



DIVISION OF
CORPORATION FINANCE

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

August 11, 2022

Markus Renschler, M.D.
Chief Executive Officer
Cyteir Therapeutics, Inc.
128 Spring St, Building A, Suite 510
Lexington, MA 02421

Re: Cyteir Therapeutics, Inc.
Registration Statement on Form S-3
Filed August 8, 2022
File No. 333-266676

Dear Dr. Renschler:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Christine Westbrook at 202-551-5019 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Tara Fisher, Esq.