VIA EDGAR

May 4, 2021

United States Securities and Exchange Commission Division of Corporation Finance Office of Life Sciences 100 F Street, N.E. Washington, D.C. 20549 Attention: Christine Westbrook

Re: Relay Therapeutics, Inc. Acceleration Request for Registration Statement on Form S-1 File No. 333-255583

Dear Ms. Westbrook,

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "**Act**"), Relay Therapeutics, Inc. (the "**Company**") hereby requests that the effective date of the above-referenced registration statement (the "**Registration Statement**") be accelerated to May 6, 2021, at 4:01 p.m., Eastern Time, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Goodwin Procter LLP by calling Gabriela Morales-Rivera at (617) 570-1329. We also respectfully request that a copy of the written order from the Securities and Exchange Commission (the "**Commission**") verifying the effective time and date of the Registration Statement be sent to our counsel, Goodwin Procter LLP, Attention: Gabriela Morales-Rivera, by facsimile to (617) 801-8858. If you have any questions regarding this request, please contact Gabriela Morales-Rivera of Goodwin Procter LLP at (617) 570-1329.

Sincerely,

RELAY THERAPEUTICS, INC.

/s/ Sanjiv K. Patel

Sanjiv K. Patel President and Chief Executive Officer

cc: Brian Adams, *Relay Therapeutics, Inc.* William D. Collins, Esq., *Goodwin Procter LLP* Gabriela Morales-Rivera, Esq., *Goodwin Procter LLP*

[Signature Page to Acceleration Request]