

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

December 13, 2017

Christopher K. Mirabelli, Ph.D. Chairman, President and Chief Executive Officer Leap Therapeutics, Inc. 47 Thorndike Street, Suite B1-1 Cambridge, MA 02141

Re: Leap Therapeutics, Inc. **Registration Statement on Form S-3** Filed December 8, 2017 File No. 333-221968

Dear Dr. Mirabelli:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Chris Edwards at (202) 551-6761 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Julio E. Vega, Esq.