



DIVISION OF
CORPORATION FINANCE

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

May 1, 2023

David Gaiero
Chief Financial Officer and Treasurer
Cyteir Therapeutics, Inc.
128 Spring Street, Building A, Suite 510
Lexington, Massachusetts, 02421

Re: Cyteir Therapeutics, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2022
Filed March 23, 2023
File No. 001-40499

Dear David Gaiero:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. 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 comment 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 our comment applies to your facts and circumstances, please tell us why in your response.

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

Form 10-K for the Fiscal Year Ended December 31, 2022

Item 15. Exhibits, Financial Statement Schedules, page 69

1. The certifications filed as Exhibits 31.1 and 31.2 do not include paragraph 4(b) referring to internal control over financial reporting. Please amend your filing to include the certifications that include paragraph 4(b) as set forth in Item 601(b)(31) of Regulation S-K. The amendment should include the cover page, explanatory note, signature page and paragraphs 1, 2, 4 and 5 of the Section 302 certification. Refer to Question 246.13 of the Regulation S-K C&DIs.

David Gaiero
Cyteir Therapeutics, Inc.
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In closing, 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.

You may contact Eric Atallah at (202) 551-3663 or Daniel Gordon at (202) 551-3486 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences