

Mail Stop 6010

August 7, 2007

Corporation Service Company  
As Agent for TopSpin Medical, Inc.  
2711 Centerville Road, Suite 400  
Wilmington, DE 19808

**Re: TopSpin Medical, Inc.  
Registration Statement on Form SB-2  
Filed July 11, 2007  
File No. 333-144472**

Dear Sir/Madam:

We have limited our review of your registration statement to those issues we have addressed in our 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Fee Table

1. Regarding your revisions in response to prior comments 1 and 2:
  - Please clarify that you are registering the common stock underlying the warrants and bonds in connection with the selling security holders' offer and sale of the warrants and bonds. You need to do this because a sale of both the convertible/exercisable security *and* the underlying security is deemed to be taking place when the selling security holders' sell the convertible/exercisable security. Your fee table then should *separately* show that you are registering

the underlying common stock for purposes of permitting the selling security holders to offer and sale the underlying common stock.

- With a view toward clarified disclosure, please tell us the purpose of the parenthetical phrase in footnote 2. Do you intend the registration statement to include the transaction in which bond holders convert their securities? Is section 3(a)(9) of the Securities Act unavailable for that conversion?
- Refer to footnote 7. With a view toward clarified disclosure, please tell us why you are registering the resale of the common stock underlying the warrants held by security holders who purchase the warrants in the offering registered by this SB-2? Why is section 4(1) of the Securities Act inapplicable to those subsequent purchasers? Do you mean that you intend to register your sale of the underlying common stock upon exercise of the warrants by security holders who purchase the warrants in the offering registered by this SB-2?

#### Cover Page

2. Please revise your reference here and throughout to the bonds and warrants being listed on the TASE to reflect your response to prior comment 10 that the listing will occur immediately after the effective time of the registrations statement.
3. We note from the prospectus cover page of your current direct public offering that you expected that the series 3 warrants would be listed on the TASE. However, it appears from page F-60 of the present registration statement that the Series 3 warrants are not so listed. Please tell us the reason for the delay in listing and whether those or other factors could affect the timing of the listing of your series 2 warrants and the convertible bonds. Also, please tell us about all conditions that remain until the securities will be listed on the TASE. After we receive your response to these comments, we will continue to evaluate whether it is premature to register this offering.
4. When referring to the title of the warrants, please include the exercise price and expiration date.

#### Risk Factors, page 6

5. Please tell us why the series 2 warrants are not subjected to the resale restrictions related to the series 3 warrants mentioned on page 13 of the prospectus related to your direct public offering.

#### Notices regarding the Series 2 Warrants and Convertible Bonds ..., page 12

6. It appears from the disclosure that certain notices required to be delivered to U.S. noteholders and the Commission under Section 313 of the Trust Indenture Act will only be in Hebrew. Given that the indenture that is filed as an exhibit to the

registration statement is required to be in the English language and the indenture requires the delivery of these notices, please advise as to why U.S. holders and the Commission will not receive these notices in the English language.

7. Please reconcile the disclosure in this risk factor that the notice will be in Hebrew with the disclosure on page 69 that the notice will be in English and Hebrew.

Plan of Operation, page 58

8. Please reconcile the disclosure on page 59 that you can satisfy your cash requirements and not have to raise additional funds in the next twelve months with the status of your best efforts offering that began in June 2007.

Series A Convertible Bonds, page 70

9. Please tell us about the status of plans for the repayment fund mentioned in your June 11, 2007 letter to us. Also tell us about any successor plans.

Series 2 Warrants, page 68

10. Please describe the effect of section 11.1 of the warrant certificate. Also, discuss the voting procedures.
11. Please tell us where you have filed the Third Supplement mentioned in section 11.2 of the series 2 warrants.

Convertible Bonds, page 70

12. Please tell us how you addressed prior comment 6 regarding the interest forfeiture.

Mandatory Conversion of the Convertible Bonds, page 72

13. Please tell us which provision of the convertible bonds supports your disclosure in the last sentence of the second paragraph on page 73.

United States Federal Income and Estate Tax Considerations, page 77

14. Please reconcile the last sentence of the first paragraph on page 77 that this summary does not describe the effects of any applicable foreign laws with your response to prior comment 7 that there are no Israeli tax consequences for U.S. purchasers of these securities. Also, please revise your disclosure to clarify which counsel's opinion cover that conclusion in your response to prior comment 7.

15. Please refer to prior comment 8. It is inappropriate to disclaim your responsibility for your disclosure. Please revise your statement on page 77 about “general purposes only” and your statements on page 85 about “general information only” and “is not tax advice.”
16. From your disclosure on pages 77 and 86 that counsel opined as to “certain” material federal tax consequences, it is unclear whether counsel has opined as to all of the consequences included in your disclosure. Please revise for clarity.
17. Please note that if counsel cannot opine on a material tax matter, it must:
  - clearly state that it is not able to opine,
  - explain why it is not able to opine on that tax consequence, and
  - explain the possible outcomes.

Also, your disclosure should include risks to investors of that tax consequence.

We note, for example:

- on page 77 the assumption that the bonds were issued on November 23, 2006 for United States tax purposes,
- on page 78, your disclosure that the bonds are expected to be subject to the contingent payment debt regulations,
- the first sentence under “Exercise of Warrants” on page 78 regarding what the tax consequences “should” be, and
- the first full paragraph on page 82.

#### Treatment of the Convertible Bonds, page 78

18. Please describe which payments on your bonds are deemed to be “contingent” and which are “noncontingent.”
19. Refer to the first paragraph on page 79. Please quantify the difference between the issue price and the stated redemption price at maturity of your bonds.

#### Selling Security Holders, page 90

20. Your response to prior comment 12 does not demonstrate how the presence of broker-dealers whose business is the buying and selling of securities could permit this transaction to be objectively viewed as a secondary offering rather than a primary offering. If this transaction is a primary offering, you should:
  - file the registration statement for the “resale” offering at the time of each exercise and conversion because you are not eligible to conduct the offering on a delayed or continuous basis under Rule 415(a)(1)(x);

- register the transaction on a form that you can use for a primary offering;
  - identify the selling shareholders as underwriters; and
  - include the fixed price at which the underwriters will sell the securities for the duration of the offering.
21. Please provide a chart that reconciles the public float mentioned in response 13 with the public float mentioned in response 19 of your March 26, 2007 response letter.
22. Please provide us your calculation of the market value of your public float per Regulation S-B Item 10(a).

Payments made to Poalim IBI, page 97

23. Refer to the last sentence of footnote 4. Please tell us the circumstances in which you may only receive a portion of the proceeds at a given time.

Exhibits, page II-4

24. Please ensure that your incorporation by reference is accurate. For example, please verify the location of the series 2 warrants that you incorporate by reference.
25. Please file the securities purchase agreement governing your sale of the offered securities to the original purchasers.
26. We note your response to prior comment 13. Please tell us the basis for your conclusion that a co-trustee under section 310(a)(3) of the Trust Indenture Act need not file a Statement of Eligibility. Cite all authority on which you rely.

Exhibit 5

27. We note the reference to “all applicable documents” in clause (iii) in the third paragraph. Please tell us what documents are intended to be included in that phrase and how those documents differ from the bond and warrant certificate and the indenture.

Exhibits 8.1 and 8.2

28. Please file counsel’s consent to the prospectus discussion of its opinion and to being named in the registration statement.

Exhibit 8.2

29. The opinion you file as an exhibit should not assume conclusions of law that are a necessary requirement of the ultimate opinion given. We note the assumption regarding due execution and delivery of documents. Please tell us why the assumption is necessary for the opinion given, which specific documents are at issue, and the consequences if the actual facts differ from the assumed facts.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of any 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 a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the

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Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement.

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.

Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3617 with any questions.

Sincerely,

Russell Mancuso  
Branch Chief

cc (via fax): Robert B. Murphy, Esq.