July 31, 2023

VIA EDGAR

Office of Life Sciences Division of Corporation Finance U.S. Securities and Exchange Commission 100 F Street NE Washington, DC 20549

Attention: Ms. Doris Stacey Gama

Mr. Jason Drory Ms. Jenn Do Mr. Kevin Vaughn

Re: Magenta Therapeutics, Inc.

Acceleration Request for Registration Statement on Form S-4

File No. 333-271917

Requested Date: August 1, 2023

Requested Time: 4:15 p.m. Eastern Time

Dear. Ms. Gama, Mr. Drory, Ms. Do and Mr. Vaughn:

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 August 1, 2023, at 4:15 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 Marianne Sarrazin at (415) 733-6134. We also respectfully request that a copy of the written order from the Securities and Exchange Commission verifying the effective time and date of the Registration Statement be sent to our counsel, Goodwin Procter LLP, Attention: Marianne Sarrazin, by email to msarrazin@goodwinlaw.com or by facsimile to (415) 651-9491.

If you have any questions regarding this request, please contact Marianne Sarrazin of Goodwin Procter LLP at (415) 733-6134.

Sincerely,

Magenta Therapeutics, Inc.

Is/ Stephen Mahoney
Stephen Mahoney
President, Chief Financial and Operating Officer

cc: Marianne Sarrazin, Goodwin Procter LLP William D. Collins, Goodwin Procter LLP Michael Patrone, Goodwin Procter LLP