

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

May 1, 2025

Chris Ehrlich Chief Executive Officer CERo Therapeutics Holdings, Inc. 201 Haskins Way, Suite 230 South San Francisco, CA 94080

> Re: CERo Therapeutics Holdings, Inc. Preliminary Proxy Statement on Schedule 14A Filed April 25, 2025 File No. 001-40877

Dear Chris Ehrlich:

We have reviewed your filing and have the following comments.

Please respond to this letter within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this letter, we may have additional comments.

Preliminary Proxy Statement on Schedule 14A

Proposal No. 1: Reverse Stock Split Proposal, page 7

1. Please revise to disclose the range of the proposed reverse stock split.

<u>Proposal No. 3: Nasdaq Stock Issuance (Series D) Proposal Overview, page 19</u>

2. We note your disclosure here stating that the Series D Preferred shares will convert into 12,820,513 shares of Common Stock, or approximately 71.3% of the then-outstanding Common Stock, at an initial conversion price of \$0.78 per share. Please revise here to prominently disclose the significance of the potential dilution and any additional dilution which could occur as a result of the alternate conversion provision.

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.

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Please contact Tyler Howes at 202-551-3370 or Jason Drory at 202-551-8342 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Jeffrey A. Letalien, Esq.