Mail Stop 6010

July 3, 2007

Harry S. Palmin President and Chief Executive Officer Novelos Therapeutics, Inc. One Gateway Center, Suite 504 Newton, Massachusetts 02458

Re: Novelos Therapeutics, Inc. Registration Statement on Form SB-2, Amendment 2 Filed June 26, 2007 File No. 333-143263

Dear Mr. Palmin:

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.

FORM SB-2

1. We note that you are registering the sale of 23,400,000 shares. 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).

Harry S. Palmin Novelos Therapeutics, Inc. July 3, 2007 Page 2

If you disagree with our analysis, please advise the staff of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made under Rule 415(a)(1)(i). In your analysis, please address the following among any other relevant factors:

- The number of selling shareholders and the percentage of the overall offering made by each shareholder;
- The date on which and the manner in which each selling shareholder received the shares and/or the overlying securities;
- The relationship of each selling shareholder with the company, including an analysis of whether the selling shareholder is an affiliate of the company;
- Any relationships among the selling shareholders;
- The dollar value of the shares registered in relation to the proceeds that the company received from the selling shareholders for the securities, excluding amounts of proceeds that were returned (or will be returned) to the selling shareholders and/or their affiliates in fees or other payments;
- The discount at which the shareholders will purchase the common stock underlying the convertible securities (or any related security, such as a warrant or option) upon conversion or exercise; and
- Whether or not any of the selling shareholders is in the business of buying and selling securities.

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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 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. Harry S. Palmin Novelos Therapeutics, Inc. July 3, 2007 Page 3

Please contact Greg Belliston at (202) 551-3861 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler Assistant Director

cc: Paul Bork, Esq. Foley Hoag LLP 155 Seaport Boulevard Boston, Massachusetts 02110