

**Prospectus Supplement No. 7
(To Prospectus dated June 7, 2012)**

NOVELOS THERAPEUTICS, INC.

**5,420,800 Units Consisting of
5,420,800 Shares of Common Stock and
Class A Warrants to Purchase 2,710,400 Shares of Common Stock
Class B Warrants to Purchase 5,420,800 Shares of Common Stock**

This prospectus supplement supplements the Prospectus dated June 7, 2012, relating to the sale of 5,420,800 units, consisting of 5,420,800 shares of our common stock, Class A Warrants to purchase up to 2,710,400 shares of our common stock and Class B Warrants to purchase up to 5,420,800 shares of our common stock. This prospectus supplement should be read in conjunction with the Prospectus.

Sale of Common Stock

On February 12, 2013, we entered into securities purchase agreements with investors to sell units consisting of an aggregate of 11,000,000 shares of our common stock, warrants to purchase up to an aggregate of 11,000,000 shares of our common stock at an exercise price of \$0.50 per share which will be exercisable for five years from issuance, and warrants to purchase up to an aggregate of 5,500,000 shares of our common stock at an exercise price of \$0.50 which will be exercisable for one year from issuance, for gross proceeds of \$5,500,000. The net proceeds of the offering, after deducting approximately \$385,000 in placement agent fees and approximately \$150,000 in other estimated transaction expenses, are estimated to be approximately \$5.0 million. Each unit consists of one share of common stock, a five-year warrant to purchase one share of common stock and a one-year warrant to purchase one-half share of common stock. The price per unit at which the units are being sold in the offering is \$0.50. In addition to cash fees, upon closing of the offering, the placement agent will receive a warrant to purchase 770,000 shares of our common stock at an exercise price of \$0.625 per share, expiring on February 4, 2018.

The offer and sale of the units has been registered under the Securities Act of 1933, as amended, pursuant to Registration Statement filed with the Securities and Exchange Commission (File No.333-185053).

**Investing in our common stock involves a high degree of risk.
See Risk Factors beginning on page 6 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 February 14, 2013
