



DIVISION OF
CORPORATION FINANCE

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

June 13, 2024

Charles R. Carter
Chief Financial Officer
CERo Therapeutics Holdings, Inc.
201 Haskins Way, Suite 230
South San Francisco, CA 94080

Re: CERo Therapeutics Holdings, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed June 5, 2024
File No. 333-279156

Dear Charles R. Carter:

We have reviewed your amended registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a 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 letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our May 16, 2024 letter.

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

Cover Page

1. With respect to first paragraph, you disclose that this prospectus relates to the resale of up to 29,393,459 shares of common stock, but the aggregate of the number of shares indicated in clauses (i) through (vi) does not appear to reconcile to 29,393,459 shares of common stock. Please advise or revise as appropriate.
2. We note your revisions in response to prior comment 1. Please continue to revise to disclose the exercise price of the Common Warrants and the Preferred Warrants.
3. As requested by prior comment 2, please update your cover page to discuss your ability to fund your operations on a prospective basis with your current cash on hand.

Charles R. Carter
CERo Therapeutics Holdings, Inc.
June 13, 2024
Page 2

Management's Discussion and Analysis of Financial Condition and Results of Operations of CERo, page 124

4. As requested by prior comment 4, discuss the effect of this offering on the company's ability to raise capital.

Exhibit 5.1, page II-4

5. Please tell us how the 35,773,704 shares referred to in clause (a)(x), and the 2,055,709 shares referred to in clause (a)(x)(i), of the opinion ties to your disclosure or file a revised opinion as appropriate.

Please contact Tamika Sheppard at 202-551-8346 or Tim Buchmiller at 202-551-3635 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Jeffrey A. Letalien, Esq.