



DIVISION OF  
CORPORATION FINANCE

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

April 22, 2024

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

**Re: CERo Therapeutics Holdings, Inc.**  
**Registration Statement on Form S-1**  
**Filed April 10, 2024**  
**File No. 333-278603**

Dear Brian Atwood:

We have conducted a limited review of your registration statement and have the following comment.

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.

Registration Statement on Form S-1, Filed April 10, 2024

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

1. Please update your registration statement to also include a management's discussion and analysis of financial condition and results of operations for Legacy CERo. Refer to Instruction 1 to paragraph (b) of Item 303 of Regulation S-K, which requires the discussion to cover the periods covered by the financial statements included in the filing.

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.

Brian Atwood  
CERo Therapeutics Holdings, Inc.  
April 22, 2024  
Page 2

Please contact Jessica Dickerson at 202-551-8013 or Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Stephen M. Davis, Esq.