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

DIVISION OF
CORPORATION FINANCE

November 21, 2023

Alex G. Howarth
Chief Financial Officer
Madrigal Pharmaceuticals, Inc.
Four Tower Bridge
200 Barr Harbor Drive, Suite 200
West Conshohocken, PA 19428

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

Dear Alex G. Howarth:

We have reviewed your filing and have the following comments.

Please respond to this letter within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this letter, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2022

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. 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. Additionally, please disclose all serious adverse events related to Resmetirom and disclose the number of such events. Explain how you have determined that the candidate is well tolerated when trial participants experienced serious adverse events.

Research and Development Expenses, page 65

2. We note the statement that you expect your research and development expenses will increase substantially in the future. 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. 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. 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.

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 Gary Newberry at 202-551-3761 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Division of Corporation Finance
Office of Life Sciences