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August 3, 2017

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: Irene Paik

Re: Novus Therapeutics, Inc. Registration Statement on Form S-3 Filed on June 23, 2017 File No. 333-218949

Dear Ms. Paik:

On behalf of our client, Novus Therapeutics, Inc. (the "**Company**"), set forth below is the Company's response to comments of the staff (the "**Staff**") of the U.S. Securities and Exchange Commission (the "**Commission**") contained in the comment letter, dated June 28, 2017 (the "**Comment Letter**"), with respect to the above referenced Registration Statement on Form S-3 (as amended, the "**S-3**"). On the date hereof, the Company has filed Amendment No. 1 to the S-3 ("**Amendment No. 1**"), incorporating the changes described herein. For your convenience, each comment from the Comment Letter is set forth in bold type below.

Selling Securityholders, page 2

1. It appears that you intend to rely on General Instruction II.G. of Form S-3 in order to refer to unnamed selling security holders in a generic manner by identifying the initial transaction in which the securities were sold. For example, we note your disclosure on page 3 that you will provide information about other selling security holders, except for any future transferees, pledgees, donees or successors of the selling security holder named in the selling securityholder table, in a prospectus supplement or amendment to the registration statement. Please note that General Instruction II.G. is only available to registrants eligible to register primary offerings on Form S-3 pursuant to General Instruction I.B.1, for which you do not appear to be eligible. Please revise your disclosure here and elsewhere to clarify that you must file a post-effective amendment to add selling security holders to your registration statement and that a Rule 424(b) prospectus supplement must be

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used to post-effectively update the selling security holder table to reflect any transfers from a previously identified selling security holder. For guidance, please refer to Question 140.03 of the Regulation S-K Compliance and Disclosure Interpretations.

Response: As reflected in Amendment No. 1, the Company revised the S-3 to clarify that the Company must file a post-effective amendment to add selling security holders to the S-3 and that a Rule 424(b) prospectus supplement must be used to post-effectively update the selling security holder table to reflect any transfers from a previously identified selling security holder.

Incorporation of Certain Information by Reference, page 6

2. Please incorporate by reference your Form 8-A filed September 12, 2014, as amended on June 23, 2017. Please see Item 12(a)(3) of Form S-3 for guidance.

Response: As reflected in Amendment No. 1, the Company revised the S-3 to incorporate by reference the Company's Registration Statement on Form 8-A, filed on September 12, 2014, as amended by Amendment No. 1 to the Registration Statement on Form 8-A, filed on June 23, 2017.

If we can be of any further assistance, or if you have any questions regarding this letter, please do not hesitate to call me at (415) 393-8373.

Very truly yours,

/s/ Ryan Murr

Ryan Murr

cc: Gregory Flesher, Chief Executive Officer, Novus Therapeutics, Inc.