

August 29, 2023

**VIA EDGAR**United States Securities and Exchange Commission  
Division of Corporation Finance, Office of Life Sciences  
100 F Street, NE  
Washington, DC 20549Attention: Franklin Wyman  
Angela Connell  
Lauren S. Hamill  
Joe McCann**Re: CohBar, Inc.  
Amendment No. 1 to Registration Statement on Form S-4  
Filed August 10, 2023  
File No. 333-273101**

Ladies and Gentlemen:

This letter is submitted on behalf of CohBar, Inc. (the "Company") in response to the comments of the staff of the Division of Corporation Finance (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") with respect to the Company's Registration Statement on Form S-4 (File No: 333-273101), initially filed on July 3, 2023 and amended on August 10, 2023 (the "Registration Statement"), as set forth in the Staff's letter dated August 25, 2023 (the "Comment Letter"). The Company is concurrently submitting Amendment No. 2 to the Registration Statement ("Amendment No. 2"), which includes changes to reflect responses to the Staff's comments and other updates.

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter. Unless otherwise indicated, page references in the descriptions of the Staff's comments refer to the Registration Statement, and page references in the responses refer to Amendment No. 2. All capitalized terms used and not otherwise defined herein shall have the meanings set forth in Amendment No. 2.

**Amendment No. 1 to Registration Statement on Form S-4 filed August 10, 2023****What are the material U.S. federal income tax consequences of the Merger to holders of CohBar capital stock?, page 8**

1. *We note your revised disclosure in response to prior comment 2. Please revise to remove the "generally" language from the Q&A or briefly identify the factors that could lead to the transaction being taxable to the CohBar shareholders.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on page 8 of Amendment No. 2 to reflect the Staff's comment.

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Page 2**The bylaws of the combined company will provide that.... page 96**

2. *We note that your revisions on page 96 describing the Delaware Forum Provision state that the combined company reserves the right to assert that the Court of Chancery of the State of Delaware will be the exclusive forum for certain litigation, including any derivative action and claims arising under the Exchange Act. In this regard, we note that Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Further, we note that this disclosure on page 96 appears to conflict with the last sentence of the paragraph captioned "Choice of forum" on page 97. Please revise or advise.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on pages 96 and 97 of Amendment No. 2 to reflect the Staff's comment.

**Background of the Merger, page 107**

3. *With reference to prior comment 11, we note that your revised disclosure indicates that in April 2023 K&V Investment One decided that it would only pay \$2.00 per share instead of \$4.00 per share. Please further revise to disclose the Investor's stated reason(s), if any, for renegotiating the price down to the \$2.00 level.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on page 114 of Amendment No. 2 to reflect the Staff's comment.

**Opinion of CohBar's Financial Advisor, page 125**

4. *We note your revised disclosures and your response to prior comment 18. Please revise to clarify whether, and if so how, Ladenburg conducted an assessment of the \$25 million valuation for CohBar. To the extent that Ladenburg did not assess this valuation, then please revise the Q&A and other disclosures concerning the fairness opinion to explain that Ladenburg did not conduct an assessment of the CohBar valuation in the course of rendering its opinion that the Exchange Ratio was fair to the CohBar holders. Also, revise the Form S-4 to present the precedent transaction analysis that is now referenced on page 118.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on pages 118 and 128 to 130 of Amendment No. 2 to reflect the Staff's comment.

5. *We note your revisions in response to prior comment 20 indicate that "considerations and judgments" concerning companies to which Morphogenesis was compared "include the exclusion of select comparable companies." In this regard, we note that preceding disclosure in the same paragraph indicating that Ladenburg did not exercise any judgment or exclusionary practices to add or remove companies meeting the stated parameters appears to conflict. Please revise or advise. Additionally, please revise your disclosure to disclose the excluded companies and/or transactions, and explain why each company or transaction was excluded.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on page 131 of Amendment No. 2 to reflect the Staff's comment.

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Material U.S. Federal Income Tax Consequences of the Merger, page 138

6. *We note your response to prior comment 24. Please revise the disclosure on page 139 to explain, if true, that counsel to Morphogenesis and the Company have concluded that there is not significant doubt that the Merger qualifies as a "reorganization."*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on page 141 of Amendment No. 2 to address the Staff's comment by, among other things, disclosing that counsel to Morphogenesis and CohBar are giving a tax opinion to Morphogenesis and CohBar, respectively, and describing such opinion.

Morphogenesis Pipeline, page 219

7. *With respect to the pipeline tables on pages 219 and 228, we reissue prior comment 28 with respect to IFx-3.0. The basis for the statement that the company expects IND-enabling studies for this candidate to be concluded in late 2024 is unclear. Please revise this column to be consistent with disclosure on page 220 stating that Morphogenesis plans on identifying a lead candidate for IFx-3.0 late in 2023 and beginning IND-enabling studies in early 2024.*

**RESPONSE:** The Company acknowledges the Staff's comment and has revised the disclosure on pages 221 and 230 of Amendment No. 2 to reflect the Staff's comment.

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If you should have any questions or comments with respect to the foregoing, please contact me at (415) 393-4631 or via e-mail at BBerns@gibsondunn.com.

Very truly yours,

/s/ Branden C. Berns

Branden C. Berns  
Gibson, Dunn & Crutcher LLP

cc: Joe Sarret, CohBar, Inc.  
Jeff Biunno, CohBar, Inc.  
Curt Creely, Foley & Lardner LLP  
Ryan A. Murr, Gibson, Dunn & Crutcher LLP

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