

**Pressure BioSciences, Inc. Reports Financial Results for the Third Quarter of 2011 and Provides Business Update**

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South Easton, MA, November 15, 2011 -- Pressure BioSciences, Inc. (NASDAQ: PBIO) ("PBI" or the "Company") today announced financial results for the three and nine months ended September 30, 2011.

Total revenue for the nine months ended September 30, 2011 was \$651,751, of which \$280,422 (or 43%) was achieved in the third quarter of 2011. Revenue from PCT products for the nine month period was \$589,063, of which \$217,734 (or 37%) was from the third quarter of 2011. We installed twenty-five PCT Sample Preparation Systems ("PCT SPS") year-to-date; eight were installed in the third quarter of 2011. Operating loss for the first nine months of 2011 was \$2,421,707, of which \$745,811 (or 31%) was from the third quarter of 2011. After the exclusion of non-cash charges, operating cash burn for the nine months ended September 30, 2011 was approximately \$2,150,000, of which approximately \$658,000 (or 31%) was from the 2011 third quarter.

Continued on Page 2, Column 1

**PBI EVENTS**

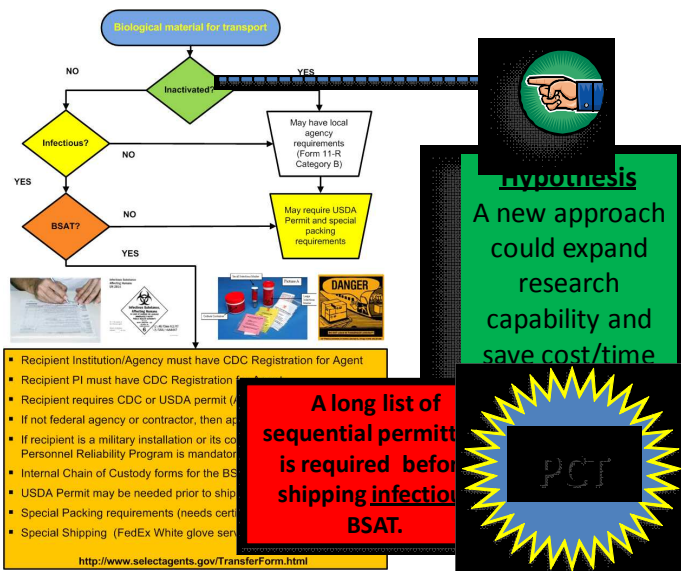
Scientific Meeting: PBI to showcase PCT and the Company's SHREDDER SG3 mechanical sample preparation system and kits at the twentieth Plant and Animal Genome (PAG XX) Conference, to be held January 14-18, 2012 in San Diego, CA

**Dr. Bradford Powell**

(Founder and CSO, Cernomics Solutions)  
presented a podium talk at the

**Integrating Sample Preparation 2011 Meeting:**  
*Integrating Sample Preparation of Chemical & Biological Agents, Threats and Pathogens into Detection, Identification & Analysis Technologies & Devices*, Washington, D.C. December 8-9, 2011

**Improved Preparation and Analysis of Biothreat Agents and Infectious Microbial Samples Using Pressure Cycling Technology (PCT)**



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**Pressure BioSciences, Inc. Reports Financial Results for the Third Quarter of 2011 and Provides Business Update: Continued from Page 1, Column 1**

In an August 31, 2011 press release, the Company reiterated its optimistic revenue and operational outlook for the third and fourth quarters of 2011, compared to the first two quarters of year. Among its expectations, the Company believed that total revenue during the second half of 2011 would increase significantly over the first half of 2011; that Q3 2011 PCT Products revenue would reach its highest level in the past year; and that sufficient capital would be raised to support its operations and growth plan during the second half of 2011, and beyond.

To that end, the Company today reported that for the third quarter of 2011:

- Total revenue was \$280,422, compared to \$190,686 for Q2 2011 (a 47% increase) and \$180,643 for Q1 2011 (a 55% increase).
- PCT Products revenue was \$217,734 - the highest level achieved in the past four quarters.
- Operating loss was \$745,811, a decrease of approximately 11% from Q2 and Q1 2011.
- Cash burn was approximately \$658,000, a decrease of approximately 11% from Q2 and Q1 2011.

Richard T. Schumacher, President and CEO of PBI, said: "In addition to these accomplishments, we reported other important successes during the third quarter of 2011, including: (a) the award of nearly \$1 million in NIH and DoD grants; (b) heightened negotiations with potential worldwide distribution partners; (c) the market release of a new and novel high pressure instrument ("Barocyler HUB440"); and (d) the closing of a registered direct offering of approximately \$850,000 in which Ladenburg Thalmann & Co. Inc., a subsidiary of Ladenburg Thalmann Financial Services Inc. (NYSE AMEX: LTS), acted as our exclusive placement agent. We believe such accomplishments will continue, including the ability to raise the capital necessary to fund our operations to profitability, and that these accomplishments will help secure a bright and successful future for all stakeholders of PBI."

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**Excerpt from: Application Note:  
Proteolysis-PrEP (Lysozyme)**

**Effect of Pressure Cycling on  
Lysozyme Activity**

**Introduction**

Pressure cycling technology (PCT) has been proven to accelerate enzymatic protein digestion. For example, the effect of PCT on trypsin digestion has been demonstrated by several laboratories. They report that digestion times can be reduced from hours to minutes [1, 2]. Not only has PCT been shown to accelerate and improve protein digestion in solution, but it also can accelerate the digestion by trypsin of proteins in polyacrylamide gel slices [3]. Additionally, the enhancing effect of PCT on the activity of several other enzymes, including Proteinase K, PNGase F, and Lys-C, has been reported [4, 5, 6]. It is thought that PCT may act synergistically with other protein denaturants, such as organic solvents and elevated temperature, to help maintain substrates in a denatured state leading to more exposure of enzyme target sites which results in better cleavage. Here we report the enhanced effect by PCT on the activity of the enzyme lysozyme. Lysozyme acts to hydrolyze peptidoglycans found in bacterial cell walls. This enzyme is frequently used for bacterial cell lysis prior to extracting DNA or proteins from bacteria. We also propose an alternate or additional mechanism by which PCT may enhance the activity of lysozyme.

**Results and Discussion**

It has been reported that thermodynamic treatments, such as High Intensity Focused Ultrasound (HIFU) [9], microwave radiation [10] and high pressure [11, 12], can accelerate digestion by trypsin and other enzymes. Pressure cycling technology (PCT) has also been reported to effectively accelerate protein digestion by trypsin and other enzymes. Here we report the effect of pressure, a thermodynamic process, on lysozyme from hen egg white.

The effects of different levels of pressure on the lysozyme reaction were assayed at room temperature and 50°C. Data show that not only is lysozyme stable at high pressure, but that its activity is significantly enhanced at pressures as high as 40,000 psi (276 MPa) (Figure 1).

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#### Forward Looking Statements

Statements contained in this press release regarding the Company'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 total revenue for the second half of 2011 increasing significantly over the first half of 2011; our progress in finding a worldwide distribution partner; our ability to raise the capital needed to fund our operations to profitability; that our successes will continue; and that our accomplishments will help secure a bright and successful future for all stakeholders of PBI. These statements are based upon the Company'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: the Company's financial results for the quarter ended September 30, 2011 may not necessarily be indicative of future results as future revenues may not meet expectations due to the possible failure of the Company's products to achieve commercial acceptance, changes in customer's needs and technological innovations, and expenses that may be higher than anticipated due to unforeseen costs or cost increases; the risk that the Company may be unable to improve total revenue and PCT products revenue, the number of PCT Systems installations, and its operating loss and cash burn due to unexpected costs or increases in costs; possible difficulties or delays in the implementation of the Company's strategies that may adversely affect the Company's continued commercialization of its PCT-based product line; changes in customer's needs and technological innovations; and the Company may not be successful in selling the Company's PCT product line because scientists may not perceive the advantages of PCT over other sample preparation methods. Further, the Company will require additional working capital to fund its operations beyond February 2012, and there can be no assurance that the Company will be successful in obtaining such financing on acceptable terms, if at all. Further, if the NASDAQ Listing Qualifications Panel does not accept the Company's plan to regain compliance with the NASDAQ Listing Rule for minimum stockholder equity, the Company's common stock will be delisted from The NASDAQ Capital Market. 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, 2010, as amended, in the Company's prospectus supplement dated November 10, 2011 filed with respect to the Company's registration Statement on Form S-3 (Registration No. 333-176828) and in 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 links:

<http://www.pressurebiosciences.com>

<http://bit.ly/uA3B5c>

Excerpt from: Application Note: Proteolysis-PrEP (Lysozyme):  
Effect of Pressure Cycling on Lysozyme Activity  
Continued from Page 2, Column 2

#### Effect of Pressure Cycling on Lysozyme Activity

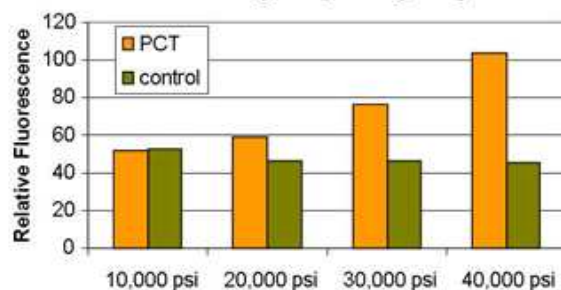


Figure 1: PCT-associated acceleration of enzyme activity increases with increasing pressure. PCT and control reactions were carried out for 30 minutes at 50°C. The legend on the X-axis indicates the pressure at which PCT was performed (orange bars). For each PCT reaction, a simultaneous control reaction, performed at atmospheric pressure, was assayed (green bars). Note that the control values show little variability from experiment to experiment.

Furthermore, the improved activity was more pronounced when the reactions were carried out at 50°C compared to reactions at room temperature (Figure 2).

Other enzymes, most notably trypsin, have been shown to be enhanced by pressure. The increase in apparent activity is more likely due more to pressure-induced denaturation of the substrate protein rather than by affecting the kinetics of the enzyme itself. By helping to maintain substrates in a denatured state, PCT effectively makes them "better" substrates for the enzyme.

In contrast, our data may suggest an alternate mechanism by which pressure accelerates lysozyme reactions. Specifically, the effect of PCT on the activity of lysozyme appears to be a direct result of increased enzymatic activity. Since the relatively small synthetic fluorogenic substrate (as compared to a protein) is not likely to be affected by pressure cycling under these conditions it is possible that pressure is acting on the enzyme itself.

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