

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 3030

November 5, 2009

Via Facsimile and U.S. Mail

Richard T. Schumacher Chief Executive Officer Pressure BioSciences, Inc. 14 Norfolk Avenue South Easton, MA 02375

Re: Pressure BioSciences, Inc.

Form 10-K for the year ended December 31, 2008

File No. 0-21615

Dear Mr. Schumacher:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspects of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the year ended December 31, 2008

Note 2 – Summary of Significant Accounting Policies, page 41

(vi) Inventories, page 43

1. Please tell us and revise future filings to disclose your methodology for determining lower of cost or market. In this regard, disclose how you determine the cost basis. Refer to paragraph 330-10-50-1 of the FASB Accounting Standards Codification.

(xiii) Accounting for Stock-Based Compensation, page 45

2. We note that you utilize the Black-Scholes option pricing model to determine the fair value of your equity-based compensation. Please revise future filings to explain how you determined the assumptions utilized in the model including the volatility, expected life, etc. Refer to the guidance in 718-10-50-2f of the FASB Accounting Standard Codification.

Item 9A(T). Controls and Procedures, page 59

- 3. We note your disclosure that management has concluded that your disclosure controls and procedures are effective "in enabling [you] to record, process, summarize and report information required to be included in [y]our periodic SEC filings within the required time period." The language that is currently included after the word "effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. However, if you do not wish to eliminate this language, please revise future filings so that the language that appears after the word "effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).
- 4. We note your statement that "... any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives." Please your future filings to state clearly, if true, that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at the reasonable assurance level. In the alternative, please remove the reference to the level of assurance of your disclosure controls and procedures. Please refer to Section II.F.4 of Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, SEC Release No. 33-8238, available on our website at http://www.sec.gov/rules/final/33-8238.htm.

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Exhibit 31.1 and Exhibit 31.2

5. We note that the identification of the certifying individual at the beginning of the certification required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. In future filings, the identification of the certifying individual at the beginning of the certification should be revised so as not to include the individual's title.

Exhibit 31.2

6. We note that your president and chief executive officer has provided the certifications required by Item 601(b)(31) of Regulation S-K in his role as principal executive officer and principal financial officer. However, we note that the certification included in Exhibit 31.2 is not in the proper form in that the reference to internal control over financial reporting in the introductory language to paragraph 4 of the certification has been omitted. Please ensure that all certifications provided in future filings are in the exact form set forth in Item 601(b)(31) of Regulation S-K. In this regard, please note the guidance in SEC Compliance and Disclosure Interpretation 161.03, which indicates that if the same individual is both the principal executive officer and the principal financial officer, that individual may provide just one certification and provide both titles underneath the signature.

Form 10-Q for the quarter ended June 30, 2009

Note 5 – Stockholders' Equity, page 11

- 7. We note that you sold 156,890 preferred stock units in February 2009. We further note that you valued the warrants using the Black-Scholes model. Please address the following:
 - Tell us and revise your future filings to disclose all significant assumptions you used in determining the value of the warrants you issued.
 - Further to the above, discuss how you considered the \$489,803 deemed dividend in your earnings per share presentation on pages 2 and 7. Refer to paragraph 260-10-45-11 of the FASB Accounting Standards Codification.

As appropriate, respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Eric Atallah, Staff Accountant, at (202) 551-3663 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact me or Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any questions.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief