

EMAIL: SFELDMAN@OLSHANLAW.COM
DIRECT DIAL: 212.451.2234

March 31, 2023

VIA EDGAR AND ELECTRONIC MAIL

U.S. Securities and Exchange Commission
Division of Corporation Finance
Mail Stop 3628
100 F Street, N.E.
Washington, D.C. 20549Attn.: Jimmy McNamara, Esq.
Office of Life SciencesRe: OS Therapies Inc
Amendment No. 2 to Draft Registration Statement on Form S-1
Submitted March 14, 2023
CIK No. 0001795091

Ladies and Gentlemen:

On behalf of OS Therapies Incorporated, a Delaware corporation (the “Company”), we are hereby filing in electronic format through EDGAR with the U.S. Securities and Exchange Commission (the “SEC”), pursuant to the Securities Act of 1933, as amended, one complete copy of the Company’s Registration Statement on Form S-1 (the “Registration Statement”), for the registration of shares of the Company’s common stock, including one complete copy of the exhibits listed as filed therewith.

The Registration Statement responds to the comments received from the staff of the SEC in its comment letter dated March 26, 2023 with respect to the Company’s Amendment No. 2 to Draft Registration Statement on Form S-1 (CIK No. 0001795091) submitted confidentially to the Division of Corporation Finance by the Company on March 14, 2023, as discussed below.

Courtesy copies of this letter and the Registration Statement (as marked to reflect changes), together with all exhibits, are being provided by email directly to the staff for its convenience (attention: Jimmy McNamara) in the review of the foregoing documents.

To facilitate the staff’s review, the SEC’s comments are reproduced before each of the Company’s responses thereto. All page numbers referred to in the responses to the staff’s comments correspond to the page numbers of the Registration Statement.

Amendment No. 2 to Draft Registration Statement on Form S-1Cover Page

1. *We note your response to prior comment 1 and reissue. To the extent that a preliminary prospectus will be circulated, please disclose on the IPO coverpage a bona fide estimate of the price range and clarify, as applicable, whether \$5.00 represents the mid-point of the price range. For guidance, refer to Instruction 1(A) to Item 501(b)(3) of Regulation S-K and Compliance Disclosure Interpretations, Securities Act Forms, Q. 34.04. Alternatively, please tell us whether you are establishing \$5.00 as the actual offering price. If so, your disclosure should clarify this point rather than referencing an “expected” offering price.*

Response: As noted by the staff, the Company has established \$5.00 as the actual offering price per share. Words such as “expected” and “assumed” as to the offering price have been removed from the Registration Statement.

March 31, 2023
Page 2Prospectus SummaryOur Pipeline of Product Candidates, page 1

2. *We refer to prior comment 9 and reissue in part. Please revise the Pipeline table to remove the OST-HER-2 Canine Osteosarcoma candidate. In this regard, the Summary pipeline table should highlight the most significant aspects of your offering, and your disclosures indicate that you have not conducted any work developing a treatment for canines and that you do not have plans to commercialize OST-HER-2 for this purpose.*

Response: As requested by the staff, the Company has removed the OST-HER2 canine osteosarcoma candidate from the pipeline table on pages 2 and 68. Additional disclosure on pages 2 and 68 under the pipeline table explains that OST-HER2 is a product candidate for veterinary use in canines. OST-HER2 holds a conditional license granted by the U.S. Department of Agriculture for treatment of dogs diagnosed with osteosarcoma that are one year of age or older. Accordingly, as part of the Company’s growth strategies following this offering, the Company intends to consider potentially out-licensing OST-HER2 to animal health companies for such use in accordance with applicable regulations. See “Our OS-Focused Clinical Trials and Studies – Preclinical Animal Study” on page 3 and “Our Growth Strategies” on page 5.

3. *Please revise the first column of your pipeline table on pg. 2 and on page 68 so that OST-HER2 and Folate Receptor Targeted TDC are listed once and not twice in that column.*

Response: As requested by the staff, the first column of the Company's oncology pipeline table has been revised so that OST-HER2 and Folate Receptor Targeted TDC are listed once and not twice in that column. See pages 2 and 68.

4. *We note your revised disclosures in response to prior comment 7. To the extent that you highlight the USDA conditional license on page 1, please revise to clarify whether you hold the conditional license or whether it is held by the previous licensee of Advaxis. Explain whether the conditional license permits full commercialization or rather allows administration of the drug in the context of veterinary drug trials. Also, revise the Business section to include a discussion of drug development and regulation in the veterinary space and provide specific information concerning the conditional license including its scope and conditions.*

Response: In response to the staff's comment, disclosure has been added under "Our OS-Focused Clinical Trials and Studies – Preclinical Animal Study" on page 4 to (i) clarify that the Company holds the conditional license previously granted to the previous licensee of ADXS-HER2 because the Company is the current licensee of ADXS-HER2 constructs, our OST-HER2 product candidate, and (ii) explain that the conditional license allows commercialization but limits the use of OST-HER2 to treat dogs, one year of age and older, diagnosed with osteosarcoma. Additionally, disclosure has been added to the Business section under "Government Regulation – Animal Health Products" on page 78 that discusses drug development and regulation in the veterinary space and conditional licensing related to animal health products.

Business

Our OS-Focused Clinical Trials and Studies, page 68

5. *We note your revised disclosure concerning the completed Phase Ib clinical trial in response to prior comments 16 and 17. Please further revise to present the Phase Ib endpoints, the trial results, and your conclusions with respect to the primary and secondary endpoints/outcome measures. In this regard, investors should be able to assess how the drug candidate performed relative to the established endpoints, including whether the reported results were or were not statistically significant, and also assess your conclusion that "the data presented from the Phase Ib trial demonstrated that ADXS31-164 was well tolerated."*

Response: In response to the staff's comment, disclosure has been added under "Our OS-Focused Clinical Trials and Studies – Phase Ib Clinical Trial" on page 69 explaining that the results of the Phase Ib trial were primarily intended to describe the safety and tolerability of ADXS-HER2 (also known as ADXS31-164) and were not intended to contribute to the evaluation of the effectiveness of ADXS-HER2 for the treatment of patients with a history of HER2 expressing tumors. Overall, the data presented from this Phase Ib trial demonstrated that ADXS-HER2 IV infusion at the dose of 1×10^9 CFU appeared to be well tolerated in 12 subjects treated and evaluable with no evidence of dose-limiting toxicities. No objective responses were observed in this late stage, heavily pre-treated patient cohort. Accordingly, the recommended Phase II dose of ADXS-HER2 was determined to be 1×10^9 CFU as it was well tolerated based on the trial.

March 31, 2023
Page 3

6. *We refer to prior comment 18 and note your revised disclosures concerning your on-going Phase IIb clinical trial. With a view to disclosure, please tell us whether your present plan calls for announcement of preliminary or topline data prior to the expected trial completion date in 2024 and whether any CTCAE Grade 5 (death) treatment emergent results have been observed to date.*

Response: In response to the staff's comment, the Company has no present plans for the announcement of preliminary or topline data prior to the expected trial completion date in 2024 of its ongoing Phase IIb clinical trial. Announcement of any data prior to trial completion is at the discretion of the independent lead principal investigator of the trial, in consultation with the Data Safety and Monitoring Committee, which is responsible for monitoring the trial's progress and ensuring that participant safety is maintained. Further, no CTCAE Grade 5 (death) treatment emergent results have been observed to date.

Business

Preclinical development, page 70

7. *We note your response to Comment 16 and your disclosure that the OST31-164 product candidate for "other solid tumor indications" is currently in preclinical development and may not require additional preclinical development. Please revise to clarify whether these disclosures apply to breast, esophageal and/or lung cancers.*

Responses: As requested by the staff, the Company has clarified its disclosure with respect to OST-HER2 (also known as OST31-164) to include that it applies to breast, esophageal and/or lung cancers. See page 70.

Business

Our Scientific Collaborations, page 71

8. *We note your response to Comment 19 and re-issue in part. Please describe with specificity the "aspects of the intellectual property" owned by the University of Pennsylvania.*

Response: As requested by the staff, disclosure has been added under "Our Scientific Collaborations – Scientific Collaborators" on page 72 describing with specificity that OST-HER2's compositions and methods of use are covered by three granted U.S. utility patents and one granted Japanese patent owned by the University of Pennsylvania.

Business

Our Intellectual Property, page 74

9. *We note your response to Comment 20 and re-issue in part. Please provide the type of patent (e.g., composition of matter) for the OST-TDC product candidate that is covered by five granted U.S. patents and two granted foreign patents. Please also specify the jurisdictions for the two granted foreign patterns.*

Response: As requested by the staff, the Company has included additional information explaining that the OST-TDC product candidate is covered by five granted U.S. utility patents, one granted Australian patent and one granted Japanese patent. Of these granted patents, one U.S. utility patent, the Japanese patent and the Australian patent are for methods of use of silicon based drug conjugates, and the other four U.S. utility patents are for silanol based therapeutic payloads. See pages 36 and 74.

General

10. *We refer to prior comment 24 and the cover art graphics included in the prospectus. Please revise the text at the bottom to clarify that OST-TDC is in pre-clinical development.*

Response: As requested by the staff, the text at the bottom of the inside front cover page art graphics has been revised to add that the OST-TDC platform is in pre-clinical development.

* * *

March 31, 2023
Page 4

The Company respectfully requests the staff's review of the Registration Statement to coincide with this timing in order to meet the Company's ultimate goal of an April 2023 initial public offering.

Kindly address any comments or questions that you may have concerning this letter or the enclosed materials to Paul A. Romness, MPH, the Chief Executive Officer of the Company (tel.: (703) 541-9811), or me (tel.: (212) 451-2234).

Very truly yours,

/s/ Spencer G. Feldman
Spencer G. Feldman

cc: Joe McCann, Esq.
Paul A. Romness, MPH
Mr. Keith Moore
Cavas Pavri, Esq.
