

**Prospectus Supplement No. 1
(To Prospectus dated December 1, 2011)**

NOVELOS THERAPEUTICS, INC.

10,081,667 units, each consisting of one share of common stock and a warrant to purchase one share of common stock

This prospectus supplement supplements the Prospectus dated December 1, 2011, relating to the sale of 10,081,667 units, each unit consisting of one share of common stock and a warrant to purchase one share of common stock. This prospectus supplement should be read in conjunction with the Prospectus.

Underwriting Agreement and Warrants

On December 1, 2011, Novelos Therapeutics, Inc. (the "Company") entered into an Underwriting Agreement (the "Underwriting Agreement") with Rodman and Renshaw, LLC (the "Underwriter") relating to the issuance and sale by the Company of 10,081,667 units at a public offering price of \$0.60 per unit (\$0.57 per unit, net of underwriting discounts and commissions, to the Company). Each unit consists of one share of common stock and a warrant to purchase one share of common stock. The warrants are exercisable at \$0.60 per share and expire on December 6, 2016, the fifth anniversary of the date of issuance. Pursuant to the Underwriting Agreement, the Company granted the Underwriter a 45-day option to purchase up to an additional 1,512,250 units on the same terms to cover over-allotments, if any. The offer and sale of the shares and warrants, and the shares of common stock issuable upon exercise of the warrants, have been registered under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to the registration statement of which this prospectus supplement forms a part, which was declared effective on November 30, 2011. The sale of the units pursuant to the Underwriting Agreement closed on December 6, 2011 for proceeds, net of underwriting discounts and commissions of \$5,747,000.

The Underwriting Agreement contains customary representations, warranties and covenants of the parties and indemnification and contribution provisions under which the Company, on the one hand, and the Underwriter, on the other hand, have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

**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 December 7, 2011
