Leap Therapeutics, Inc. 47 Thorndike Street, Suite B1-1 Cambridge, MA 02141

June 12, 2023

VIA EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, NE Washington, D.C. 20549

Attention: Lauren Hamill

Re: Leap Therapeutics, Inc. — Registration Statement on Form S-3 (File No. 333-271399) (the "Registration Statement")

Dear Ms. Hamill:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Leap Therapeutics, Inc. hereby requests acceleration of the effective date of the Registration Statement so that the Registration Statement becomes effective at 4:05 p.m., Eastern Time, on June 14, 2023, or as soon as practicable thereafter.

Please contact Julio E. Vega of Morgan, Lewis & Bockius LLP at +1.617.951.8901 with any questions you may have concerning this request. In addition, please notify Julio E. Vega when this request for acceleration has been granted.

LEAP THERAPEUTICS, INC.

By: /s/ Douglas E. Onsi

Name: Douglas E. Onsi

Title: Chief Executive Officer, Chief Financial Officer and President

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