August 9, 2022

Jason Gardner Chief Executive Officer Magenta Therapeutics, Inc. 100 Technology Square Cambridge, Massachusetts 02139 Re: Magenta Therapeutics, Inc. Registration Statement on Form S-3 Filed August 4, 2022 File No. 333-266511 Dear Dr. Gardner: This is to advise you that we have not reviewed and will not review your registration statement. Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. Please contact Tyler Howes at 202-551-3370 with any questions. Sincerely,

Division of Corporation Finance Office of Life Sciences cc: William Collins, Esq.