SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

DATE OF REPORT (DATE OF EARLIEST EVENT REPORTED)
April 12, 2007

NOVELOS THERAPEUTICS, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN CHARTER)

DELAWARE(STATE OR OTHER JURISDICTION
OF INCORPORATION)

333-119366 (COMMISSION FILE NUMBER) **04-3321804**(IRS EMPLOYER
IDENTIFICATION NO.)

One Gateway Center, Suite 504, Newton, Massachusetts 02458 (ADDRESS OF PRINCIPAL EXECUTIVE OFFICES) (ZIP CODE)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: (617) 244-1616

NOT APPLICABLE (FORMER NAME OR FORMER ADDRESS, IF CHANGED SINCE LAST REPORT)

CHECK THE APPROPRIATE BOX BELOW IF THE FORM 8-K FILING IS INTENDED TO SIMULTANEOUSLY SATISFY THE FILING OBLIGATION OF THE REGISTRANT UNDER ANY OF THE FOLLOWING PROVISIONS:

WRITTEN COMMUNICATIONS PURSUANT TO RULE 425 UNDER THE SECURITIES ACT (17 CFR 230.425)

SOLICITING MATERIAL PURSUANT TO RULE 14a-12 UNDER THE EXCHANGE ACT (17 CFR 240.14a-12)

PRE-COMMENCEMENT COMMUNICATIONS PURSUANT TO RULE 14d-2(b) UNDER THE EXCHANGE ACT (17 CFR 240.14d-2(b))

PRE-COMMENCEMENT COMMUNICATIONS PURSUANT TO RULE 13e-4(c) UNDER THE EXCHANGE ACT (17 CFR 240.13e-4(c))

ITEM 1.01 ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT

Securities Purchase Agreement

On April 12, 2007, we entered into a securities purchase agreement (the "Purchase Agreement") with accredited investors whereby we agreed to sell 1,500 shares of a newly created series of our preferred stock, designated "Series B Convertible Preferred Stock", par value \$0.00001 per share (the "Series B Preferred Stock") and agreed to issue warrants to purchase 7,500,000 shares of our common stock for an aggregate purchase price of \$15,000,000. Pursuant to the purchase agreement, from and after the closing, Xmark Opportunity Fund, L.P., Xmark Opportunity Fund, Ltd. and Xmark JV Investment Partners LLC (collectively, the "Xmark Entities"), will have the right to designate one member to our Board of Directors. This right shall last until such time as the Xmark Entities no longer hold at least one-third of the Series B Preferred Stock issued to them at closing. In addition, the Xmark Entities, 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 (collectively, the "Lead Investors") will have the right to designate one observer to attend all meetings of our Board of Directors, committees thereof and access to all information made available to members of the Board. This right shall last until such time as the Lead Investors no longer hold at least one-third of the Series B Preferred Stock issued to them at closing.

As a condition to closing the preferred stock and warrant financing, the holders of our existing Series A preferred stock must exchange their shares of Series A preferred stock for shares of a new Series C convertible preferred stock, the rights and preferences of which are junior to the Series B preferred stock. As an inducement for the holders of the Series A preferred stock to exchange their shares, we expect to issue warrants to purchase shares of our common stock and pay a cash restructuring fee to holders of the Series A preferred stock.

Series B Preferred Stock

The shares of Series B Preferred Stock to be issued upon the closing of the preferred stock and warrant financing will be convertible into shares of our common stock any time after issuance at the option of the holder at \$1.00 per share of common stock. If there is an effective registration statement covering the shares of common stock underlying the Series B Preferred Stock and the VWAP, as defined in the Series B Certificate of Designations, of our 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. The conversion price will be subject to adjustment for stock dividends, stock splits or similar capital reorganizations.

The Series B Preferred Stock will have an annual dividend rate of 9%, payable semi-annually on September 30 and March 31. Such dividends may be paid in cash or in registered shares of the Company's common stock at the Company's option.

For as long as any shares of Series B Preferred Stock remain outstanding, we will be prohibited from (i) paying dividends to our common stockholders, (ii) amending our certificate of incorporation (except to increase the number of shares of authorized common stock to 150,000,000), (iii) issuing any equity security or any security convertible into or exercisable for any equity security at a price of \$1.00 or less or with rights senior to the Series B Preferred Stock (except for certain exempted issuances), (iv) increasing the number of shares of Series B Preferred Stock or issuing any additional shares of Series B Preferred Stock, (v) selling or otherwise disposing of all or substantially all our assets or intellectual property or entering into a merger or consolidation with another company unless we are the surviving corporation, the Series B Preferred Stock remains outstanding and there are no changes to the rights and preferences of the Series B Preferred Stock, (vi) redeeming or repurchasing any capital stock other than Series B Preferred Stock, (vii) incurring any new debt for borrowed money and (viii) changing the number of our directors.

Common Stock Purchase Warrants

The common stock purchase warrants to be issued to the investors upon closing will be exercisable for an aggregate of 7,500,000 shares of our common stock at an exercise price of \$1.25. The warrants will expire five years from the date of issuance. If after the first anniversary of the date of issuance of the warrant there is no effective registration statement registering, or no current prospectus available for, the resale of the shares issuable upon the exercise of the warrants, the holder may conduct a cashless exercise whereby the holder may elect to pay the exercise price by having us withhold, upon exercise, shares having a fair market value equal to the applicable aggregate exercise price. In the event of a cashless exercise, we would receive no proceeds from the sale of our common stock in connection with such exercise.

The warrant exercise price and/or number of warrants will be subject to adjustment 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.

If there is an effective registration statement covering the shares underlying the warrants and the VWAP, as defined in the warrant, of our 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.

Registration Rights Agreement

At the closing, the Company and the investors will execute a registration rights agreement which will require us to file with the Securities and Exchange Commission no later than 30 days following the closing of the transaction, a registration statement covering the resale of a number of shares of common stock equal to 100% of the shares issuable upon conversion of the preferred stock and exercise of the warrants as of the date of filing of the registration statement. The registration statement covering these shares must be declared effective by the Securities and Exchange Commission no later than 90 days following the closing (or in the event there is a review, no later than 120 days from the closing). We will be required to use our best efforts to keep the registration statement continuously effective under the Securities Act until the earlier of the date when all the registrable securities covered by the registration statement have been sold or the second anniversary of the closing. In the event we fail to file the registration statement or it is not declared effective within the timeframes specified by the Registration Rights Agreement, we will be required to pay to the Investors liquidated damages equal to 1.5% per month (but pro-rated on a daily basis for any period of less than a full month) of the aggregate purchase price of the preferred stock and warrants until we file the delinquent registration statement or the registration statement is declared effective, as applicable. We will be allowed to suspend the use of the registration statement for not more than 15 consecutive days or for a total of not more than 30 days in any 12 month period without incurring liability for the liquidated damages in certain circumstances.

Placement Agent Agreement

Upon the closing of the preferred stock and warrant financing we are obligated to pay Rodman & Renshaw LLC ("Rodman") a cash fee and issue Rodman warrants to purchase a total of 900,000 shares of our common stock with the same terms as the warrants issued to the investors.

We have agreed to indemnify Rodman from claims arising in relation to the services it provides to us in connection with this agreement.

ITEM 7.01 REGULATION FD DISCLOSURE

A copy of the press release issued by us on April 13, 2007 announcing the signing of the Purchase Agreement is filed as Exhibit 99.1 and is incorporated by reference.

ITEM 9.01 FINANCIAL STATEMENTS AND EXHIBITS

99.1

(c) Exhibits

Number Title

SIGNATURE

Press Release dated April 13, 2007 entitled "Novelos Therapeutics Announces \$15 Million Private Placement"

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: April 13, 2007 NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin

Harry S. Palmin

President and Chief Executive Officer

EXHIBIT INDEX

Number	Title
99.1	Press Release dated April 13, 2007 entitled "Novelos Therapeutics Announces \$15 Million Private Placement"

FOR IMMEDIATE RELEASE

NOVELOS THERAPEUTICS ANNOUNCES \$15 MILLION PRIVATE PLACEMENT

NEWTON, Mass., April 13, 2007 - Novelos Therapeutics, Inc. (OTCBB: NVLT), a biopharmaceutical company focused on the development of therapeutics to treat cancer and hepatitis, today announced that it has entered into a definitive agreement with institutional investors to raise \$15 million in gross proceeds through the sale of shares of a new series of its convertible preferred stock and warrants to purchase its common stock. Novelos has agreed to sell 1,500 shares of Series B convertible preferred stock, having a stated value equal to \$10,000 per share, a cumulative annual dividend of 9% of stated value and a conversion price of \$1.00 per share of common stock. The investors will also receive warrants, callable in certain circumstances, expiring in five years to purchase an aggregate of 7,500,000 shares of common stock at an exercise price of \$1.25 per share. The transaction is expected to close in seven to ten days, subject to the satisfaction of certain closing conditions.

The investors include Xmark Opportunity Funds, OrbiMed Advisors, and other selected institutional investors. Rodman & Renshaw, LLC is serving as the placement agent, and Emerging Growth Equities, Ltd is serving as the sub-placement agent for the transaction, and will receive a placement agent fee consisting of cash and warrants to purchase Novelos common stock at the closing of the transaction. The preferred stock and warrants will be issued in a private placement transaction under Regulation D of the Securities of Act of 1933. Novelos is required to file a registration statement covering the common stock underlying the preferred stock purchased by the investors and the common stock underlying the warrants within 30 days of the closing and to use its best efforts to obtain effectiveness within 90 days of the closing.

"We are very pleased to have these excellent institutional investors participate in the financing, which will provide funds for Novelos' current development program through mid-2008," said Harry Palmin, President and CEO of Novelos. "Furthermore, if all the warrants are exercised for cash, Novelos would receive about \$10 million of additional proceeds. Fundamentally, we continue to anticipate that our pivotal Phase 3 lung cancer trial will be fully enrolled by the end of the first quarter of 2008. Meanwhile, we expect earlier stage clinical trial results later this year."

About Novelos Therapeutics, Inc.

Novelos Therapeutics, Inc. is a biopharmaceutical company commercializing oxidized glutathione-based compounds for the treatment of cancer and hepatitis. NOV-002, the lead compound currently in Phase 3 development for lung cancer under a SPA and Fast Track, acts together with chemotherapy as a chemoprotectant and an immunomodulator. NOV-002 is also in Phase 2 development for chemotherapy-resistant ovarian cancer and early-stage breast cancer, and is in addition being developed for acute radiation injury. NOV-205 acts as a hepatoprotective agent with immunomodulating and anti-inflammatory properties. NOV-205 is in Phase 1b development for chronic hepatitis C non-responders. Both compounds have completed clinical trials in humans and have been approved for use in the Russian Federation where they were originally developed. For additional information about Novelos please visit www.novelos.com

COMPANY

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INVESTOR RELATIONS

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This news release contains forward-looking statements. Such statements are valid only as of today, and we disclaim any obligation to update this information. These statements are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, uncertainties related to the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, the completion of clinical trials, the FDA review process and other government regulation, our pharmaceutical collaborators' ability to successfully develop and commercialize drug candidates, competition from other pharmaceutical companies, product pricing and third-party reimbursement.