

September 6, 2023

Mary Kay Fenton
Chief Financial Officer
Talaris Therapeutics, Inc.
93 Worcester St.
Wellesley, MA 02481

Re: Talaris

Therapeutics, Inc.

Amendment No.1 to

Registration Statement on Form S-4

Filed August 25,

2023

File No. 333-273335

Dear Mary Kay Fenton:

We have reviewed your amended registration statement and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

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. Unless we note otherwise, our references to prior comments are to comments in our August 16, 2023 letter.

Amendment No. 1 to Registration Statement on Form S-4

Tourmaline's Pipeline, page 309

1. We note your response to our previous comment 25 and reissue in part. On page 314 you state that Tourmaline has not received IND approval at this time for the clinical trials indicated in the pipeline table for ASCVD. Since the pipeline table could read as showing that Tourmaline is currently in clinical trials, please revise your table as appropriate to more clearly show the current status of ASCVD.

Mary Kay Fenton
FirstName LastNameMary
Talaris Therapeutics, Inc. Kay Fenton
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September NameTalaris
2023 Therapeutics, Inc.

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FirstName LastName

You may contact Christine Torney at 202-551-3652 or Daniel Gordon at 202-551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact Doris Stacey Gama at 202-551-3188 or Tim Buchmiller at 202-551-3635 with any other questions.

Sincerely,

Division of

Corporation Finance

Office of Life

Sciences

cc: Sarah Ashfaq, Esq.