

June 8, 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.
Registration Statement on Form S-1
Filed May 14, 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.

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 comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. Please confirm that any preliminary prospectus you circulate will include all non-Rule 430A information. This includes the price range and related information based on a bona fide estimate of the public offering price within that range, and other information that was left blank throughout the document. Also, note that we may have additional comments after you file this information.

Prospectus Summary, page 1

2. Please tell us whether the organizations mentioned here and throughout your prospectus (e.g., Medtech Insight and MedMarket Diligence):
 - make their reports publicly available,
 - received compensation from you for preparation of the statistics,

- prepared the statistics for use in the registration statement, or
- have consented to your use of their statistics in your document.

Summary Consolidated Financial Information, page 7

3. Please revise throughout the filing to use a consistent chronological ordering of the financial data, consistent with SAB Topic 11E.

Risk Factors, page 9

We have incurred losses since inception..., page 9

4. Revise to disclose that you expect to continue incurring operating losses at least through 2008, as noted on page F-8.

We assemble our Intelligent Surgical Instruments..., page 12

5. Please update this risk factor to address the status of the development of your automated system which you expected to be completed in the first half of 2007.

If we infringe intellectual property..., page 20

6. Revise to describe briefly that the outcome of one of the patent-infringement lawsuits against you in Germany was adverse to you.

There is no guarantee..., page 23

7. Update the disclosure regarding the submission to the FDA you intended to make in the second quarter of 2007.

Capitalization, page 33

8. Please remove cash and cash equivalents from your capitalization table.

Dilution, page 35

9. We note that the amount of total consideration for existing stockholders is \$135.5 million. Please disclose whether this amount assumes conversion of the redeemable preferred stock. Please also tell us how you calculated the amount of total consideration and reconcile with page F-3.

Management's Discussion and Analysis of Financial Condition..., page 38

Critical Accounting Policies and Estimates, page 43

Stock-based Compensation, page 44

10. We note that you refer to using the valuation of an independent third party here and on page F-12 when determining fair value of certain of your equity instruments. Please revise the filing to name the independent valuation expert in these sections of the filing as well as in the Experts section and to include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.
11. Since your valuation was retrospective, we believe that these disclosures would be helpful to an investor since changes in your methodologies and assumptions could have a material impact upon your financial statements. Please revise to provide the following disclosures in MD&A:
 - The aggregate intrinsic value of all outstanding options based on the midpoint of the estimated IPO price range.
 - Discuss the significant factors, assumptions and methodologies used in determining fair value for those options granted during the twelve months prior to the date of the most recent balance sheet.
 - Discuss 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.

Liquidity and Capital Resources, page 48

12. Please discuss material changes in the underlying drivers of your working capital changes (*e.g.*, cash receipts from the sale of goods and cash payments to acquire supplies and components for assembly or goods for resale), rather than merely describing items identified on the face of the statement of cash flows to provide a sufficient basis for a reader to analyze the change. Refer to Item 303(a) of Regulation S-K and Release 33-8350.

Contractual Obligations, page 48

13. Please revise your contractual obligations table to include deferred rent reflected in your balance sheet under GAAP, or tell us why the current disclosure complies with Item 303(a)(5) of Regulation S-K.

Business, page 50

Government Regulation, page 65

14. Revise to briefly describe the modifications described on page 69, and the basis for your determination that the modifications to your devices did not require a new 510(k) application.

Compensation Discussion and Analysis, page 82

15. You state that the compensation committee reviews and recommends to your board executive compensation and benefits policies. Please clarify the extent to which the entire board makes the final decisions on these matters. As part of this, discuss the role that Mr. Whitman, as CEO and Chairman of the board, plays in these decisions. For example, explain whether he votes on matters concerning his own compensation. Refer to Items 402(b)(2)(xv) and 407(e)(3) of Regulation S-K.

Objectives of Our Compensation Policy, page 82

16. We note that your compensation program “takes into consideration information available to us concerning the compensation practices of other companies with which we compete for executive talent.” Please expand to provide more detailed disclosure regarding the information, including the number of companies and their identities. Also, please reconcile the disclosure with your statement on page 83 that you do not engage in any process of formal benchmarking. See Item 402(b)(2)(xiv) of Regulation S-K.

Annual incentive bonus plan, page 84

17. We note that you have not provided a quantitative discussion of the company and individual performance objectives to be achieved in order for your executive officers to earn their cash-based incentive payments. Please provide such disclosure or, alternatively, tell us why you believe that the disclosure of such information would result in competitive harm such that the information could be excluded under instruction 4 to Item 402(b) of Regulation S-K. Further, qualitative goals generally need to be presented to conform to the requirements of Item 402(b)(2)(v). To the extent that it is appropriate to omit specific targets,

discuss how difficult it would be for the executive, or how likely it will be for the registrant, to achieve the target levels or other factors. Please see instruction 4 to Item 402(b).

Certain Relationships and Related Party Transactions, page 97

18. We note the first paragraph. Please confirm that you have disclosed all transactions required to be disclosed under Regulation S-K Item 404(a), and not just those that met the \$500,000 threshold.
19. For each transaction, please identify the benefit derived. For example, in the second paragraph under the caption "Transactions with Gerald Dorros, M.D." describe the conversion and other material terms of the notes. In the third paragraph, disclose that the expiration term for the warrants was May, 2007, and disclose the warrant exercise prices.
20. Please expand to provide the disclosure required by Items 404(b)(1)(ii) and 404(b)(1)(iv) of Regulation S-K.
21. Expand to briefly describe the conversion terms for the preferred stock identified on page 99.

Financial Statements, page F-1

22. Please update your financial information as required by Rule 3-12 of Regulation S-X.
23. We note that Schedule II – Valuation and Qualifying Accounts was not included in the filing. Please provide the disclosures to satisfy the requirements of Rule 12-09 of Regulation S-X, or tell us why you believe the information is not required.

Report of Independent Registered Public Accounting Firm, page F-2

24. Please request your auditors to include the city and state of issue in their report, consistent with Rule 2-02(a) of Regulation S-K.

Note 2. Summary of Significant Accounting Policies, page F-8

Concentration of Credit Risk, page F-10

25. We note that your policy is to record an allowance for doubtful accounts when specific collectibility matters arise. Under SFAS 5, you should recognize an allowance for doubtful accounts when it is probable and estimable.

Revenue Recognition, page F-10

26. With reference to the second paragraph on page 41, please tell us in greater detail about your arrangements with customers before and after 2005. Please address the following in your response:
- Discuss whether customers purchased the power consoles and related accessories prior to 2005.
 - Discuss the significant terms under which you make the power console and related accessories available to your customers during and after 2005.
 - Discuss who holds title to the console.
 - Tell us whether or not the power console and related accessories are required to operate your other products.
 - Tell us whether or not customers may purchase the console and related accessories from other vendors.
 - Discuss why you wrote down the value of the power consoles and related accessories by \$2.4 million in 2005 and how you determined the amount of the charge, consistent with Chapter 4 of ARB 43. In this regard, discuss how you are using or have used the written down inventory.
 - We note that you refer to the charge as an inventory obsolescence charge on page F-11. Please relate that description to your response above.
27. Further, we note from your website that the power console houses the main microprocessor and motor drive units of the SurgASSIST™ platform and “mediates all functions of the FlexShaft and Digital Loading Units®.” The power console also provides voice and text messages to the surgeon during the procedure. As such, it appears that the power console is an integral part of your product. In addition, we note from your website that your SurgASSIST™ product consists of the three items: the FlexShaft, the power console, remote control unit, disposable Digital Loading Units® and a mobile cart. Please discuss in sufficient detail how you account for these arrangements and why. Cite the accounting literature upon which you relied. Please also include a discussion of your consideration of SFAS 13, EITF 00-21 and 01-9 for these arrangements.

28. On page 41 you disclose that you make power consoles and related accessories available to institutions at a nominal charge or at no charge. On page F-10 you disclose that you sometimes recover discounts given on FlexShafts through higher unit pricing on the sale of reload cartridges. Please clearly describe your major revenue-generating products, services, or arrangements, consistent with paragraph 18 of EITF 00-21 and Current Accounting and Disclosure Issues in the Division of Corporation Finance, November 30, 2006, available on our website at <http://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf>. For major contracts or groups of similar contracts, disclose essential terms, including payment terms and unusual provisions or conditions.
29. As discussed in paragraph 14 of EITF 01-9, you should consider carefully whether any disclosures related to your incentives are necessary in "Management's Discussion and Analysis of Financial Condition and Results of Operations," required by Item 303 of Regulation S-K.
30. Identify contract elements permitting separate revenue recognition, and describe how they are distinguished. Explain how you determine the fair value used to allocate contract revenue among each separate element using relative fair value. Refer to Current Accounting and Disclosure Issues in the Division of Corporation Finance, November 30, 2006, available on our website at <http://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf>.
31. Disclose contingencies such as warranties and the related accounting policy. If applicable, provide the disclosures required by paragraph 14 of FIN 45.

Inventory, page F-11

32. We note your disclosure that market value is based on the lower of replacement cost or estimated net realizable value. Under Statement 6 of ARB 43, market should not be less than net realizable value reduced by an allowance for an approximately normal profit margin.

Stock-Based Compensation, page F-11

33. We note that you historically used the minimum value method for purposes of your pro forma disclosures under SFAS 123. Consistent with paragraph 85 of SFAS 123R, please delete your pro forma presentation for 2005 and 2004. Alternatively, explain to us why this disclosure is appropriate.

Net Loss Attributable to Common Shares, page F-14

34. Please tell us and disclose why you have presented the pro forma net loss per share information. Refer to Rule 11-01 of Regulation S-X.

Note 6. Redeemable Convertible Preferred Stock, page F-17

35. Please disclose how you are accounting for and measuring the accretion of the preferred stock. We note that you reflect an amount for the accretion of the preferred stock in your statements of operations.
36. Please provide us with your analysis of the accounting for the redeemable preferred stock and warrants. Include a discussion of your consideration of SFAS 133 and EITF 00-19. Include a discussion of your accounting for these instruments in your disclosure.
37. Please disclose all of the significant terms of the preferred stock, consistent with paragraph 4 of SFAS 129, including conversion terms, terms of adjustment to the conversion price and the definition of a qualified IPO.
38. Please disclose the significant assumptions used to value the warrants issued with the Series A and D preferred stock consistent with paragraph 64 of SFAS 123R.
39. In the last paragraph on page F-18 you refer to the "Series A, B, and C common stock or other securities." Please revise or clarify.

Note 7. Common Stock, page F-19

40. On page F-12 you disclose that the value of your common stock ranged from \$0.28 to \$0.48 during 2006. Please tell us why holders of your warrants exercised those warrants for 4,456,242 common shares at a price of \$0.737 per share in 2005. Discuss whether the value of the company decreased between May 2005 and January 2006.

Warrants, page F-19

41. Please disclose all of the significant terms of the warrants, including their anti-dilution provisions, consistent with paragraph 64 of SFAS 123R.

Note 8. Stock Option Plan, page F-20

42. Please note that we are deferring any final evaluation of your stock compensation recognized until the estimated offering price is specified, and we may have further comments in that regard when you file the amendment containing that information.

Note 11. Commitments and Contingencies, page F-24

43. Please tell us the nature of the legal reserve of \$285,000 shown on page F-16 and provide any disclosures required by SFAS 5.

Note 13. License Agreements, page F-26

44. Please disclose the term of the license agreement.

Note 15. Subsequent Events (dated May 3, 2007), page F-27

45. We note the disclosure on page 103 relating to the convertible senior secured promissory notes you issued in March 2007 and that you may incur liquidated damages or penalties pursuant to a registration rights agreement. Please refer to the guidance provided in the Division of Corporation Finance's Current Accounting and Disclosure Issues Outline at <http://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf> and address the following:
- Please provide us with a clear description of all the material terms of the convertible promissory notes, including but not limited to, the conditions under which you or the holder may convert into common shares, the conversion rate and all conditions that may result in adjustments to that rate, as well as any conditions under which you or the holder may accelerate payment of the notes. Likewise, please clearly describe the material terms of the registration rights agreements, including the conditions under which you would be required to pay liquidated damages.
 - Tell us how you have applied the guidance in EITF 05-02, EITF 00-19 and SFAS 133 in evaluating whether the various features of your convertible promissory notes, including for example, the conversion feature, the redemption feature, etc., are embedded derivatives that you should separate from the debt host, record as liabilities and account for at fair value under SFAS 133. Please provide us with your analysis of each of

these features under paragraphs 12-32 of EITF 00-19. As an initial step, please address whether the notes would meet the definition of conventional convertible debt in paragraph 4 of EITF Issues 00-19 and 05-2.

46. When you update your financial statements, please tell us and disclose the method and significant assumptions used to determine the fair value of the options and warrants, consistent with paragraph 64 of SFAS 123R, including how you determined the underlying fair value of your common stock.
47. When you update your financial statements, please disclose the significant terms of your convertible note agreement, including how the agreement defines a qualified initial public offering or qualified sale of the company and terms of anti-dilution adjustments. The disclosure should allow an investor to determine whether the offering that is the subject of the filing will be a qualified public offering under the agreement.

Exhibit 23.1

48. Please provide a currently dated and signed consent from your independent registered public accounting firm prior to requesting effectiveness. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

Exhibits

49. Please note that comments on your application for confidential treatment will be sent under separate cover.

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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 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 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