

COGENT BIOSCIENCES, INC.

**275 Wyman Street, 3rd Floor
Waltham, MA 02451**

VIA EDGAR

April 8, 2024

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549

**Re: Cogent Biosciences, Inc.
Registration Statement on Form S-3
Filed March 29, 2024
File No. 333-278382**

To Whom it May Concern:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended (the "Act"), Cogent Biosciences, Inc., a Delaware corporation (the "Company"), hereby respectfully requests that the effective time of the above referenced Registration Statement on Form S-3 filed by the Company be accelerated to 4:00 p.m., Eastern Daylight Time, on April 10, 2024 or as soon thereafter as practicable, unless we or our outside counsel, Gibson, Dunn & Crutcher LLP, request by telephone that such Registration Statement be declared effective at a later time. In making this acceleration request, the Company acknowledges that it is aware of its obligations under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Gibson, Dunn & Crutcher LLP by calling Ryan Murr at (415) 393-8373.

Very truly yours,

COGENT BIOSCIENCES, INC.

By: /s/ Evan Kearns

Name: Evan Kearns

Title: Chief Legal Officer and Corporate Secretary

cc: Ryan A. Murr, Gibson, Dunn & Crutcher LLP
Branden C. Berns, Gibson, Dunn & Crutcher LLP