

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

July 21, 2009

Kevin R. Davidson Chief Executive Officer 2060 Centre Pointe Boulevard, Suite 7 Mendota Heights, Minnesota 55120

Re: BioDrain Medical, Inc. Amendment No. 5 to Registration Statement on Form S-1 Filed July 1, 2009 File No. 333-155299

Dear Mr. Davidson:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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.

We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Risk Factors, page 3

- 1. Given your deletions on page 34, it appears you no longer intend to register a class of your securities under the Exchange Act. Therefore, please:
 - disclose the risks related to termination of periodic disclosure due to the automatic reporting suspension under Section 15(d) of the Exchange Act; and
 - explain the effect of the inapplicability of the proxy rules and Section 16 of the Exchange Act.

Three months ended March 31, 2009 and 2008, page 25

2. Please disclose your response to the second bullet of prior comment 7.

Private Placement Financing, page 34

3. Please tell us the reasons for the deletions here and on page 79 regarding the provision that limited exercise of the warrants. If that provision is no longer applicable to those securities, please ensure that the disclosures you provided pursuant to Items 403 and 507 of Regulation S-K are updated accordingly. Also note that it is generally inconsistent with Section 5 of the Securities Act to renegotiate the terms of a private offering while the related securities are registered for resale.

Handling Costs, page 47

4. We note your response to prior comment 12. Please clarify for investors that the study you cite in the last paragraph involved a total of 31 exposures, the majority of which were percutaneous exposures, which are more costly for hospitals to address. Also revise to clarify your cost estimates for non-percutaneous exposures, as previously requested.

Directors, Executive Officers, Promoters and Control Persons, page 58

5. We note your response to prior comment 15. Please reconcile your response regarding Mr. Shuler's "assisting Mr. Davidson in the financial record keeping area" with the statements on your web site under the caption "Management" that Mr. Shuler is your "Acting Chief Financial Officer."

Security Ownership, page 76

- 6. We reissue prior comment 19:
 - You disclose in note 12 that the following shares are included in the table for Mr. Patel—412,411 shares of common stock, 45,595 shares underlying warrants, 45,595 shares underlying convertible notes and 183,991 shares held by RP Capital. Adding those numbers equals 687,592, not the 641,997 included in the table on page 77; and
 - You disclose in note 13 that the following shares are included in the table for Mr. Richardson—399,543 shares of common stock, 45,595 shares underlying warrants, 45,595 shares underlying convertible notes and 183,991 shares held by RP Capital. Adding those numbers equals 674,724, not the 629,129 included in the table on page 77.

Warrants and Convertible Debt, page 79

7. Please expand your revisions in response to prior comment 20 to clarify when you intend to issue the shares and pay the penalties mentioned. Also tell us how your disclosure on pages 70, 71-73 and 77 accounts for the penalties you are obligated to pay and shares you are obligated to issue.

Report of Independent Registered Public Accounting Firm, page F-1

- 8. As the development stage cumulative financial information has been updated to March 31, 2009, an unaudited cumulative period, please tell us why the audit report continues to indicate that development stage cumulative financial information through December 31, 2008 is included in the accompanying financial statements. In that regard, please have the auditor either (1) modify the report to indicate that the development stage cumulative financial information through December 31, 2008 is not separately presented in the accompanying financial statements or (2) delete the references to the development stage cumulative financial information through December 31, 2008 as that data is no longer separately presented in the accompanying financial statements.
- 9. Please note that there appears to be a typographical error in the fourth sentence of the second paragraph of the audit report. Please appropriately revise.

Statement of Operations, page F-3

10. Please revise so that the net loss for the three months ended March 31, 2008 as presented on the statement of operations is the same amount as that presented on the statement of cash flows for that period.

Note 1, Summary of Significant Accounting Policies, page F-6

11. Please revise to the provide the management representation regarding interim financial statements that is required by Instruction 2 to Rule 8-03 of Regulation S-X.

Note 8, Long-Term Debt, page F-12

12. Please disclose how you are accounting for the registration payment obligation described under the tabular data. In that regard, please add disclosure explaining how you have applied the guidance from FASB ASC 825-20. As you appear to

have incurred obligations as of March 31, 2009, please disclose the amount accrued pursuant to FASB ASC 825-20-50-1. If no amounts have been accrued, please tell us how your accounting is appropriate under the cited guidance and FASB ASC 450-20.

Note 11. Restatement of 2007 and 2008, page F-13

13. Please revise to clearly disclose how the "net change" for each restated financial statement line item reconciles to the narrative discussion of the individual restatement adjustments. For instance, you could provide cross references between tabular data and the narrative linking the explanations of the components to the net changes or expand the tabular data to show the separate impact of each separate restatement adjustment described in the narrative.

Note 12. Liability for Equity-Linked Financial Instruments, page F-15

- 14. We see that you recorded the fair value of the warrants with round down provisions at January 1, 2009 as a reduction to paid-in capital. Please help us better understand how you have applied the guidance from paragraph 21 of EITF 07-05 (ASC FASB 815-10-65-3). Under the cited guidance, the cumulative-effect of adoption is the difference between the amounts recognized in the statement of financial position before initial application of the Issue and the amounts recognized in the statement of financial position at initial application of the Issue. The amounts recognized at initial application (that is, January 1, 2009) should be based on the amounts that would have been recognized had the warrants been accounted for as derivatives from the date of issuance. In that regard please tell us:
 - The estimated fair value of the warrants at the date of issuance.
 - The change in the fair value of the warrants from the date of issuance to the date of adoption (that is, January 1, 2009), if any.
 - Why the cumulative effect of adoption as presented on the statement of stockholders' equity should not separately show the initial fair value at issuance of the warrants as an adjustment to paid-in-capital with the pre-adoption change in fair value shown as an adjustment to the accumulated deficit, both amounts recognized as of January 1, 2009.

That is, while we understand that the fair value of the warrants (and net cumulative impact of adoption) is estimated to be \$479,910 as of January 1, 2009, please explain to us how the presentation of the impact of adoption as reflected on the statement of stockholders' equity reflects the cited guidance.

Item 27. Exhibits, page II-8

15. We note your response to prior comment 14. We previously requested that you resolve all comments regarding your request prior to requesting effectiveness of this registration statement. You informed us in your response letter dated May 14, 2009 that you would submit a confidential treatment request "shortly." Please note that we have not yet received your application for confidential treatment and, as we previously informed you, you should resolve all comments regarding that request prior to requesting effectiveness of this registration statement.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

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 Act of 1933 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 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kristin Lochhead at (202) 551-3664 or Gary Todd, Reviewing Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Geoffrey Kruczek at (202) 551-3641 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher Assistant Director

cc (via fax): Ryan Hong, Esq.—Richardson & Patel LLP