

Mail Stop 6010

July 16, 2008

Stephen Davis
Chief Executive Officer
Neurogen Corporation
35 Northeast Industrial Road
Branford, CT 06405

**Re: Neurogen Corporation
Amendment No. 1 to Registration Statement on Form S-3
Filed July 1, 2008
File Number 333-150585**

Dear Mr. Davis:

We have limited our review of your filing 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Amendment No. 1 to Form S-3

1. We note our prior Comment 7 and your response. The first bullet of that comment asked you to tell us the number of shares outstanding prior to the private placement transaction held by persons other than selling stockholders, affiliates of the company, and affiliates of the selling shareholders. While you have provided this information as of June 13, 2008, we were unable to locate information regarding ownership before the April 2008 private placement. Supplementally, please provide us with this information.

2. We note your response to Comment 12. Given the size relative to the number of shares outstanding held by non-affiliates, the nature of the offering and the selling security holders, the transaction appears to be a primary offering. Because you are not eligible to conduct a primary offering on Form S-3 you are not eligible to conduct a primary at-the-market offering under Rule 415(a)(4).
 - Please file a registration statement for the “resale” offering at the time of each conversion because you are not eligible to conduct the offering on a delayed or continuous basis under Rule 415(a)(1)(x);
 - Please identify the selling shareholders as underwriters in the registration statement; and
 - Please include the price at which the underwriters will sell the securities.

* * *

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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 this action 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.

Stephen Davis
Neurogen Corporation
July 16, 2008
Page 3

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 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.

Please contact Rose Zukin at (202) 551-3239 or me at (202) 551-3710 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: B. Shayne Kennedy, Esq.
Wesley C. Holmes, Esq.
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