

PRESSURE BIOSCIENCES INC.

480 Neponset Street, Building 10
Canton, MA 02021
(T) 508-230-1828
(F) 508-230-1829

info@pressurebiosciences.com

www.pressurebiosciences.com

Mr. Richard T. Schumacher, CEO, President
Dr. Edmund Y. Ting, SVP of Engineering
Dr. Alexander V. Lazarev, Chief Science Officer
Mr. James Behnke, Director of Operations
Mr. John B. Hollister, Director, Marketing & Sales
Mr. Kenneth F. Micciche, Director, Business Dvlp.
Dr. Vera Gross, Senior Scientist, R&D.

COMPANY OVERVIEW

Pressure BioSciences, Inc. (OTCQB: PBIO) is a leader in the development & sale of innovative, enabling, high pressure-based instruments, consumables, and services for the life sciences and other industries worldwide. Our products/services are based on three patented, high-pressure platforms: (i) Pressure Cycling Technology (“PCT”), (ii) BaroFold Technology (“BaroFold”), and (iii) Ultra Shear™ Technology (“UltraShear”).

The Company was founded on the belief that its PCT Platform had the potential to significantly increase the quality of sample preparation in research and clinical settings. Although this premise has been proven true, and although PBI has been successful in installing its PCT Platform in the laboratories of dozens of key opinion leaders worldwide, PBIO now believes – based on market feedback – that the commercial potential for UltraShear far exceeds the potential of the PCT Platform. Consequently, in January 2022, PBIO made the critical decision to immediately shift its primary business focus from PCT to its innovative UltraShear Platform.

The UltraShear Platform (8 issued patents) is based on the use of intense shear forces from ultra-high pressure valve discharge (greater than 20,000 psi) under precisely controlled temperatures. Ultra Shear Technology (UltraShear or UST™) has been shown to turn hydrophobic (water-repelling) oil-based supplements (e.g., CBD, curcumin), therapeutics (e.g., prednisone), and other active ingredients (e.g., retinol, astaxanthin) into long-term stable, effectively water-soluble, highly bioavailable nanoemulsion formulations. The Company announced pending commercialization of the UltraShear Platform in May 2022. Since then, PBI has announced agreements with approximately one dozen CBD and one cosmetics company for commercialization in 2023; product shipments began on October 2, 2023.

The BaroFold Platform (14 issued patents) can be used to significantly improve the quality and production costs of protein biotherapeutics. It employs high pressure for the disaggregation and controlled refolding of proteins to their desired native structures at yields and efficiencies not achievable using existing technologies. The BaroFold Platform has been shown to remove protein aggregates in biotherapeutic drug manufacturing, thereby improving product efficacy, safety, and cost for both new-drug entities and biosimilar (follow-on biologic) products. It is scalable and practical for standard manufacturing processes. This unique platform is currently helping start-ups to multi-billion-dollar companies create and manufacture novel protein-based therapeutics and lower the cost of existing formulations.

The PCT Platform (21 issued patents) uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels to control bio-molecular interactions safely and reproducibly in the area of sample preparation (e.g., the critical steps performed by tens of thousands of scientists worldwide, such as cell lysis and biomolecule extraction from tissue samples). Our primary focus is on making our recently released, GMP-compliant, next generation PCT-based Barocycler EXTREME system available globally to biopharmaceutical drug manufacturers for use in the design, development, characterization, and quality control of biotherapeutic drugs. We currently have over 350 PCT Systems placed in approximately 225 academic, government, pharmaceutical, and biotech research laboratories worldwide. There are currently over 200 independent publications highlighting the advantages of using the PCT Platform in scientific research & clinical laboratories

Uncle Buds Hemp (renamed Uncle Bud’s Health & Wellness, Inc.) was acquired on January 19, 2024, and is now a wholly-owned subsidiary of PBIO. Launched in 2018 with a trailblazing hemp-based Pain Relief product, Uncle Bud’s has rapidly captured an innovative leadership role in the Hemp Seed Oil, Cannabidiol (CBD), and the broader Health & Wellness industry. The Uncle Bud’s brand is revered for its unwavering commitment to domestic manufacturing excellence, setting benchmarks for its organic, preservative-free, non-GMO standards and its ethical cruelty-free practices. Uncle Bud’s is dedicated to the highest-quality formulations and to continuous improvement, guided by the latest scientific research and development innovations – including the revolutionary performance breakthroughs delivered by PBIO’s patented UltraShear™ processing platform. Uncle Bud’s diverse product portfolio addresses an ever-broadening spectrum of consumer needs, encompassing pain relief, sophisticated skincare solutions, personal wellness and athletic recovery products, and specialized pet care items. Learn More: www.unclebudshemp.com.

INVESTMENT HIGHLIGHTS

- Proven Core Technology with Multiple Applications (Over 350 Pressure Systems Installed Globally).
- Three Novel, Enabling, Patented & Proprietary Pressure-based Platforms: PCT, BaroFold, & UST.
- PCT Platform Breaks Through Bottlenecks to Enable Discovery & QC in Drug Development.
- BaroFold Platform Improves Quality and Reduces Production Costs of Protein Drug Therapeutics through Disaggregation and Controlled Refolding of Proteins.
- UST Platform Makes Safer, Highly Stable, More Bioavailable Nanoemulsions for Many Major Markets.
- Significant Worldwide Markets: PCT and BaroFold (BioPharma R&D and QC \$526B); UST (CBD \$44B; Cosmeceuticals \$805B; BioPharma Manufacturing \$900B; Food and Beverages \$5.65T).
- Uncle Buds H&W will incorporate P BIO's best-in-class UltraShear processing technology into its already successful oil-based products for new market breakaway potential, as well as to add over a dozen new products in 2024 based on UltraShear processing. Uncle Buds offers P BIO stakeholders an additional path to increased revenue and growth.

KEY ANNOUNCEMENTS (October 2023 to August 2024)

- **June 25, 2024:** P BIO partners with Vita-Forte, largest global supplier of freeze-dried Acai, to commercialize highly potent, multi-antioxidant, UST nanoemulsion oral spray.
- **April 11:** Uncle Bud's Health & Wellness to Expand new premium collection with novel products for sleep, memory, pain, immunity, feminine hygiene, and sexual awareness.
- **April 2:** P BIO receives critical processor license for industrial hemp production in Mass.
- **February 26:** Uncle Buds reports powerful growth one month following acquisition by P BIO.
- **February 15:** P BIO completes relocation into new facility with substantially increased manufacturing space, vastly improved efficiencies, and measurable cost savings.
- **February 5:** Uncle Buds to launch premium health & wellness products; strong revenue expected..
- **January 22:** P BIO announces closing of Uncle Bud's acquisition in all-stock transaction.
- **January 18:** P BIO reports on new UltraShear client with \$300,000-plus product order.
- **January 16:** P BIO reports \$252,000 order from one of the world's largest retailers.
- **January 11:** P BIO signs definitive agreement for the acquisition of Uncle Buds Health& Wellness.
- **January 4:** P BIO's BaroFold platform expected to revolutionize biopharmaceutical production with help from new AI/ML technologies.
- **December 21, 2023:** P BIO celebrates the second groundbreaking article on the Company's UltraShear platform published in month of December 2023 – this one published in *Food Technology*.
- **December 12:** P BIO's UltraShear platform shown to inactivate foodborne pathogens while maintaining nutritional, sensory, and other important qualities.
- **December 1:** P BIO and Veterans Service Team launch UltraShear Best-in-Class Nano CBD Topical Spray – MMA Champ Cat Zingano now official VST ambassador.
- **November 21:** P BIO reports Q3 2023 financial results.
- **November 2:** P BIO and global contract dvlp. and mfg. organization (CDMO) leader LONZA AG presented breakthrough data on P BIO's BaroFold platform at a leading scientific meeting.
- **October 18:** Exclusive distribution agreement with premier life sciences distributor in India.
- **October 10:** P BIO continues expansion of UltraShear IP portfolio with award of 1st Canadian patent.

BOARD OF DIRECTORS

- Mr. Jeffrey N. Peterson, Chairman • Dr. Mickey Urdea • Mr. Richard T. Schumacher
1. Shares Outstanding – includes approximately 36M Common Shares (3/31/24), 5M CS Equivalents (CSE) from outstanding stock options, 27M CSE from Preferred Stock (12/31/23), and 10M CSE from convertible loans on an as-converted basis (12/31/23).
 2. Fully Diluted Market Capitalization is calculated using Common Stock OS and Common Shares Equivalents OS on a Fully Diluted basis. Common Share Equivalents from the future exercise of warrants are not included as no Warrant Shares are currently in the money.

This communication does not constitute an offer to buy or sell or the solicitation of an offer to buy or sell securities.

08.01.24