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Pressure BioSciences' Patented BaroFold Technology Platform for High Efficiency Biopharmaceuticals Manufacturing Featured at International Bioprocess Conference by Leading Global Contract Biologics Manufacturer

Scientists at Lonza Biologics and Pressure BioSciences Presented PBIO's Patented BaroFold Platform for Breakthrough Efficiency and Economics Versus Current Manufacturing Methods in the Nearly \$500 Billion Global Protein Therapeutics Biopharmaceuticals Market

SOUTH EASTON, MA / ACCESSWIRE / November 2, 2023 /Pressure BioSciences, Inc. (OTCQB:PBIO) ("PBIO" or the "Company"), a global leader in the development and sale of broadly enabling, high-pressure-based equipment, consumables, and specialty testing services to the worldwide biopharmaceuticals, nutraceuticals, cosmeceuticals, food and beverage, and other industries, today reported that Company scientists collaborating with scientists from Lonza Biologics (Lonza AG is a world-renowned global biopharmaceutical Contract Development and Manufacturing Organization, or CDMO) presented convincing evidence that the Company's patented BaroFold™ high-pressure protein disaggregation and refolding process provides significant advantages in cost, efficiency, and environmental impact remediation over current methods widely employed in biomanufacturing protein drugs, a market expected to reach \$488 billion by 2030 ([global protein therapeutics market](#)).

Because of their high degree of specificity, proven efficacy, and minimal side effects, proteins have become the therapeutic design of choice. Unfortunately, conventional methods of biomanufacturing proteins are costly and time-consuming, making protein therapeutics inaccessible for most patients in developing countries. Data generated by Lonza and PBIO scientists were presented on October 30th at the 15th Annual RAFT ([Recent Advances in Fermentation Technology](#)) Meeting.

The presentation showed that PBIO's BaroFold™ Platform (14 issued patents) demonstrated the potential to revolutionize the biomanufacturing of proteins in bacterial cultures by disaggregating, unfolding, and facilitating the refolding of protein molecules back to their desired, "native," biologically-active configurations, *thus significantly improving the quality and lowering the production costs of protein therapeutics*. The authors concluded that "high-pressure refolding can improve process economy and environmental footprint via superior solubilization and refolding yields, reduced consumption of reagents, and higher protein concentrations."

Richard T. Schumacher, President and CEO of PBIO, expanded: "Demonstrations like this one on the effectiveness of high-pressure protein refolding should accelerate the adoption of the BaroFold platform by the biopharmaceutical industry. As BaroFold users become ready to scale up, we will support the establishment of BaroFold manufacturing sites under expanded licensing and contracting engagements. We estimate that BaroFold Manufacturing Systems would likely generate several million dollars in contract design, manufacture, installation, and qualification contracts for PBIO. As previously stated, we believe the various BaroFold platform systems and the on-going utilization and support fees associated with installations could eventually grow into annual revenue exceeding \$100M for PBIO."

PBIO's Chairman Jeffrey N. Peterson summarized the exciting recent progress made by PBIO: "In the past week, we received confirmation of the acceptance and impending publication in a peer-reviewed on-line journal of revolutionary absorption and bioavailability of desired "active" therapeutic and nutritional molecules delivered via our UltraShear-processed nanoemulsions, heralding the launch of new generations of products, major purchase orders, and licensing agreements. As 2024 approaches, our team and our investors look forward to further growth of our UltraShear processing sector, continued progress in our BaroFold and PCT platforms, ramping revenue from all three business units, and to the achievement of our expected uplist to a major US exchange in 2024."

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. (OTCQB: PBIO) is a global leader in providing innovative, broadly enabling, high pressure-based solutions for a range of industries, including biotechnology, pharmaceutical, nutraceutical, cosmeceutical, and agrochemical, as well as food and beverage manufacturing. Our products utilize both constant and alternating pressure. Our patented enabling technology platform, Pressure Cycling Technology (PCT), utilizes alternating cycles of pressure to control bio-molecular interactions (such as cell lysis and biomolecule extraction) safely and reproducibly. PCT-based products are beginning to be widely used for biomarker and target discovery, drug design and development, biotherapeutics characterization and quality control, soil & plant biology, forensics, and counter-bioterrorism applications. We have recently expanded our market opportunities with the acquisition of the BaroFoldTM patented technology platform, allowing us to enter the biopharma contract services and GMP manufacturing equipment sector. We have also developed the scalable and high-efficiency pressure-based UltraShear TechnologyTM (UltraShearTM) platform, which allows for the creation of stable nanoemulsions of otherwise immiscible fluids. It also allows for the preparation of higher quality, homogenized, extended shelf-life or room temperature-stable low-acid liquid foods that cannot be effectively preserved using existing non-thermal technologies. Our commitment to innovation and cutting-edge technology has established PBIO as a leader in the high-pressure industry, providing unique and effective solutions to our customers.

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 many forward-looking statements. 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, 2022, 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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