

**NOVUS THERAPEUTICS, INC.**  
**PROSPECTUS SUPPLEMENT NO. 1**  
**TO PROSPECTUS DATED APRIL 3, 2020**

This Prospectus Supplement No. 1 supplements and amends the prospectus dated April 3, 2020 (File No. 333-237379) filed by Novus Therapeutics, Inc. (the “*Company*”).

On September 14, 2020, the Company announced the acquisition of Anelixis Therapeutics, Inc. by way of merger (the “*Merger*”) and a concurrent offering of Series X1 Preferred Stock (“*Preferred Stock*”) for aggregate gross proceeds of approximately \$108.1 million (the “*Financing*”).

In the Merger, the Company issued approximately 3.8 million shares of Common Stock and issued approximately 146,765 shares of Preferred Stock.

In the Financing, the Company issued approximately 217,198 shares of Preferred Stock, which represented a pre-money valuation of the Company at approximately \$85 million.

Additional information regarding the Merger and Financing will be filed in a Current Report on Form 8-K.

You should read this prospectus supplement, together with additional information described under the headings “Incorporation of Certain Information by Reference” and “Where You Can Find More Information” in the prospectus dated April 3, 2020 carefully before you invest in our securities.

The date of this prospectus supplement is September 15, 2020.