

Magenta Therapeutics, Inc.  
100 Technology Square  
Cambridge, MA 02139

August 10, 2022

**Via EDGAR Transmission**

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

Re: Magenta Therapeutics, Inc.: Registration Statement on Form S-3 filed August 4, 2022 (File No. 333-266511)

Ladies and Gentlemen:

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 12, 2022, at 4:01 pm 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.

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/ Stephen Mahoney

Stephen Mahoney  
Chief Financial and Operating Officer

cc: Thomas W. Beetham, Secretary and Chief Legal Officer, *Magenta Therapeutics, Inc.*  
William Collins, Esq., *Goodwin Procter LLP*  
Mitchell S. Bloom, Esq., *Goodwin Procter LLP*