December 14, 2023

VIA EDGAR

Division of Corporate Finance
Office of Life Sciences
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attention: Mr. Gary Newberry
Mr. Kevin Kuhar

Re: Madrigal Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2022
File No. 001-33277

Dear Messrs. Newberry and Kuhar:

On behalf of Madrigal Pharmaceuticals, Inc. ("Madrigal"), this letter is in response to your letter dated November 21, 2023 to Madrigal (the "Comment Letter"), relating to Madrigal's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "Form 10-K"). For ease of reference, each of the Staff's comments is set forth in italic type immediately before the corresponding response submitted on behalf of Madrigal, and the numbering below corresponds to the numbering in the Comment Letter. We also added lettered annotations for each element of the numbered comments and, to facilitate your review, we have provided responses for each specific lettered element of each numbered comment.

Dual Primary Endpoints (52 Weeks) and Key Secondary Endpoint (24 weeks), page 9

1. *We note your disclosure on page 10 that Resmetirom was safe and well tolerated. (a) Determinations related to safety are within the sole authority of the FDA. In future filings, please refrain from making such assessments related to product candidates that have not been approved. (b) Additionally, please disclose all serious adverse events related to Resmetirom and disclose the number of such events. (c) Explain how you have determined that the candidate is well tolerated when trial participants experienced serious adverse events.*

(a) Madrigal acknowledges the Staff's comment and advises the Staff that in future reports filed with the SEC, it will refrain from making express statements that resmetirom is safe pending approval by the U.S. FDA, or unless another (e.g. foreign) regulatory authority has made such a safety determination concerning resmetirom (in which case such disclosure would be limited to such context).

(b) Madrigal acknowledges the Staff's comment and confirms the referenced disclosure will be updated in our forthcoming Form 10-K to be filed with the SEC concerning any reportable SAE (and number) considered related to investigational product.

(c) Madrigal believes that the referenced disclosure is accurate that resmetirom was well tolerated since treated patients experienced only generally mild and transient diarrhea at the beginning of therapy and generally mild nausea. These are not SAEs related to resmetirom. Based on SEC positions and responses in other life science comment letters, and subject to your review, Madrigal currently plans to continue to make "well tolerated" statements in future filings.

Research and Development Expenses, page 65

2. *(a) We note the statement that you expect your research and development expenses will increase substantially in the future. (b) Accordingly for each period presented in future filings, please revise to provide a breakdown of the amount of research and development expense incurred for each of your lead product candidates by program. (c) For product candidates with more than one application, provide a breakdown by indication. To the extent that you do not track expenses by product candidate, program, or indication, please disclose that fact and explain why you do not maintain and evaluate research and development cost in this manner. (d) For all unallocated research and development expense, provide a breakdown by type or nature of expense such that the sum reconciles to total research and development expense for the period.*

(a) The statement made concerning expected increases in future research and development expenses in the Form 10-K was accurate when made. However, for the information of the Staff, Madrigal will evaluate whether it is appropriate to include this statement (or make an adjusted statement for future R&D spend outlook) in future filings.

(b) Madrigal wishes to advise the Staff that it has a single product candidate (resmetirom) and is seeking approval of resmetirom to treat one disease state, NASH, for which there is no currently approved therapeutic in the US or EU. See disclosures in the Form 10-K on pages 7, 8 (clinical trials chart describing studies to support use of resmetirom to treat one disease state, NASH), 12, 13 and 64.

(c) Since there is currently not more than one product candidate or program under clinical study for approval, Madrigal respectfully submits that a breakdown of R&D expenses along the lines suggested in the Staff's comment is not required. All R&D costs in the Form 10-K for the three year period ending December 31, 2022 relate to R&D costs for resmetirom to treat NASH patients; the same is true for R&D costs reported in the first through third quarter Forms 10-Q filed during 2023.

(d) Madrigal further confirms that it had no Unallocated R&D expenses to report in its Form 10-K and does not currently expect to have any such Unallocated R&D expenses in the future.

* * *

If the Staff should have any questions, or would like further information, concerning any of the responses above, please do not hesitate to contact the undersigned at 267 824 2827. We thank you in advance for your attention to the above.

Sincerely,

/s/ Brian J. Lynch
Senior Vice President and General Counsel
Madrigal Pharmaceuticals, Inc.

cc: Alan L. Dye, Hogan Lovells US LLP