

Leap Therapeutics, Inc.
47 Thorndike Street
Suite B1-1
Cambridge, MA 02141
(617) 714-0360

March 16, 2018

Via EDGAR and FedEx

United States Securities and Exchange Commission
Division of Corporate Finance
100 F Street, NE
Washington, D.C. 20549
Attention: Irene J. Paik

**RE: Leap Therapeutics, Inc.
Registration Statement on Form S-3
Filed on March 2, 2018
File No. 333-223419**

Dear Ms. Paik:

In accordance with Rule 461 promulgated under the Securities Act of 1933, as amended (the "Securities Act"), the undersigned respectfully requests that the effective date for the Registration Statement referred to above be accelerated so that it will be declared effective at 5:00 p.m., Eastern time, on March 16, 2018, or as soon thereafter as is practicable. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Morgan, Lewis & Bockius LLP, by calling Julio E. Vega at (617) 951-8901.

Very truly yours,

LEAP THERAPEUTICS, INC.

/s/ Christopher K. Mirabelli, Ph.D.

Name: Christopher K. Mirabelli, Ph.D.

Title: Chairman, President and Chief Executive Officer

cc: Julio E. Vega, *Morgan, Lewis & Bockius LLP*
