

Via Facsimile and U.S. Mail
Mail Stop 6010

September 17, 2007

Neil M. Kurtz
President and Chief Executive Officer
TorreyPines Therapeutics, Inc.
11085 North Torrey Pines Road, Suite 300
La Jolla, CA 92037

Re: TorreyPines Therapeutics, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2006
Filed March 29, 2007
File Number: 000-25571

Dear Mr. Kurtz:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with additional information so we may better understand your disclosures. 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.

1. Organization and Summary of Significant Accounting Policies, page F-7

Purchased Patents, page F-8

1. Your disclosure in note 2 indicates that you wrote off to expense the in process research and development for each of the projects associated with these patents because no alternative future use exists for these projects. Please tell us why capitalizing the cost of the patents was appropriate under GAAP. Please refer to paragraph 11.c. of SFAS 2.

5. Significant Arrangements, page F-15

Eli Lilly and Company, page F-16

2. Please provide us in disclosure type format the amount of the milestone payments associated with this agreement and the events that would trigger these payments. Also tell us why you do not include as a contractual obligation in your contractual obligation table or otherwise discuss as part of that table this and the other milestone obligated agreements that include any potential/expected payments in the near term.

* * * *

Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

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 filing or in response to our comments on your filing.

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You may contact Vanessa Robertson, Staff Accountant, at (202) 551-3649 or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674 if you have any 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