

August 21, 2007

Mail Stop 6010

Michael P. Whitman  
Chief Executive Officer  
Power Medical Interventions, Inc.  
2021 Cabot Boulevard  
Langhorne, PA 19047

**Re: Power Medical Interventions, Inc.  
Amendment to Form S-1  
Filed July 27, 2007  
File No. 333-142926**

Dear Mr. Whitman:

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.

Artwork

1. Please revise the legend at the bottom of the page to state clearly whether the product depicted has received FDA approval and whether it has been approved for sale. Also, in view of possible unforeseen delays and the uncertainty regarding FDA approval, delete the language, "Expected to be available in the fourth quarter of 2007."

Management's Discussion and Analysis..., page 39

Overview, page 39

2. We note your response to comment 11 in our letter to you dated June 8, 2007. Revise this section to disclose that your revenue during the first half of 2007 was lower than expected and explain the reasons your revenue for the period did not meet expectations.

Six months ended June 30, 2006 compared to the six months ended June 30, 2007,  
page 48

3. Expand your disclosure to explain why you had fewer direct sales representatives in the first six months of 2007 compared to the corresponding period in 2006.
4. We note your reference to “continuing problems” with PLC 60 reload cartridges in your response to prior comment 11. Update your disclosure to explain the status of such “problems” and the results of your initiatives discussed on page 40 to improve your supply chain and manufacturing.

Critical Accounting Policies and Estimates, page 44

Stock-based Compensation, page 45

5. Please refer to prior comment 11. We note the proposed changes in your disclosure. Since you used the fair-value-based method to account for compensation during the last twelve months, it appears that disclosures based on fair value are more appropriate than intrinsic value, consistent with footnote 61 to paragraph 180 of The AICPA Audit and Accounting Practice Aid Series: Valuation of Privately-Held-Company Equity Securities Issued as Compensation. In addition, please disclose each significant factor contributing to the difference between the fair value as of the date of grant and the estimated IPO price for options granted during the twelve months prior to the date of the most recent balance sheet.

Compensation Discussion and Analysis, page 86

Employment Agreements, page 91

6. We note the added disclosure in response to prior comment 17. Given that the likelihood that your executive officers will achieve the performance targets depends on whether you achieve your internal operating plan, please revise to disclose how likely it will be for you to achieve your internal operating plan for 2007. Your disclosure should be more than general statements regarding the level of difficulty, or ease associated with achieving performance goals. Please provide as much detail as necessary without providing information that would result in competitive harm

Financial Statements, page F-1

Consolidated Balance Sheets, page F-3

7. The amount recorded for deferred equity offering costs as of December 31, 2006 has not been accounted for in the computation of total current assets and total assets. We note disclosure of this item in Note 2 on page F-11. Please recalculate and make all appropriate revisions.

Note 2. Summary of Significant Accounting Policies, page F-9

Revenue Recognition, page F-12

8. Please refer to prior comment 26. We note that you re-deploy power consoles to other customers if the current user of the equipment is not using it on an active basis. Tell us what happened to the remaining excess units written off in 2005 and whether or not such units are being used for re-deployment. If so, tell us and disclose how you accounted for these transactions.
9. Please see prior comment 26. You respond that you transferred power consoles, FlexShafts, remote control units and mobile carts from inventory to property plant and equipment in 2005. Please quantify and disclose this non-cash investing activity and, as necessary, revise your statement of cash flows to properly exclude this non-cash activity.
10. Please tell us and disclose the amount of loaner equipment included in property, plant and equipment at each balance sheet date.
11. Please see prior comment 26. Please tell us and disclose the amortization period and method for the loaner equipment.
12. Further, you respond that you concluded that you would likely not be able to use all of the loaner equipment you previously had on hand due to obsolescence given "the market resistance to complete system sales and the anticipated changes in technology" that will occur upon your introduction of the i60 linear stapler. Please tell us how the release of the i60, which you expect in the fourth quarter of 2007, has impacted your evaluation of the amortization period and impairment of the loaner equipment.
13. Please tell us and disclose where you include the depreciation expense related to the loaner equipment. If the amount is not included in cost of sales, please tell us in sufficient detail regarding the basis for your classification of these costs.

Note 15. Subsequent Events (dated May 3, 2007), page F-32

14. You updated the financial statements to include interim financial information for the six months ended June 30, 2007. Please explain why this note includes events that occurred prior to the date of the latest balance sheet as a subsequent event. While the events may be subsequent to the date of your annual financial statements, they are not subsequent to the date of your interim financial statements. Since you have elected to combine the presentation of the annual and interim financial statements, you should include the appropriate disclosures for both your annual and interim periods in the notes.
15. For example, you include significant information regarding the March 2007 convertible senior secured promissory notes in the subsequent events footnote. This presentation may be confusing for an investor since this event occurred within the periods presented within the financial statements. In addition, due to the significance of the notes, a more prominent placement may be warranted.
16. Further, we note that you have limited your subsequent events disclosures to the period through May 3, 2007. Please update the subsequent events note, or explain why this limitation is appropriate.
17. Please refer to prior comment 45. Please clarify, similar to your response that once a conversion event occurs the holder may convert the notes at any time from the occurrence of the event through the maturity date of the notes.
18. Please refer to prior comment 45. Please tell us and disclose how the terminal value is considered a part of the conversion amount for purposes of determining the conversion rate. We note that the discussion of your conversion rights defines the conversion amount as the face amount plus accrued interest and does not appear to include the terminal value.
19. Please refer to prior comment 45. Please disclose the significant redemption terms of the notes.
20. Please refer to prior comment 45. Please disclose the significant terms of the registration rights agreement.
21. Please refer to prior comment 45. Please disclose, similar to your response, that the contingent interest feature is an embedded derivative that you have separated from the host and your conclusions about its value.

22. Please refer to prior comment 45. Please provide us with your analysis of the Terminal Value provisions under SFAS 133.

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.

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 David Burton at (202) 551-3626 or Kaitlin Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Eduardo Aleman at (202) 551-3646 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher  
Assistant Director

cc(via facsimile): Jeffrey L. Quillen, Foley Hoag LLP