



December 1, 2023

**Via EDGAR**

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549  
Attn: Tamika Sheppard

**Re: Cartesian Therapeutics, Inc.  
Registration Statement Filed on Form S-3, as amended on December 1, 2023 (the "Registration Statement")  
File No. 333-275171**

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 for the above-referenced Registration Statement be accelerated to 5:00 p.m., Eastern Time, on December 1, 2023 or as soon as practicable thereafter.

Please contact Brian K. Rosenzweig of Covington & Burling LLP at (212) 841-1108 or brosenzweig@cov.com with any questions you may have regarding this request. In addition, please notify Mr. Rosenzweig by telephone when this request for acceleration has been granted.

Respectfully,

**Cartesian Therapeutics, Inc.**

By: /s/ Carsten Brunn, Ph.D.

Name: Carsten Brunn, Ph.D.

Title: President and Chief Executive Officer

cc: Brian K. Rosenzweig, Covington & Burling LLP