

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

May 17, 2022

Andrew Robbins
President and Chief Executive Officer
Cogent Biosciences, Inc.
200 Cambridge Park Drive, Suite 2500
Cambridge, Massachusetts 02140

Re: Cogent Biosciences, Inc.
Registration Statement on Form S-3
Filed May 6, 2022
File No. 333-264773

Dear Mr. Robbins:

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 Dillon Hagius at 202-551-7967 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Ryan A. Murr