

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

March 6, 2018

Arthur Tzianabos President and Chief Executive Officer Homology Medicines, Inc. 45 Wiggins Avenue Bedford, MA 01730

> Re: Homology Medicines, Inc. Registration Statement on Form S-1 Filed March 2, 2018 File No. 333-223409

Dear Dr. Tzianabos:

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

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

Form S-1 filed March 2, 2018

Notes to Consolidated Financial Statements

Note 16. Collaboration and License Agreement, page F-27

1. Please revise to separately quantify your potential development, regulatory and commercial milestone payments under the Novartis agreement.

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.

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You may contact Keira Nakada at 202-551-3659 or Angela Connell at 202-551-3426 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at 202-551-2544 or Erin Jaskot at 202-551-3442 with any other questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Wesley Holmes