

**Prospectus Supplement No. 6
(To Prospectus dated March 28, 2007)**

NOVELOS THERAPEUTICS, INC.

34,285,449 shares of common stock

This prospectus supplement supplements the Prospectus dated March 28, 2007, relating to the resale of 34,285,449 shares of our common stock. This prospectus supplement should be read in conjunction with the Prospectus.

Election of Director

On September 14, 2007 the board of directors of Novelos Therapeutics, Inc. (the "Company") increased the number of directors to eight and elected Stephen A. Hill, B.M. B.Ch., M.A., F.R.C.S., as chairman of the Company's board of directors. Upon his election, Dr. Hill received an option to purchase 150,000 shares of the Company's common stock at an exercise price of \$0.70 per share which represents the closing price of the Company's common stock on September 14, 2007 as reported on the Over the Counter Bulletin Board, vesting quarterly over two years. Dr. Hill will also receive a \$15,000 annual fee for his service as chairman as well as quarterly director fees and compensation for meeting attendance consistent with the Company's practice for other independent directors.

**Investing in our common stock involves a high degree of risk.
See Risk Factors beginning on page 7 of the Prospectus.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is September 19, 2007
