

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

June 29, 2022

Anatoly Dritschilo
Chief Executive Officer
Shuttle Pharmaceuticals Holdings, Inc.
One Research Court, Suite 450
Rockville, MD 20850

Re: Shuttle Pharmaceuticals Holdings, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed on June 23, 2022
File No. 333-265429

Dear Dr. Dritschilo:

We have reviewed your amended registration statement and have the following comments. In some of our comments, 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 comments apply 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 15, 2022 letter.

Amendment No. 1 to Form S-1 filed June 23, 2022

Summary Financial Information, page 12

1. We note the revisions made in response to prior comment 2. Please also re-label your summary financial information for the year ended December 31, 2021 as restated.

Exhibits

2. Please have BF Borgers CPA PC provide an updated consent that is currently dated with the filing date of the next amendment. We note that this date will be different than the audit opinion date.

Anatoly Dritschilo Shuttle Pharmaceuticals Holdings, Inc. June 29, 2022 Page 2

You may contact Tracie Mariner at 202-551-3744 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Jordan Nimitz at 202-551-5831 or Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Megan Penick, Esq.