



September 27, 2024

Via EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549
Attn: Tyler Howes and Tim Buchmiller

**Re: Cartesian Therapeutics, Inc.
Registration Statement on Form S-1 (the "Registration Statement")
File No. 333-281204**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Cartesian Therapeutics, Inc. (the "Company") hereby respectfully requests that the effective date of the above-referenced Registration Statement be accelerated to 4:00 p.m., Eastern Time, on October 1, 2024, or as soon as practicable thereafter.

Please contact Sarah C. Griffiths of Covington & Burling LLP at (617) 603-8815 or sgriffiths@cov.com with any questions you may have regarding this request. In addition, please notify Ms. Griffiths by telephone when this request for acceleration has been granted.

Very truly yours,

CARTESIAN THERAPEUTICS, INC.

By: /s/ Carsten Brunn

Name: Carsten Brunn

Title: President and Chief Executive Officer

cc: Brian K. Rosenzweig, Covington & Burling LLP
Sarah C. Griffiths, Covington & Burling LLP
