

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

May 27, 2020

Frank D. Lee President and Chief Executive Officer Forma Therapeutics Holdings, Inc. 500 Arsenal Street, Suite 100 Watertown, Massachusetts 02472

> Re: Forma Therapeutics Holdings, Inc. Amendment No. 2 to Draft Registration Statement on Form S-1 Submitted May 15, 2020 CIK No. 0001538927

Dear Mr. Lee:

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

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 2 to Draft Registration Statement on Form S-1 submitted May 15, 2020

Business

Partnered Programs, page 121

1. We note your response to our prior comment 9 and reissue the comment in part. Please revise your disclosure regarding the Boehringer Ingelheim agreement to include aggregate payments received to date and aggregate milestone payments receivable.

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You may contact Christie Wong at (202) 551-3684 or Angela Connell at (202) 551-3426 if you have questions regarding the financial statements and related matters. Please contact Abby Adams at (202) 551-6902 or Irene Paik at (202) 551-6553 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Gabriela Morales-Rivera