

January 19, 2024

Paul Alloway, Ph.D.
President and Chief Operating Officer
Homology Medicines, Inc.
One Patriots Park
Bedford, MA 01730

Inc.

Statement on Form S-4
2023

Re: Homology Medicines,
Registration
Filed December 18,
File No. 333-276093

Dear Paul Alloway:

We have reviewed your registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies 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 this letter, we may have additional comments.

Registration Statement on Form S-4 Filed December 18, 2023

Cover Page

1. Please revise the Letter to Stockholders to prominently disclose, if true, whether the listing securities on NASDAQ is a closing condition of the merger. approval for Q32's
2. Please revise the Letter to Stockholders to disclose the valuations assigned to Homology and Q32 for purposes of this merger. Questions and Answers, page 2
3. Please revise this section, where appropriate, as well as the Prospectus Summary, to disclose Homology's net cash as of the most recent practicable date and briefly describe the factors that could affect Homology's net cash between this date and the closing date of the merger.

Paul Alloway, Ph.D.
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Homology LastNamePaul
Medicines, Inc.Alloway, Ph.D.
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Page 2 19, 2024 Page 2
FirstName LastName
What is the Merger?, page 2

4. Please revise to disclose and, if necessary, explain the Exchange Ratio. What are the CVRs being issued to Homology stockholders?, page 5

5. With reference to Exhibit 10.5, please revise this Q&A or add a new one to explain that Q32 must use commercially reasonable efforts to sell the legacy assets and discuss the level of efforts and resources required. Prospectus Summary , page 13

6. Please shorten the ADX-097 pipeline arrow given that the Phase 1 appears to be on-going.
7. Please revise to remove the final candidate from the table. In this regard, we note that both the discovery phase program and the indication are unidentified.
8. Please revise your pipeline table to include the information for footnote 2 or advise.
Opinion of Homology's Financial Advisor, page 17
9. Please revise to explain why Homology's Board sought a fairness opinion concerning the \$195 million Q32 Equity Value as opposed to one that addressed the fairness of the Merger exchange ratio. Revise to clarify, if true, that the advisor did not assess whether the \$80 million Homology Equity Value of Homology was fair from a financial point of view to the Homology stockholders. Discuss how Homology's Board assessed this valuation in rendering its recommendation to shareholders. Following the Merger, the combined company may be unable to integrate successfully..., page 36
10. Please reconcile this risk factor disclosure with your disclosure on page 2 and elsewhere indicating that the business of Q32 will continue as the business of the combined company. Homology is currently subject to securities class action litigation..., page 77
11. Please revise to address whether future damages in excess of insurance coverage will be borne by the combined company and its shareholders. In this regard, clarify whether damage awards could impact CVR payments. Background of the Merger, page 153
12. Please revise your disclosure on page 154 to explain the basis on which Homology narrowed the field down to the 6 initial bidders. Also describe what factors the Homology board took into consideration in selecting Q32 as the lead potential counterparty.
13. Please revise to discuss the negotiations and revisions relating to the CVRs, including those pertaining to the definition of commercially reasonable efforts. It should be clear Paul Alloway, Ph.D. Homology Medicines, Inc. January 19, 2024 Page 3 how the terms evolved over time and the positions of the two parties.
14. Please revise the October 16 entry to identify the items included in the supplemental request.
15. With reference to the October 12 and November 9 entries, please revise to explain the material changes to the Q32 financial models during the course of the negotiations. Please revise to discuss what consideration the Homology Board gave to negotiating the \$195 million Q32 Equity Value downward in light of Q32's inability to identify sufficient demand to pursue a \$75 million PIPE financing led by its current investors. Financial Analyses, page 169
16. Please revise your disclosure regarding TD Cowen's DCF analysis to disclose why cash flows for a 26-year period were used instead of a shorter period. Certain Unaudited Financial Projections for Q32, page 171
17. Please revise page 173 to also present the unadjusted projections that Q32's management provided to Homology. Material U.S. Federal Income Tax Consequences of the Merger, page 220
18. Please revise to add a section that discusses the material tax consequences of the Merger to the Homology stockholders, or advise. With reference to Staff Legal

Bulletin No. 19,
please provide a tax opinion of counsel, as applicable.
Matters Being Submitted to a Vote of Homology Stockholders, page 233

19. We note your disclosure in Proposal No. 3 stating that you are proposing an amendment to the Restated Certificate of Incorporation to give the Homology board of directors discretionary authority to effect a Reverse Stock Split of Homology s issued and outstanding common stock. Please revise to disclose the range of this reverse stock split. Further, to the extent that any such reverse stock split is expected to occur prior to the effectiveness of your registration statement, all share data will require retroactive adjustment pursuant to SAB Topic 4.C.
Q32's Business, page 305

20. Please revise your disclosure to provide a narrative description explaining the results in the graphs on page 311 so it is clear how the results support the claims in this section.
Future Funding Requirements, page 378
FirstName LastNamePaul Alloway, Ph.D.

21. With reference to the pro forma balance sheet on page 401, please revise to discuss the Comapany NameHomology combined company s Medicines, plans for theInc. funds it will hold post-merger, including the Januaryapproximate amount 19, 2024 Page 3 intended for each purpose.

FirstName LastName
Paul Alloway, Ph.D.
FirstName
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Medicines, Inc.Alloway, Ph.D.
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2024 Medicines, Inc.

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FirstName LastName
Unaudited Pro Forma Condensed Combined Financial Information
Notes to the Unaudited Pro Forma Condensed Combined Financial Information
1. Description of the Transaction, page 404

22. We note your disclosure that the number and value of the shares of Homology common stock and options to purchase Homology common stock to be held by Homology stockholders to be outstanding following the Merger and the fair value of the CVRs will not be determined until the completion of the Merger and therefore, the final aggregate value of the consideration paid in the Merger may be more or less than \$45.3 million. We further note that the ownership percentages are subject to adjustment to the extent that Homology's net cash of the closing is less than \$59.5 million or greater than \$60.5 million. Please tell us your consideration of including a sensitivity analysis of the merger consideration.
Unaudited Pro Forma Condensed Combined Financial Information
Notes to the Unaudited Pro Forma Condensed Combined Financial Information
4. Pro Forma Adjustments, page 407

23. We note your disclosure in Note H stating, "The estimated fair value of the CVR is \$14.3 million, which is the fair value of the estimated cash dividend expected to be paid." Please expand your disclosure to explain how this amount was determined.
General

24. With reference to your disclosures concerning the current status of Homology Medicines, Inc. s operations, the plans for those operations, and the pro forma

accounting treatment
for Homology Medicines' assets and liabilities on page 404, please
provide us an analysis
concerning whether Homology Medicines is a shell company as defined in
Rule 12b-2 of
the Exchange Act or whether it could become one prior to Closing. For
guidance, see Use
of Form S-8, Form 8-K, and Form 20-F by Shell Companies, Release No.
33-8587 (July
15, 2005) at n. 32 as reiterated in Special Purpose Acquisition
Companies, Shell
Companies, and Projections, Release No. 33-11048 (March 30, 2022) at
n. 239 and
accompanying text.

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.

Paul Alloway, Ph.D.
Homology Medicines, Inc.
January 19, 2024
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Please contact Tracie Mariner at 202-551-3744 or Angela Connell at
202-551-3426 if you
have questions regarding comments on the financial statements and related
matters. Please
contact Cindy Polynice at 202-551-8707 or Joe McCann at 202-551-6262 with any
other
questions.

FirstName LastNamePaul Alloway, Ph.D.
Corporation Finance
Comapany NameHomology Medicines, Inc.

Sciences
January 19, 2024 Page 5
cc: Lisa Martin, Esq.
FirstName LastName

Sincerely,
Division of
Office of Life