

VIA EDGAR

April 29, 2019

United States Securities and Exchange Commission
Division of Corporation Finance
Mail Stop 4561
100 F Street, N.E.
Washington, D.C. 20549
Attention: Tonya K. Aldave

**Re: Magenta Therapeutics, Inc.
Acceleration Request for Registration Statement on Form S-1
File No. 333-231097**

Dear Ms. Aldave:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the “**Act**”), Magenta Therapeutics, Inc. (the “**Company**”) hereby requests that the effective date of the above-referenced registration statement (the “**Registration Statement**”) be accelerated to May 1, 2019, at 4:00 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 William Collins at (617) 570-1447. 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: William Collins, by facsimile to (617) 321-4422.

If you have any questions regarding this request, please contact William Collins of Goodwin Procter LLP at (617) 570-1447.

Sincerely,

MAGENTA THERAPEUTICS, INC.

/s/ Jason Gardner

Jason Gardner

President and Chief Executive Officer

cc: Jason Gardner, President and Chief Executive Officer, *Magenta Therapeutics, Inc.*
William Collins, Esq., *Goodwin Procter LLP*
Mitchell Bloom, Esq., *Goodwin Procter LLP*