UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

June 13, 2023

Stephen Mahoney
President, Chief Financial and Operating Officer
Magenta Therapeutics, Inc.
300 Technology Square, 8th Floor
Cambridge, MA 02139

Re: Magenta Therapeutics, Inc.
Registration Statement on Form S-4
Filed May 15, 2023
File No. 333-271917

Dear Stephen Mahoney:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-4

Questions and Answers About the Merger
Q: What are contingent value rights ("CVR")?, page 4

1. We note your disclosure that, "[i]n April 2023, Magenta sold certain assets, including intellectual property, related to its product candidates MGTA-45, MGTA-145 and the CD117 antibodies including the clinical antibody that was used with MGTA-117, and is continuing to explore strategic alternatives related to its other assets." Please specify the programs or pre-merger assets held by Magenta the are covered by the CVR Agreement. We note from your disclosure on pages 253 and 254 that the April 2023 asset sales included certain up-front cash payments as well as future potential milestone payments. Please clarify whether or not any of the April 2023 asset sales by Magenta, including future milestone payments, are covered by the CVR Agreement.

2. Please revise your disclosure to clarify the material terms of the CVR Agreement, your intentions with Magenta's pre-merger assets and describe any material assets that either have been sold or may be sold by Magenta pursuant to the CVR Agreement or otherwise advise.

The Companies
Magenta, page 10

3. You state here and on page 252 that in April 2023, Magenta sold certain assets, related to Magenta's prior product candidates. However, you also state that Magenta is continuing to explore strategic alternatives related to its "other assets." Given your recent sales in April 2023, please revise your disclosure to clarify what you mean when you state "other assets" to specifically describe any material assets or otherwise advise.

Prospectus Summary, page 12

4. Please balance your discussion here, and on page 145, to disclose the negative factors or potential risks associated with your merger agreement that were considered by the boards of directors of Magenta and Dianthus, respectively, when each voted to approve the merger agreement.

Risk Factors
Risks Related to the Merger
Some Magenta and Dianthus directors and executive officers have interests in the merger..., page 28

5. We note your disclosure that "certain of Dianthus' directors are affiliated with investment funds which hold an interest in Dianthus and are participating in the Dianthus pre-closing financing." Please update your disclosure here to identify the directors and the fund(s) they are affiliated with that are participating in the pre-closing financing.

The Merger
Background of the Merger, page 133

6. Please revise your disclosure to identify the individuals who negotiated the material terms of the merger. For example only, we note your disclosure that "Magenta's management," "participants" and certain "financial advisors" were part of the negotiations related to the merger.

7. We note your disclosure on page 136 discussing certain "Criteria" that would be used to evaluate any potential indications of interest. Please revise to more specifically describe the criteria proposed to assess potential counterparties. For example, if you were looking for parties with a product candidate that had achieved a specific stage of development, what stage was that? What were you looking for with respect to the attractiveness of the counterparty's technology and development pipeline? Additionally, please discuss whether the criteria and/or the prioritization of the criteria changed over time.

8. On page 140 you state that on March 21, 2023 representatives of Wedbush communicated to representatives of Dianthus Magenta's willingness to agree to a traditional reverse merger in exchange for an increase in the valuation attributed to Magenta. Please include a description of Dianthus' response to such communication.

9. We note your disclosure that "after reviewing all of the submitted indications of interest, the participants selected 12 indications of interest to prioritize and invite to make management and due diligence presentations." However, your disclosure appears to only disclose Parties A through D. Please update your disclosure to describe the seven other parties that were invited to make presentations. In addition, update your existing disclosure where you describe Parties A through D to provide additional details about each party, including a description of the general industry of the company.

Opinion of Houlihan Lokey to the Magenta Board, page 154

10. Revise to provide additional information regarding how Houlihan Lokey selected the comparable companies and whether it excluded any comparable companies that fit those criteria.

11. Please explain the statement "Houlihan Lokey selected an implied enterprise value reference range for Dianthus of $150.0 million to $200.0 million, which resulted in an aggregate implied equity value reference range for Dianthus of $274.2 million to $324.2 million, and an implied per share reference range for Dianthus of $4.75 to $5.62." Please clarify how Houlihan Lokey arrived at the $150.0 million to $200.0 million range. For example, did Houlihan Lokey use the mean, median, high or low value from the calculations of the comparable companies? Please explain what other considerations Houlihan Lokey deemed relevant and how they impacted Houlihan Lokey's analysis.

12. We note your disclosure that "[t]he Magenta Liquidation Analysis and Houlihan Lokey's selected companies analysis for Dianthus indicated an implied exchange ratio reference range of 4.42844313 to 5.33756289 shares of Magenta common stock for each share of Dianthus capital stock, as compared to the exchange ratio in the merger pursuant to the Merger Agreement of 3.88182949 shares of Magenta common stock for each share of Dianthus capital stock." Please revise to describe the conclusions Houlihan Lokey reached with respect to the implied exchange ratio as a result of such comparisons.

The Merger Agreement, page 177
Potential Asset Sale, page 183

13. You state hereunder that in April 2023, Magenta entered into asset purchase agreements related to each of (i) MGTA-145, (ii) MGTA-45 and (iii) the CD117 antibodies, including the clinical antibody that was used with MGTA-117. We note from Magenta's Form 10-Q for the period then ended that assets held for sale appears to consist of only remaining lab equipment (referring to page 15 therein). Please address the following:
    - Tell us how you considered the guidance of ASC 205-20-45 in determining whether

discontinued operations accounting was appropriate for some or all of the asset purchase agreements for the drug candidates.

- Further in this regard, noting the sale of MGTA-45 on April 7, 2023 (page 143), tell us why you reported the $1.1 million recorded as other income as of March 31, 2023 (referring to page 21 of the March 31, 2023 Form 10-Q), instead of gain from discontinued operations, is appropriate.

Dianthus' Business
DNTH103, page 281

14. Please update your disclosure to define C1s and clarify what you mean when you state you are targeting "Active C1s." In addition, please revise your disclosure to clarify how preventing further progression of the classical pathway cascade helps severe autoimmune and inflammatory diseases.

15. Please define all technical and scientific terms throughout the business section, such as "diplopia and ptosis" and "MAC formation" on first use.

16. We note your disclosure that "DNTH103 has the potential to become a first-line, steroid-sparing treatment option." Please revise your disclosure to clarify what you mean when you state "steroid-sparing treatment" or otherwise advise. We note your disclosure elsewhere appears to indicate that biologics such as IVIG or FcRn inhibitors are currently being use to treat gMG.

Dianthus' Pipeline of Next-Generation Complement Therapeutics, page 281

17. We note your pipeline table on page 281. Specifically, we note that Dianthus appears to currently only have an ongoing Phase 1 trial for DNTH103 yet your pipeline table includes five arrows under DNTH103, four of which appear to depict completion of Phase 1 clinical trials. Progress arrows should be moved to clearly depict the progress of each candidate to date and should not encroach on phases not commenced. Please amend the table to properly reflect the current status of Dianthus' product candidate.

18. The pipeline table includes two separate programs with the general description “Additional Active Selective Complement Target” that are all in the early stages of discovery. Please limit your table to product candidates that are sufficiently material to your business to warrant inclusion in your table. If these new targets are material, identify the indications and expand your disclosure elsewhere to identify more specifically these programs or candidates.

Dianthus’ First Product Candidate, DNTH103, page 286

19. We note your disclosure of trials relating to your product candidates throughout this section. Please revise to clarify whether each trial was powered for statistical significance. In addition, if a trial was powered for statistical significance please provide p-values for the results of each trial.

20. We note your disclosure that, "[a]ccording to published scientific literature, Dianthus anticipates a significantly longer half-life in humans." Please update your disclosure to discuss the "specific literature" you are referring to.

21. We note your disclosure here and elsewhere in your registration statement in which you make statements related to potential safety and efficacy, which are premature given the stage of development of Dianthus' product candidates. For example, we note your disclosure here that DNTH103 has a "[m]ore favorable safety profile." Please revise your disclosure throughout your document, including but not limited to the statement noted above, to eliminate the implication that your product candidates have been or will ultimately be determined safe and/or effective or have demonstrated safety and/or efficacy for purposes of approval by the FDA or comparable agency.

22. We note your disclosure of a "representative experiment" for which DNTH103 was compared to "recombinantly-generated" sutimlimab and ravulizumab that were based on amino acid sequences from patent filings." Please clarify what "recombinantly-generated based off of patent filings" means and describe any risks to using "recombinantly-generated" sutimlimab and ravulizumab in your experiment or otherwise advise. In addition, please update your disclosure to clarify that the results in the "representative experiment" may not be predictive of or consistent with the results of later trials.

License Agreements
Zenas BioPharma, page 296

23. Please file your license agreement with Zenas BioPharma Limited as an exhibit to your filing, or provide us with your updated analysis as to why it need not be filed under Item 601 of Regulation S-K.

Management Following the Merger
Executive Officers and Directors, page 349

24. Please revise your disclosure regarding the background and history of your executive officer and director to comply with Item 401(e)(1) of Regulation S-K. Specifically, revise your disclosure to describe the business experience, principal occupations and employment, of Anne McGeorge during the past five years, including the dates and duration of their employment.

Unaudited Pro Forma Condensed Combined Financial Information, page 365

25. You disclose on page 365 that the merger is expected to be treated as a reverse recapitalization because on the effective date of the merger, the pre-combination assets of Magenta are expected to be primarily cash and cash equivalents and marketable securities. Please address the following:
    - Tell us and revise your pro forma narrative and MD&A to more clearly disclose the extent to which you expect there to be any residual research and development activities and expenses or facilities expense continuing in Magenta after the sale of

certain assets under the April 2023 asset purchase agreements.

- If so, explain how you considered this fact as part of your determination that Magenta will be a shell company for purposes of reverse recapitalization treatment.
- Tell us how you considered the potential future revenue streams associated with the asset purchase agreements including milestone and royalty payments in your determination that the company will be a shell company for purposes of recapitalization accounting.
- Tell us how you considered the Contingent Value Right (CVR) agreements associated with the asset purchase agreements in determining that the company will be a shell company for purposes of recapitalization accounting.

26. You disclose that you expect the merger to be treated as a reverse recapitalization and such accounting is reflected in the pro forma financial information. Given the asset purchase agreements and CVR are central to the consideration of whether Magenta will effectively be a shell company as of the merger date and appear to be significant, tell us how you determined that it was appropriate under Article 11 of Regulation S-X not to give effect to the asset purchase agreements and the CVR in the pro forma financial information. As part of your response, specifically explain how you determined whether these arrangements represent the disposition of a business under the guidance of Section 11-01(a)(4) of Regulation S-X.

General

27. We note the disclosure that the merger is " intended to qualify as a “reorganization” within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the “Code”) for U.S. federal income tax purposes.” Please revise to clarify the tax consequences of the merger to investors and file a tax opinion. For guidance, please refer to Staff Legal Bulletin No. 19.

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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jenn Do at 202-551-3743 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Doris Stacey Gama at 202-551-3188 or Jason Drory at 202-551-8342 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Marianne Sarrazin, Esq.