

APPLIED THERAPEUTICS, INC.
340 Madison Avenue, 19th Floor
New York, NY 10173

May 6, 2019

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attn: David Plattner

**Re: Applied Therapeutics, Inc.
Registration Statement on Form S-1, as amended (File No. 333-230838)
Request for Acceleration of Effective Date**

Dear Mr. Plattner:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Applied Therapeutics, Inc. (the "Company") hereby requests that the Securities and Exchange Commission (the "Commission") accelerate the effective date of the above-referenced Registration Statement on Form S-1 (as amended, the "Registration Statement") and declare the Registration Statement effective as of 4:00 p.m. Eastern time, on May 8, 2019, or as soon thereafter as possible, or at such other time as its legal counsel, Cooley LLP, may request by telephone to the staff of the Commission. This request for acceleration is subject, however, to your receiving a telephone call prior to such time from our legal counsel, Cooley LLP, confirming this request.

Once the Registration Statement has been declared effective, please orally confirm that event with Jaime L. Chase of Cooley LLP at (202) 728-7096 or, in her absence, Pia Kaur of Cooley LLP at (415) 693-2135.

Under separate cover, you will receive today a letter from the managing underwriters of the proposed offering joining in the Company's request for acceleration of the effectiveness of the Registration Statement.

[Signature Page Follows]

Very truly yours,

Applied Therapeutics, Inc.

/S/ SHOSHANA SHENDELMAN

By: Shoshana Shendelman, Ph.D.

Title: President and Chief Executive Officer
