February 12, 2021

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

Inc.

Statement on Form S-3

2021

Re: Cogent Biosciences,

Registration

Filed February 9,

File No. 333-252873

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 Alan

Campbell at 202-551-4224 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Ryan A. Murr