

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Post-Effective
Amendment No. 1
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Cartesian Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	2834	26-1622110
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

7495 New Horizon Way
 Frederick, MD 21703
 (301) 348-8698

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Carsten Brunn, Ph.D.
President and Chief Executive Officer
Cartesian Therapeutics, Inc.
 7495 New Horizon Way
 Frederick, MD 21703
 (301) 348-8698
 (301) 348-8698

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Brian K. Rosenzweig
Sarah C. Griffiths
Covington & Burling LLP
One International Place, Suite 1020
Boston, Massachusetts 02110
(617) 603-8805

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE
TERMINATION OF REGISTRATION STATEMENT

Cartesian Therapeutics, Inc. (the “Company”) filed with the Securities and Exchange Commission (the “SEC”) a Registration Statement on Form S-1 (File No. 333-281204) on [August 2, 2024](#), as amended by (i) Pre-Effective Amendment No. 1 to the Registration Statement on Form S-1, filed with the SEC on [September 9, 2024](#), and (ii) Pre-Effective Amendment No. 2 to the Registration Statement on Form S-1, filed with the SEC on [September 20, 2024](#), which was declared effective by the SEC on [October 1, 2024](#) (as amended, the “Original Registration Statement”).

The Original Registration Statement was filed to register an aggregate of up to 6,501,150 shares of the Company’s common stock, \$0.0001 par value per share (“common stock”), which consisted of (i) up to 3,563,247 shares of common stock originally issued in a private placement to certain institutional and accredited investors and (ii) up to 2,937,903 shares of common stock issuable upon the conversion of 2,937,903 shares of Series B Non-Voting Convertible Preferred Stock, par value \$0.0001, issued in such private placement (the 6,501,150 shares of common stock, the “Registered Shares”). The Original Registration Statement was filed while the Company was ineligible to use Form S-3. As of the date hereof, the Company meets the eligibility requirements of Form S-3 and therefore may use its Registration Statement on Form S-3 (File No. 333- 283806), which was filed with the SEC on [December 13, 2024](#) and declared effective by the SEC on January 8, 2025 (the “New Registration Statement”).

Pursuant to the Company’s undertaking as required by Item 512(a)(3) of Regulation S-K, this Post-Effective Amendment No. 1 is being filed to terminate the effectiveness of the Original Registration Statement and to deregister, as of the effective date of this Post-Effective Amendment No. 1, all the Registered Shares that remain unsold under the Original Registration Statement as of the date thereof. The Registered Shares that remain unsold as of the date of the New Registration Statement are registered under the New Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Post-Effective Amendment No. 1 to the Original Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Frederick, State of Maryland, on January 10, 2025.

CARTESIAN THERAPEUTICS, INC.

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

Name: Carsten Brunn, Ph.D.

President and Chief Executive Officer

Note: No other person is required to sign this Post-Effective Amendment No. 1 to the Original Registration Statement in reliance upon Rule 478 under the Securities Act of 1933, as amended.
