

Via Facsimile and U.S. Mail
Mail Stop 6010

December 28, 2007

Harold E. Selick, Ph.D.
Chief Executive Officer
Threshold Pharmaceuticals, Inc.
1300 Seaport Boulevard
Redwood City, CA 94063

Re: Threshold Pharmaceuticals, Inc.
Form 10-K for Fiscal Year Ended December 31, 2006
Filed March 15, 2007
File No. 001-32979

Dear Dr. Selick:

We have limited our review of your filing to those issues we have addressed in our comments. Please revise your Form 10-K for the fiscal year ended December 31, 2006 in response to comment one. If you disagree, we will consider your explanation as to why our comment is inapplicable. In comments two and three, we 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 filings. 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.

Form 10-K – December 31, 2006

Item 8. Financial Statements And Supplementary Data, page 58

Report of Independent Registered Public Accounting Firm, page 59

1. PricewaterhouseCoopers' report included in the filing does not cover the "Cumulative Period from October 17, 2001 (date of inception) to December 31, 2006. Please have PricewaterhouseCoopers provide you a revised report covering this period and include it in the filing as required by rule 2-05 of Regulation S-X.

Balance Sheet, page 61

2. Please explain to us what consideration you gave to the guidance in paragraph 74 of SFAS 123R in your decision to continue to include as a separate “contra-equity” account the line item “Deferred stock-based compensation.”

Note 2 – Net Loss per Share, page 70

3. Please explain to us how the shares included in this calculation in the line item “Less: Weighted-average shares subject to repurchase” in this document and the amounts included in your Form 10-Q for September 30, 2007 in a similar note on page 7 of that document reflect the assertion made in note 8 on page 75 that there were “no restricted awards subject to the Company’s right or repurchase.” If these represent other shares that are similarly subject to repurchase, please provide to us a discussion of those shares. Also provide to us your analysis under the applicable authoritative literature that describes the treatment applied to the repurchase feature of these shares including the specific terms of the repurchase.

* * * *

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include 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 your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

Harold E. Selick, Ph.D.
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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 filings or in response to our comments on your filings.

You may contact James Peklenk, Staff Accountant, at (202) 551-3661, or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant