Prospectus Supplement No. 3 (To Prospectus dated December 15, 2005)

## 14,831,798 shares of common stock

## NOVELOS THERAPEUTICS, INC.

This prospectus supplement supplements the Prospectus dated December 15, 2005 relating to the resale of 14,831,798 shares of our common stock. This prospectus supplement should be read in conjunction with the Prospectus.

Unregistered Sale of Equity Securities

On March 7, 2006, we issued 11,154,073 shares of our common stock and warrants to purchase 8,365,542 shares of our common stock pursuant to a securities purchase agreement dated March 2, 2006 with 39 accredited investors for aggregate gross proceeds of \$15,058,005. The warrants are exercisable until March 7, 2011 at an exercise price of \$2.50 per share.

We are required to register the resale of the shares of common stock sold in the offering and issuable upon exercise of the warrants. We are required to file the registration statement with the SEC within 30 days after the closing and use our best efforts to cause the registration statement to be declared effective under the Securities Act of 1933, as amended (the "Securities Act"), within 120 days after the closing of the offering. We are 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 that the registration statement is not filed or declared effective when due, we are obligated to pay the investors liquidated damages in the amount of 1% of the purchase price for each month in which we are in default.

Oppenheimer & Co., Inc. acted as the placement agent and Rodman & Renshaw, LLC acted as the subplacement agent in connection with the offering. The aggregate commissions payable to Oppenheimer and Rodman & Renshaw in connection with the private placement were approximately \$1,000,000. In addition, we issued them warrants to purchase 669,244 shares of common stock identical to those sold to the investors.

The shares of common stock and common stock purchase warrants were offered and sold without registration under the Securities Act in reliance upon the exemption provided by Section 4(2) and/or Rule 506 of Regulation D. However, the securities purchase agreement requires us to subsequently register the resale of the shares with the SEC.

Investing in our common stock involves a high degree of risk. See risk factors beginning on page 4 of the Prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS SUPPLEMENT IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus supplement is March 7, 2006