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Pressure BioSciences Announces First Commercial Production of Revolutionary UltraShear Nanoemulsion Product Shipped, Booked, and Paid

\$75,000 Pilot Lot Payment Received for Phase I of Safer Medical of Montana Agreement; Phases II/III Commercial Scale-Up Scheduled for Early 2023 - Expected to Yield 1st Half 2023 Revenues Over \$1 Million

SOUTH EASTON, MA / ACCESSWIRE / December 13, 2022 /Pressure BioSciences, Inc. (OTCQB:PBIO) ("PBI" or "Company"), a leader in the development and sale of broadly enabling, pressure-based instruments, consumables, and specialty process development and production services to the worldwide nutraceuticals, cosmetics, biotherapeutics, and food/beverage industries, among others, today confirmed the shipment of the Company's first ever commercial production lot of a revolutionary nanoemulsion product created and enabled by the Company's innovative Ultra Shear Technology™ (UST™ or UltraShear™) nanoemulsification platform. The shipped product is a breakthrough CBD oral spray designed by PBI for fast effect and high potency for Safer Medical of Montana ("SMM"), with whom PBI signed a multi-year development and manufacturing agreement ("Agreement"), [announced on May 4, 2022](#). SMM pre-paid the entire \$75,000 purchase price of the Phase I production lot.

The Agreement covers three phases of development and commercialization of a custom-formulated oral spray of hemp-derived nanoemulsified CBD designed for extremely rapid absorption and effectiveness, and for efficient high potency delivery of CBD active material in each dose. All ingredients used in the manufacture of this UltraShear prepared nanoemulsion product are sourced from naturally-occurring, plant-based origins. Phases II and III of the PBI-SMM Agreement are focused on scaling up UltraShear nanoemulsion production by a factor of 10x in each stage, with total PBI revenues captured under this Agreement expected to top \$1M in Q1/Q2 of 2023.

Captain George Ackerson, the CEO and Founder of Safer Medical of Montana, stated: "I am so excited by our opportunity to partner with Pressure BioSciences in allowing the launch of their first UltraShear-enabled nanoemulsion product to be focused upon creation of our revolutionary "Black Ops Nano CBD" oral spray, which is specifically targeted to serving vast unmet needs within the U.S. veterans community. Their UltraShear technology platform allows an oil-soluble active molecule like CBD to be prepared into a nanoemulsion of vanishingly tiny oil droplets in water that ensures rapid absorption and unparalleled bioavailability of the CBD into the water-based biochemistry of human bodies. Development work to date has demonstrated these capabilities far beyond any CBD products currently on the market - with performance better than we could have dreamed."

Captain Ackerson continued: "As a Vietnam veteran myself, I wanted to make certain that our CBD product had the best chance of helping the men and women who have served our Country, many of whom still struggle daily with significant health and wellness issues. To ensure optimal effectiveness with fast validation in a positive first use experience, we requested the development of a very high concentration of CBD (40mg per milliliter), which is beyond the concentration capabilities of currently marketed true nano formulations. Each bottle contains 2000mg of CBD. One spray will deliver about 6.5mg of the nanoemulsified CBD, designed for fast absorption through the cheek or under the tongue. Individual users will be able to adjust their dosage easily and rapidly as needed."

Mr. John B. Hollister, Director of Sales and Marketing at PBI, observed: "This launches a new chapter for Pressure BioSciences, as UltraShear commercialization enters into a phase of scale up and rapid growth. PBI has long established itself as an expert in the development and application of extreme high-pressure technology to enable remarkable and important new scientific and production capabilities, but UltraShear now opens an extraordinarily broad range of important and large new commercial application markets, from pharmaceuticals to nutraceuticals, cosmetics, food and beverages, agrochemicals, and many more."

Mr. Hollister continued: "Black Ops Nano CBD is the first UltraShear product, but vastly more products, far beyond this initial cannabinoid opportunity, will quickly follow. We have previously announced exciting progress in our cosmeceutical partnership with [Dr. Denese SkinScience](#), and in our formulation developments for astaxanthin (the most potent antioxidant in the market) and other nutraceuticals. Our investors should expect to hear much more about additional UltraShear contracts and products in the days and weeks ahead. The dam is bursting."

Mr. Richard T. Schumacher, President and CEO of PBI, concluded: We recently announced the first three cosmeceutical products targeted for development and commercialization with Dr. Adrienne Denese through the initial quarters of 2023 [PBIO/Dr. Denese FORCE Webinar 101322](#). Combined with the CBD product formulations already announced with orders from Captain Ackerman and other partners, we expect these UltraShear products to yield at least \$4 million of incremental new toll manufacturing revenues for PBI through Q1/Q2 of 2023. We are also close to executing a number of additional UltraShear contracts that we anticipate will drive Q3/Q4 2023 tolling revenues well beyond the expected Q1/Q2 record revenues created by the UltraShear platform. This is a wonderful time to consider becoming or being a stakeholder in Pressure BioSciences."

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. 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, 2021, 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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