

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

June 15, 2022

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

> Re: Shuttle Pharmaceuticals Holdings, Inc. Registration Statement on Form S-1 Filed on June 3, 2022 File No. 333-265429

Dear Dr. Dritschilo:

We have reviewed your 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.

Form S-1 Filed June 3, 2022

Market Opportunity, page 6

1. We note your response to comment 5. Please remove the references to indications that you are not currently developing candidates to address. If you have no current plans to develop candidates to treat such indications, they are not part of your current market opportunity.

Related Party Transactions, page 84

2. We note the revisions made to your financial statements in response to our prior comment 14. Tell us how you considered the guidance in ASC 250-10-20 (definition in glossary) and ASC 250-10-45-22 to 45-24 as well as SAB Topic 1:M in concluding that the changes should not be reported as an error in previously issued financial statements. Otherwise,

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revise to comply with that guidance by providing all the information required by ASC 250-10-50-7, label the appropriate columns of the financial statements as "Restated" and have your auditor revise its report to reference the restatement consistent with paragraph 18e. of PCAOB Auditing Standard 3101.

Exhibits

- 3. Please provide searchable copies of all of your exhibits. We refer you to Rules 301 and 304 of Regulation S-T.
- We note that the forum selection provision in your Amended and Restated Certificate of 4. Incorporation identifies the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation, including any "derivative action." Please disclose in your Risk Factors whether this provision applies to actions arising under the Securities Act or Exchange Act. In that regard, we note that Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. If the provision applies to Securities Act claims, please also revise your prospectus to state that there is uncertainty as to whether a court would enforce such provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. If this provision does not apply to actions arising under the Securities Act or Exchange Act, please also ensure that the exclusive forum provision in the governing documents states this clearly, or tell us how you will inform investors in future filings that the provision does not apply to any actions arising under the Securities Act or Exchange Act.
- 5. Please revise the legality opinion filed as Exhibit 5.1 to state that the shares will be legally issued, fully paid and non-assessable when sold in accordance with the registration statement. Refer to Section II.B.2.h of Staff Legal Bulletin No. 19. Please note that Item 601 of Regulation S-K expressly provides for short form opinion with respect to a tax opinion, but does not provide for a short form legal opinion.

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.

You may contact Tracie Mariner at 202-551-3744 or Kevin Kuhar at 202-551-3662 if

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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.