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

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

Research and Development Expenses, page 65

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

Alex G. Howarth

Madrigal Pharmaceuticals, Inc.

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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.

FirstName LastNameAlex G. Howarth Comapany NameMadrigal Pharmaceuticals, Inc.

Sincerely,

Division of

Corporation Finance November 21, 2023 Page 2 Sciences FirstName LastName

Office of Life