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# **Pressure BioSciences, Inc. and Target Discovery, Inc. Expand Strategic License Agreement and Collaboration Supporting TDI's Planned Offering of Personalized Medicine Clinical Diagnostic Services**

## **Diagnostic Services to Initially Target Critical Unmet Needs in Treatment Selection Guidance for Ovarian and Other Cancers**

SOUTH EASTON, Mass., April 23, 2012 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI") and Target Discovery, Inc. ("TDI"), (together "the companies"), today announced the signing of expanded strategic technology license and supply agreements (the "Agreements"). Under these agreements, TDI now has the right to use PBI's patented and enabling Pressure Cycling Technology ("PCT") Platform for their planned entry into the clinical diagnostics testing market. The planned commercial diagnostic services will initially target what the companies believe are critical, unmet needs in treatment selection guidance for ovarian cancer. Until now, PBI's PCT Platform has been available on a "research-use-only" basis.

In 2010, the companies announced a collaboration to combine PBI's PCT Platform with TDI's proprietary reagents to enable the extraction of membrane protein biomarkers from human tissue. Such biomarkers include specific modified proteins ("isoforms") that have heretofore been very difficult to extract from tissue in a form suitable for diagnostic testing. The companies believe that the ability to rapidly extract and recover diagnostically and commercially useable protein isoforms from cell membranes is unique to PCT and the TDI reagents, and that this capability positions the companies with game-changing abilities to exploit this critical class of membrane proteins as diagnostic biomarkers.

Mr. Jeffrey N. Peterson, CEO of TDI, and a director of PBI, said: "We are very pleased with the progress and outcomes achieved in our on-going multi-year collaboration with PBI. We believe that the PCT Platform, in combination with TDI's proprietary reagents, provides reliable access to this important class of protein biomarkers for life sciences R&D. We further believe that variations measured in these protein isoforms are expected to translate into important commercial applications, and desperately needed breakthroughs in improved patient care and health-economic outcomes. Our first area of application focus is in ovarian cancer, where over 22,000 women are diagnosed annually in the USA with this fast-moving disease, and over two-thirds of these new patients could be helped dramatically by the introduction of reliable treatment selection guidance diagnostic information."

"Membrane proteins play key biological roles in cancer, in drug resistance, and in viral

infections, yet until now scientists have been virtually unable to use this important class of biomarkers for diagnostic and prognostic testing," commented Dr. Luke V. Schneider, TDI's Chief Scientific Officer. "These proteins are tightly bound within the cell membrane, making them very difficult to extract and recover for scientific study. The extraction of membrane proteins from tissue samples typically requires the use of aggressive physical and chemical methods that yield useless protein fragments, often in solutions that are completely incompatible for laboratory testing. Consequently, although membrane proteins and their isoforms play vital roles in human health and disease, they have never been conveniently available for use as disease biomarkers."

Mr. Richard T. Schumacher, CEO of PBI, remarked: "The innovative scientific team at TDI has vaulted important anticipated applications for PCT forward into near-term realities. The power and impact of TDI's isoform-focused technologies and their promise in opening a new era in personalized medicine diagnostics for cancer treatment is dramatic and inspiring. We are excited that PBI's patented PCT Platform will provide the sample-processing foundation upon which many of TDI's next generation clinical laboratory testing services will be based, and we look forward to supporting our colleagues at TDI with our continued collaboration, and by fulfilling their expected PCT Platform instrument and consumables needs."

### **About the Agreements.**

The non-exclusive, worldwide, royalty-bearing license is for the *in vitro* diagnostic services testing for the detection of proteins that may be regarded as biomarkers of ovarian and other cancers, including any number of specific or all protein isoforms. The license agreement includes a minimum royalty that is replaced by an annual royalty once TDI achieves a specified minimum level of diagnostic testing sales. It also includes a right of first negotiation and right of first refusal for an exclusive license to sell biomarker and/or diagnostic assay products, including instruments, software, kits and consumables, in a specified field of use. The license continues for the life of PBI's PCT patents. Under the Supply Agreement, PBI will make available to TDI the PCT instruments and consumables required at "most favored nation" pricing.

### **About Target Discovery, Inc.**

Target Discovery, Inc., a privately held company located in Palo Alto, California, is developing the next generation of clinical diagnostics, offering higher-value molecular insights for disease management and diagnosis. Assessing protein modification states (the "missing link" in biomarkers), the company focuses on creating protein isoform diagnostics (Isonostics™), to better guide therapeutic choices and lower overall treatment costs for cancer and other diseases. TDI engages in funded collaborations with partners, for application of unique isoform-level technologies in other disease areas and in theranostic applications.

### **About Pressure BioSciences, Inc.**

Pressure BioSciences, Inc. ("PBI") (OTCQB: PBIO) is focused on the development, marketing, and sale of proprietary laboratory instrumentation and associated consumables based on Pressure Cycling Technology ("PCT"). PCT is a patented, enabling technology platform with multiple applications in the estimated \$6 billion life sciences sample preparation market. PCT uses cycles of hydrostatic pressure between ambient and ultra-

high levels to control bio-molecular interactions. PBI currently focuses its efforts on the development and sale of PCT-enhanced sample preparation systems (instruments and consumables) for mass spectrometry, biomarker discovery, bio-therapeutics characterization, vaccine development, soil and plant biology, forensics, histology, and counter-bioterror applications.

## **Forward Looking Statements**

Statements contained in this press release regarding PBI's intentions, hopes, beliefs, expectations, or predictions of the future are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward looking statements include statements regarding the relationship between the companies; the estimated size of the life sciences sample preparation market; the estimated number of women in the US who are diagnosed with ovarian cancer and the belief that two-thirds could be helped with better treatment guidance information; the potential advantages of PCT in processing tissue samples, including the extraction and recovery of intact protein isoforms contained in cellular membranes; that the companies will develop diagnostic services for ovarian and other cancers incorporating PCT and the TDI reagents; that membrane proteins play key roles in cancer, drug resistance, viral infections, human health and disease, and life science research; that the ability to extract and recover diagnostically and commercially useable protein isoforms from cell membranes is unique to PCT and the TDI reagents and that this capability positions the companies with abilities to exploit this class of membrane proteins as diagnostic biomarkers; that the TDI reagents, in combination with PCT, effectively release proteins and protein isoforms from cell membranes that have been difficult to extract in the past; and that vital clinical diagnostic services and important clinical applications can be created from the combination of PCT and TDI reagents, and may result in breakthroughs in improved patient care and health-economic outcomes. These statements are based upon PBI's current expectations, forecasts, and assumptions that are subject to risks, uncertainties, and other factors that could cause actual outcomes and results to differ materially from those indicated by these forward-looking statements. These risks, uncertainties, and other factors include, but are not limited to: possible difficulties, delays and additional costs in the implementation of PBI's strategies that may adversely affect the commercialization of PCT and PCT-dependent products, including the expectation of developing a clinical diagnostic testing service based on the extraction and recovery of proteins isoforms that have been extracted and recovered by PCT and the TDI reagents; due to differences in strategies between TDI and PBI and unforeseen scientific impediments to the utilization of PCT with the TDI reagents, the collaboration may not result in a successful clinical laboratory service; changes in customer needs and technological innovations; other scientists may not achieve the same PCT results achieved by TDI or reported by PBI; TDI's sales force may not successfully sell the clinical laboratory services because scientists may not perceive the advantages of detecting and analyzing protein isoforms; and the Company may not be successful in raising additional capital necessary to fund the Company's operations. Given the uncertainty in the capital markets and the current status of the Company's product development and commercialization activities, there can be no assurance that the Company will secure the additional capital necessary to fund its operations beyond May 2012 on acceptable terms, if at all. Additional risks and uncertainties that could cause actual results to differ materially from those indicated by these forward-looking statements are discussed under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2011, 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.

PBI filed a registration statement (including a prospectus) with the SEC for an offering to which this communication may relate. Before you invest, you should read the prospectus in that registration statement for the offering and other documents PBI has filed with the SEC for more complete information about PBI and the offering. You may get these documents for free by visiting EDGAR on the SEC Web site at [www.sec.gov](http://www.sec.gov). Alternatively, PBI can arrange to send you the prospectus, when available, upon request.

For more information about PBI and TDI and this press release, please click on the following links:

<http://www.pressurebiosciences.com>

<http://www.targetdiscovery.com>

<http://bit.ly/lkiRxJ>

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