April 5, 2024

Andrew Robbins Chief Executive Officer Cogent Biosciences, Inc. 275 Wyman Street, 3rd Floor Waltham, MA 02451

Inc.

Statement on Form S-3

2024

Re: Cogent Biosciences,

Registration

Filed March 29,

File No. 333-278382

Dear Andrew 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 Doris

Stacey Gama at 202-551-3188 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Ryan Murr, Esq.