

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Post-Effective Amendment No. 3 to Form SB-2 on  
FORM S-1  
REGISTRATION STATEMENT  
*Under*  
*THE SECURITIES ACT OF 1933*

**NOVELOS THERAPEUTICS, INC.**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**04-3321804**  
(I.R.S. employer  
identification number)

**One Gateway Center  
Suite 504  
Newton, Massachusetts 02458  
(617) 244-1616**  
(Address and telephone number of principal executive offices)

**Harry S. Palmin**  
**President and Chief Executive Officer**  
**Novelos Therapeutics, Inc.**  
**One Gateway Center, Suite 504**  
**Newton, Massachusetts 02458**  
**(617) 244-1616**  
(Name, address and telephone number of agent for service)

**Copies to:**  
**Paul Bork, Esq.**  
**Foley Hoag LLP**  
**155 Seaport Boulevard**  
**Boston, Massachusetts 02110**  
**(617) 832-1000**

**Approximate date of commencement of proposed sale to the public:** Not applicable.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If the Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer   
Non-accelerated filer  (Do not check if a smaller reporting company)

Accelerated filer   
Smaller reporting company

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## **DEREGISTRATION OF UNSOLD SECURITIES**

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On April 6, 2006, Novelos Therapeutics, Inc. (the "Company") filed a Registration Statement on Form SB-2 (File No. 333-133043) with the Securities and Exchange Commission (the "Commission"), which was declared effective on April 19, 2006 and subsequently amended by Post-Effective Amendment No. 1 and Post-Effective Amendment No. 2 filed on November 17, 2006 and March 21, 2007, respectively (the "Registration Statement"). The Registration Statement registered the resale from time to time, of 34,285,449 shares (the "Shares") of the Company's common stock, par value \$0.00001 per share. The Shares were registered to permit resales of such Shares by the selling stockholders, as named in the Registration Statement, who acquired Shares, preferred stock convertible into Shares and warrants to purchase Shares in connection with the Company's private placements in 2005 and 2006.

In accordance with the undertaking of the Company contained in the Registration Statement pursuant to Item 512 of Regulation S-K, the Company is filing this Post-Effective Amendment No. 3 to the Registration Statement to deregister the Shares that were previously registered under the Registration Statement, but remain unsold as of the date hereof. As of the date of this filing, to the best of the Registrant's knowledge based on the information available to it, 26,573,344 Shares remain unsold under the Registration Statement. The Company is seeking to deregister these Shares because its obligation to keep the Registration Statement effective pursuant to the terms of its registration rights agreements with the selling stockholders has terminated with respect to all the Shares except 2,727,200 shares issuable upon exercise of warrants expiring on August 9, 2008. The Company plans to satisfy this obligation by filing a new registration statement covering such shares. The Registration Statement is hereby amended to reflect the deregistration of these 26,573,344 Shares.

