

Via EDGAR

July 12, 2007

Mr. Jeffrey Riedler
Assistant Director
Division of Corporation Finance - Mail Stop 6010
United States Securities and Exchange Commission
Washington, D.C. 20549

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

Dear Mr. Riedler:

Set forth below are our responses, on behalf of Novelos Therapeutics, Inc. (the "Company"), to the comments contained in the letter of the staff (the "Staff") of the Division of Corporation Finance of the Securities and Exchange Commission dated July 3, 2007 to Mr. Harry Palmin, Chief Executive Officer of the Company (the "Comment Letter"), with respect to the above-referenced filing. For your convenience, we have repeated the Staff's comment below in bold face type. Except as otherwise indicated, all statements contained herein concerning factual matters relating to the Company are based on information provided to us by the Company.

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).**

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;**
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- **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.**

The Company believes that this offering is a “true” secondary offering that is eligible to be made on a shelf basis under Rule 415(a)(1)(i). The limited circumstances under which the Staff has taken the position that an offering styled as a secondary offering is really a disguised primary offering made on behalf of the issuer entail situations in which the selling stockholders were acting as a conduit for the issuer or where the securities sold were deemed to be of a “toxic” nature such as so called “death spiral” convertible securities or equity lines which feature “at the market” conversions or issuances. Relevant factors include the length of time the selling stockholders have held their shares, the circumstances under which the selling stockholders received their shares, the selling stockholders’ relationship to the issuer, the amount of shares involved, whether the selling stockholders are in the business of underwriting securities and whether the securities feature “at the market” conversions or issuances.

We do not believe that the facts and circumstances involved in this offering bear any resemblance to those outlined above. The following is a summary of the facts and circumstances surrounding the offering of the shares by each selling stockholder covered by the Form SB-2, as well as the basis for the Company’s determination that the securities do not have provisions which would deem them as “toxic” and that each selling stockholder is not acting as a conduit for the Company.

A. THE SECURITIES ISSUED BY THE COMPANY ARE NOT “TOXIC”

On May 2, 2007 the Company sold 1,500 shares of the Company’s Series B Convertible Preferred Stock (the “Series B Preferred Stock”) and warrants (the “Warrants”) to purchase 7,500,000 shares of the Company’s common stock, par value \$.00001 per share (“Common Stock”) to (i) Xmark Opportunity Fund, L.P. (“Xmark LP”), Xmark Opportunity Fund, Ltd. (“Xmark Ltd”), Xmark JV Investment Partners LLC (“Xmark LLC” and together with Xmark LP and Xmark Ltd, the “Xmark Entities”), (ii) Caduceus Master Fund Limited, Caduceus Capital II, L.P., UBS Eucalyptus Fund, L.L.C., PW Eucalyptus Fund, Ltd. and HFR SHC Aggressive Master Trust, entities associated with Orbimed Advisors (collectively, the “Orbimed Entities”), (iii) Knoll Capital Fund II Master Fund, Ltd. and Europa International, Inc. (collectively, the “Knoll Entities”), and (iv) Hunt BioVentures, L.P. (“Hunt”) (the Xmark Entities, Orbimed Entities, Knoll Entities and Hunt, collectively, the “Series B Purchasers”) in a private placement (the “Private Placement”). The conversion price of the Series B Preferred Stock and the exercise price of the Warrants are fixed at \$1.00 and \$1.25, respectively. These prices do not change as a result of any change in the market price of the Company’s Common Stock nor as a result of any subsequent issuance of Common Stock at a price less than the applicable conversion or exercise price. The only adjustment in price occurs in the event of a stock dividend, stock split or similar action which affects all outstanding shares of Common Stock equally.

Although both the conversion price of the Series B Preferred Stock and the exercise price of the Warrant were less than the closing price of the Company’s Common Stock on May 2, 2007, the conversion price and the exercise price reflect the results of the full negotiation of the terms of the Series B Preferred Stock and the Warrants which provide for mandatory conversion and forced exercise, respectively as described below. If there is an effective registration statement covering the shares of common stock underlying the Series B Preferred Stock and the volume weighted average price (“VWAP”), as described more fully in the Series B Certificate of Designations, of the Company’s common stock exceeds \$2.00 for 20 consecutive trading days, then the outstanding Series B Preferred Stock will automatically convert into common stock at the conversion price then in effect. In addition, if there is an effective registration statement covering the shares underlying the Warrants and the VWAP of the Company’s common stock exceeds \$2.25 for 20 consecutive trading days, then on the 31st day following the end of such period any remaining Warrants for which a notice of exercise was not delivered shall no longer be exercisable and shall be converted into a right to receive \$.01 per share. The Company believes that this mandatory call provision significantly limits the value of the Warrants.

The Company understands that the Series B Purchasers are viewed in the capital markets both as long term investors in the biopharmaceutical space and as investors that do not engage in trading activities to which the Commission deems manipulative or otherwise illegal. The Series B Purchasers engaged in an extensive due diligence exercise regarding the Company's business, intellectual property assets and management evidencing a long term investment perspective rather than an immediate monetization objective inherent in the "toxic" issuances.

B. THE NUMBER OF SHARES REGISTERED IS NOT SO LARGE AS COMPARED TO THE NUMBER OF
OUTSTANDING SHARES HELD BY NON-AFFILIATES

The Series B Purchasers

The Series B Purchasers are seeking to register 15,000,000 shares of Common Stock issuable upon conversion of the Series B Preferred Stock that they purchased in the Private Placement. The total number of outstanding shares of Common Stock held by non-affiliates is approximately 36,922,000 shares. All such shares have either been registered under the Securities Act of 1933, as amended (the "Act"), or are transferable without restrictions under the Act because they have been held for at least two years. Thus, the 15,000,000 shares of Common Stock that the Series B Purchasers are seeking to register represent approximately 40% of the Company's issued and outstanding shares of Common Stock which are freely tradeable and held by non-affiliates. In addition, since the conversion price of the Series B Preferred Stock is subject to adjustment only for stock dividends, stock splits or similar capital reorganizations, this percentage would not be subject to increase.

The Series B Purchasers are also seeking to register 7,500,000 shares of Common Stock which are issuable upon exercise of the Warrants. The Warrants have an exercise price of \$1.25 per share and expire in May 2012. The additional 7,500,000 shares of Common Stock that the Series B Purchasers are seeking to register represent approximately 20%, and when combined with the 15,000,000 shares underlying the Series B Preferred Stock, 60% of the issued and outstanding shares of Common Stock which are freely tradeable and held by non-affiliates. The Warrant exercise price and/or number of Warrants is subject to adjustment only for stock dividends, stock splits or similar capital reorganizations so that the rights of the Warrant holders after such event will be equivalent to the rights of warrant holders prior to such event. Therefore, as in the case of the Series B Preferred Stock, the number of shares of Common Stock issuable upon exercise of the Warrants would not be increased in the event of future issuances of the Company's stock.

The Xmark Entities seek to register the offer and sale of an aggregate of 6,000,000 shares of Common Stock pursuant to the Form SB-2. The shares offered by the Xmark Entities and the percentage of those shares, for the individual entities as well as the Xmark Entities as a whole, in relation to the total shares offered is shown in the following table:

Selling Stockholder	Shares Underlying			Portion of Offering
	Series B Preferred Stock	Warrants	Total Shares	
Xmark Opportunity Fund, L.P.	1,000,000	500,000	1,500,000	6.4%
Xmark Opportunity Fund, Ltd.	2,000,000	1,000,000	3,000,000	12.8%
Xmark JV Investment Partners LLC	1,000,000	500,000	1,500,000	6.4%
Total Xmark Entities	4,000,000	2,000,000	6,000,000	25.6%

The Orbimed Entities seek to register the offer and sale of an aggregate of 7,500,000 shares of Common Stock pursuant to the Form SB-2. The shares offered by the Orbimed Entities and the percentage of those shares, for the individual entities as well as the Orbimed Entities as a whole, in relation to the total shares offered is shown in the following table:

Selling Stockholder	Shares Underlying			Portion of Offering
	Series B Preferred Stock	Warrants	Total Shares	
Caduceus Capital Master Fund Limited	2,000,000	1,000,000	3,000,000	12.9%
Caduceus Capital II, L.P.	1,300,000	650,000	1,950,000	8.3%
UBS Eucalyptus Fund, L.L.C.	1,300,000	650,000	1,950,000	8.3%
HFR SHC Aggressive Master Trust	250,000	125,000	375,000	1.6%
PW Eucalyptus Fund, Ltd.	150,000	75,000	225,000	1.0%
Total Orbimed Entities	5,000,000	2,500,000	7,500,000	32.1%

The Knoll Entities seek to register the offer and sale of an aggregate of 6,000,000 shares of Common Stock pursuant to the Form SB-2. The shares offered by the Knoll Entities and the percentage of those shares, for the individual entities as well as the Knoll Entities as a whole, in relation to the total shares offered is shown in the following table:

Selling Stockholder	Shares Underlying			Portion of Offering
	Series B Preferred Stock	Warrants	Total Shares	
Knoll Capital Fund II Master Fund, Ltd.	2,000,000	1,000,000	3,000,000	12.8%
Europa International, Inc.	2,000,000	1,000,000	3,000,000	12.8%
Total Knoll Entities	4,000,000	2,000,000	6,000,000	25.6%

Hunt seeks to register the offer and sale of an aggregate of 3,000,000 shares of Common Stock pursuant to the Form SB-2. Of these 3,000,000 shares, 2,000,000 are issuable upon conversion of the Company's Series B Preferred Stock and 1,000,000 are issuable upon exercise of the Warrants. The 3,000,000 shares that Hunt seeks to register represent 12.8% of the overall offering.

The shares are being registered pursuant to registration rights granted to each of the Series B Purchasers in connection with the Private Placement. No other agreement or understanding exists between the Company, on the one hand, and any of the Series B Purchasers, on the other hand, with respect to the registration of their shares.

Prior to the consummation of the Private Placement, none of the Series B Purchasers were affiliated with the Company and there were no prior securities transactions between the Company and any of the Series B Purchasers. In connection with the Private Placement, the Xmark Entities were granted the right to have their designee elected to the Board of Directors of the Company (the "Board"). In addition, the Xmark Entities and the Orbimed Entities, together, were granted the right to designate one observer to attend all meetings of the Board, committees thereof and access to all information made available to members of the Board. Because of this potential access to material non-public information, the Company does not expect that these Series B Purchasers will be active in the market for the Company's stock unless they are confident that all material information regarding the Company has been made public. The Company believes that rights to designate directors/observers are customarily given to fundamental investors and that, in this instance, such rights are consistent with a longer term investment perspective for the Series B Purchasers.

As described above, certain of the Series B Purchasers are part of investment fund groups under common control. Other than those relationships, the Company is not aware of any other relationships between the selling stockholders.

Placement Agents

Rodman & Renshaw LLC ("Rodman") and VFT Special Ventures, Ltd. ("VFT") seek to register the offer and sale of 900,000 shares of Common Stock pursuant to the Form SB-2. These shares are issuable upon exercise of common stock purchase warrants acquired as partial payment for the placement fee payable for their services in the Private Placement. Of the 900,000 shares, 765,000 shares are issuable to Rodman upon exercise of its common stock purchase warrant and 135,000 are issuable to VFT upon exercise of its common stock purchase warrant. The 765,000 shares and 135,000 shares that Rodman and VFT seek to register represent 3.3% and 0.6% of the overall offering, respectively.

Neither Rodman nor VFT is currently engaged by the Company to perform any services on its behalf. Neither Rodman nor VFT has the right to designate a director to the Board and their shares are being registered pursuant to registration rights granted to Rodman and VFT in connection with the Private Placement. No other agreement or understanding exists between the Company and Rodman or VFT with respect to the registration of their shares. Rodman acted as co-placement agent in connection with a private placement of common stock and common stock purchase warrants by the Company in March, 2006 and received common stock purchase warrants and a cash payment as compensation for its placement agent services. Rodman also provides research coverage on the Company and is a market maker in the Company's Common Stock.

C. THE DOLLAR VALUE OF THE SHARES REGISTERED IS NOT SO LARGE IN RELATION TO THE PROCEEDS THE COMPANY RECEIVED

The following table shows the dollar value of the securities being registered in relation to the proceeds that the Company received from the sale of the Series B Preferred Stock, excluding any payments made or required to be made to the selling stockholders or their affiliates. For purposes of this analysis, the “dollar value” is presented as the nominal market value of the underlying securities on the date of closing, plus the additional proceeds that will be received upon exercise of the common stock purchase warrants.

Gross proceeds from the sale of Series B Preferred Stock	\$ 15,000,000
Proceeds to be received upon exercise of Warrants at \$1.25	10,500,000
Payments - placement agent fees and expense reimbursements	1,152,695
Dividends to be paid through May 2, 2007	1,237,500
Net proceeds after required payments	\$ 23,109,805
Shares underlying Series B Preferred Stock	15,000,000
Shares underlying the Warrants	8,400,000
Total shares being offered	23,400,000
Closing market price of Common Stock on May 2, 2007	\$ 1.27
Nominal total market value of securities being offered	\$ 29,718,000
Nominal value as a percentage of net proceeds after required payments	129%

The dividends included in the above table have been calculated on the assumption that none of the shares of Series B Preferred Stock are converted into common stock within the first year following the closing of the sale of the Series B Preferred Stock and that a liquidation event does not occur.

The cash fees paid to the placement agents are included in the above table since the placement agents are also selling stockholders. If this amount was excluded, the net proceeds to the Company would be \$24,159,805. Correspondingly, if the placement agents' Warrants were excluded, the number of shares underlying the Warrants would decrease to 7,500,000 and the total shares offered would decrease to 22,500,000. Excluding the placement agent fees decreases the total nominal market value of the securities offered to \$28,575,000, the proceeds to be received upon exercise of the Warrants to \$9,375,000, and the net proceeds after required payment to \$23,034,805. This results in nominal value expressed as a percentage of net proceeds equal to approximately 124%.

As stated above, both the conversion price of the Series B Preferred Stock and the exercise price of the Warrants are fixed and do not change to reflect either changes in the market price of the underlying Common Stock or subsequent issuances of Common Stock at prices less than the conversion or exercise price, as the case may be. Therefore the “factor” of the selling stockholders purchasing the Common Stock at a discount is not relevant for this offering.

Although the Series B Purchasers regularly invest in securities, none of the Series B Purchasers are in the business of underwriting securities. Each of the Series B Purchasers represented in the Purchase Agreement that they did not purchase their shares with a “view to the resale or distribution” and therefore the Company believes that the Series B Purchasers are not acting as “conduit” for the Company. Also, given the nature of Rodman’s and VFT’s relationship with the Company, the small number of shares being offered by Rodman and VFT, the fact that Rodman and VFT have not entered into any agreements or understandings with any person to distribute such shares, the Company believes that, although Rodman’s business includes underwriting securities, neither Rodman nor VFT is acting as a conduit for the Company with respect to this offering.

In conclusion, since as described above, the securities sold to the selling stockholders are not “toxic” and the selling stockholders are not acting as conduits for the Company, we believe that the facts and circumstances compel the conclusion that the offering by the selling stockholders pursuant to the Registration Statement on Form SB-2 is “true” secondary offering eligible to be made on a shelf basis under Rule 415(a)(1)(i).

Should the Staff have any additional comments or questions, please direct such to me at (617) 832-1113 or in my absence to Amanda Kirouac at (617)-832-3091.

Very truly yours,

/s/ Paul Bork

Paul Bork

cc: Mr. Harry Palmin
Mr. Greg Belliston