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Pressure BioSciences Announces Early Access Program for UST Nanoemulsion Processing

Strong Market Demand Fuels Company's Decision to Access Early Revenue Generating Opportunities for UST Processing of High Quality Nanoemulsions of Oil-Based Active Ingredients for Multiple Markets Ahead of Q4 2022 Commercialization - Company Expects Several Executed Contracts During Q2 2022

SOUTH EASTON, MA / ACCESSWIRE / April 27, 2022 /Pressure BioSciences, Inc. (OTCQB:PBIO) ("PBI" or the "Company"), a leader in the development and sale of broadly enabling, pressure-based instruments, consumables, and specialty testing services to the worldwide biotechnology, biotherapeutics, nutraceuticals, cosmetics, agriculture, and food & beverage industries, today announced the initiation of an Early Access Program (effective July 1, 2022) for the use of its revolutionary Ultra Shear Technology™ ("UST™") platform for the processing of oil-based active ingredients into highly stable, water soluble, long-term stable nanoemulsions.

In September 2021, and reinforced several times since, the Company announced plans for the commercialization of its revolutionary UST platform. Under this plan, commercialization activities are to begin with the opening of two fee-for-service, GMP-compliant tolling centers in the 2022 fourth quarter. These centers are to be located in the Boston and San Francisco areas. Good progress continues to be made in this effort.

Importantly however, PBI has been experiencing more immediate demand for UST-processed nanoemulsions. Although the UST platform systems and laboratory space required for the tolling sites will not be available until later in 2022, the Company currently has three working benchtop, small-capacity systems (BaroShear MINI) and expects to soon finish the manufacture of both a mid-capacity BaroShear K45 and a large-capacity BaroShear MAX (capable of very large production runs). Propelled by this very welcomed demand to use the UST platform, and aware that such use could help to accelerate the trajectory of commercial proof of principle, production engagement, and conversion into long term processing relationships with a diverse group of prospective partners in the nutraceutical, health and beauty, agrochem, and food/beverage industries, PBI has decided to open up a program to allow early access to the UST processing system.

Mr. John B. Hollister, Director of Sales and Marketing at PBI, addressed the burgeoning demand for access to PBI's UST platform for processing valuable oil/water emulsion-based products in multiple major markets: "We have announced our plans to have commercial toll-production UST-processing capacity operational on the East and West coasts of the USA by Q4 2022. Since announcing this, we have worked closely with a number of companies on formulating some of their products. As a result, the demand to serve initial contracts for pilot-scale production of nanoemulsions in nutraceuticals, cosmetics, health and beauty care, and

agrochemical markets has become particularly intense and is growing. We anticipate the announcement of at least two significant relationships and contracts within these sectors during Q2 2022, for which early small-batch production capacity can be pivotal to accelerating the commercialization phase to follow."

Dr. Alexander Lazarev, Chief Science Officer at PBI, said: "UST, by design, is a scalable and precisely controlled process that allows us to "dial in" and routinely deliver sub100 nm nanoemulsions of desired characteristics. Resulting oil droplets become smaller than the wavelength of visible light, at which point the previously cloudy/opaque emulsions become transparent nanoemulsions. More importantly, oil-soluble bioactive molecules are now in nano-droplets so small that they become more readily absorbable and bioavailable. Taste and smell characteristics are similarly magnified, while textures are ultimately transformed into silkiness and lower viscosity. Most microorganisms are also destroyed in the process, yielding room-temperature stability against spoilage without a need for preservatives. Moreover, nanoemulsions are easily sterilized by filtration, which makes them ideal media for pharmaceutical drug delivery. These nanoemulsions exhibit remarkable stability against physical separation when prepared using our minimal custom formulations of plant-based, non-GMO, non-allergenic, organic/green natural stabilizers designed for clean label products."

PBI's President and CEO, Mr. Richard T. Schumacher, expanded: "Our early demonstrations of UST processing have astonished our prospective partners, including prednisone for pharmaceuticals; retinol for cosmetics; neem oil for agrochem; and astaxanthin, curcumin, krill oil, algae oil, and CBD for nutraceuticals. Retained samples were subjected to stability testing, and such testing has helped confirm that stability was completely maintained with full clarity at the key two-year milestone. We have demonstrated our ability to deliver these results at production scales from our BaroShear Mini to our K45 and MAX systems. Our first MAX system has been operational at the renowned Pilot Test Lab of The Ohio State University since January, and we anticipate that our consortium partnership with Ohio State will shortly launch into close working relationships on UST with diverse major global companies in the liquid food and beverage industry. Our plans remain on track to complete the development of four additional MAX systems and begin offering UST tolling services in East/West coast facilities by Q4 2022. Finally, we now have seven issued UST patents and believe that more will be awarded to us over the coming months."

Mr. Schumacher concluded: "The PBI Team has been extraordinarily driven and focused, which has been instrumental in moving the UST platform from a critical R&D project to the point where we are just months away from proving the commercial viability, scalability, and the incredible product quality generated by the UST platform. Progress for PBI has been exciting as we have laid the foundations for UST over the past several years and we remain driven by our belief that without a doubt the best is yet to come."

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:
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Please visit us on Facebook, LinkedIn, and Twitter.

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