug candidates move through successive stages of analysis and development: from pilot-scale processing, through volume scale-up, and finally to commercialization. Ultimately, the BaroFold platform will become Standard Operating Procedure for production of the protein therapeutic. From the biopharma's perspective, benefits include the commercialization of a drug that might otherwise never make it to market, as well as a potential increase in quality and decrease in manufacturing costs. From PBI's perspective, benefits include additional rounds of service fees, equipment sales/leases, and finally BaroFold license fees. For a commercially successful protein therapeutic, the licensing stream is expected to be extremely lucrative."

Mr. Hollister continued: "Recently it became evident that some biopharma companies developing protein-based therapeutics had libraries of protein drug candidates they would like PBI to evaluate, but it would be too costly to test them all through the BaroFold Service. Our due diligence indicated that if they had use of our small-scale BaroFold platform equipment, they could screen their library themselves and send to PBI only those that evidenced the most potential. We quickly set up a sale/leasing program to fulfill these needs. Recently, we leased two small-scale systems to a multi-billion-dollar biotech company and are in discussions with additional interested groups. Having now proven the concept, we believe this program will add greatly to the number of protein candidates utilizing our BaroFold services going forward, and that we will consequently see an increase in instrument/consumable revenue from biopharma companies in the protein therapeutic development space."

About the BaroFold Patented Technology Platform

The BaroFold™ platform uses carefully controlled high pressure for the disaggregation and controlled refolding of recombinant proteins into their native structures for desired drug activity. The BaroFold platform is transformative and practical for biopharmaceutical

manufacturing processes, offering substantially reduced production costs due to its increased process yield and throughput in both mammalian and non-mammalian systems. The BaroFold platform is easily scalable and has been utilized for the cGMP production of pre-clinical and phase 1 through phase 3 clinical materials.

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 bio-molecular 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. 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, 2020, 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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