UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

PRE-EFFECTIVE AMENDMENT NO. 1 TO FORM S-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

CARTESIAN THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

704 Quince Orchard Road

Delaware (State or other jurisdiction of incorporation or organization)

pursuant to Rule 413(b) under the Securities Act, check the following box.

26-1622110 (I.R.S. Employer Identification No.)

Gaithersburg, Maryland 20878
(617) 923-1400
(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
704 Quince Orchard Road
Gaithersburg, Maryland 20878
(617) 923-1400

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

with a copy 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 the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant

to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting 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 □

Non-accelerated filer □

Smaller reporting company and emerging growth company in Kule 126-2 of the Exchange Act.

Accelerated filer □

Smaller reporting company □

Emerging growth company □

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 or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Pre-Effective Amendment No. 1 to the Registration Statement (the "Registration Statement") on Form S-3 of Cartesian Therapeutics, Inc. (File No. 333-275171), originally filed on October 25, 2023, is being filed solely to update the name of the registrant from Selecta Biosciences, Inc. to Cartesian Therapeutics, Inc. (the "Company"). Accordingly, this Pre-Effective Amendment No. 1 consists solely of the facing page, this explanatory note and Part II of the Registration Statement, and is not intended to amend or delete any part of the Registration Statement or prospectus included therein except as specifically noted herein.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following is an estimate, other than with respect to the SEC registration fee, of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

SEC registration fee	\$ 14	4,760
FINRA filing fee	\$ 15	5,500
Printing expenses	\$	*
Legal fees and expenses	\$	*
Accounting fees and expenses	\$	*
Blue Sky, qualification fees and expenses	\$	*
Transfer agent fees and expenses	\$	*
Trustee and depositary fees and expenses	\$	*
Warrant agent fees and expenses		
Miscellaneous	\$	*
Total	\$	*

^{*} These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of

Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Any underwriting agreement or distribution agreement that the registrant enters into with any underwriters or agents involved in the offering or sale of any securities registered hereby may require such underwriters or dealers to indemnify the registrant, some or all of its directors and officers and its controlling persons, if any, for specified liabilities, which may include liabilities under the Securities Act of 1933, as amended.

Our restated certificate of incorporation, as amended, provides that to the fullest extent permitted by the DGCL, none of our directors shall be liable to our company or our stockholders for monetary damages arising from a breach of fiduciary duty owed to our company or our stockholders. In addition, our amended and restated bylaws provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL and must also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified under this section or otherwise.

We have entered into indemnification agreements with each of our directors and executive officers in which we have agreed to indemnify, defend and hold harmless, and also advance expenses as incurred, to the fullest extent permitted under applicable law, from damage arising from the fact that such person is or was an officer or director of our company or our subsidiaries.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, our restated certificate of incorporation, our amended and restated bylaws, any agreement, any vote of stockholders or disinterested directors or otherwise.

We expect to maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

We have purchased and intend to maintain insurance on behalf of Cartesian Therapeutics, Inc. and any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in that capacity, subject to certain exclusions and limits of the amount of coverage.

ITEM 16. EXHIBITS

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Registration Statement.

Exhibit Number	Exhibit Description
3.1	Restated Certificate of Incorporation of the Company dated as of June 27, 2016, incorporated by reference to Exhibit 3.1 to Form 8-K (File No. 001-37798) filed on June 29, 2016.
3.2	Certificate of Amendment to the Restated Certificate of Incorporation of the Company, dated as of June 21, 2022, incorporated by reference to Exhibit 3.1 to Form 8-K (File No. 001-37798) filed on June 21, 2022
3.3	Certificate of Amendment to the Restated Certificate of Incorporation of the Company, dated as of November 13, 2023, incorporated by reference to Exhibit 3.3 to Form 8-K (File No. 001-37798) filed on November 13, 2023
3.4	Amended and Restated By-laws of Cartesian Therapeutics, Inc., incorporated by reference to Exhibit 3.2 to Form 10-Q (File No. 001-37798) filed on November 13, 2023.
4.1	Form of Specimen Certificate Representing Common Stock, incorporated by reference to Exhibit 4.2 to Form S-1 (Reg. No. 333-211555), filed with on May 24, 2016.
4.2*	Form of Indenture.
4.3**	Form of Note.
4.4**	Form of Warrant.
4.5**	Form of Warrant Agreement.
4.6**	Form of Unit Agreement.
5.1*	Opinion of Covington & Burling LLP.
23.1	Consent of Ernst & Young LLP.
23.2*	Consent of Covington & Burling LLP (filed as part of Exhibit 5.1).
24.1	Powers of Attorney (included on signature page).
107*	Filing Fee Table.

^{*} Filed Previously

ITEM 17. UNDERTAKINGS

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from

^{**} To be filed by amendment or incorporated by reference in connection with the offering of the securities.

the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
 - provided, however, that paragraphs (a)(l)(i), (a)(l)(ii) and (a)(l)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) If the undersigned registrant is relying on Rule 430B:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(l)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*; that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (ii) If the undersigned registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into

- the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

POWER OF ATTORNEY

Each of the undersigned officers and directors of the registrant hereby severally constitutes and appoints Carsten Brunn, Ph.D. and Blaine Davis, and each of them singly (with full power to each of them to act alone), as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them, for him or her and in his or her name, place and stead, and in any and all capacities, to file and sign any and all amendments, including post-effective amendments, to this registration statement and any other registration statement for the same offering that is to be effective under Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney shall be governed by and construed with the laws of the State of Delaware and applicable federal securities laws.

Pursuant to the requirements of the Securities Act, this Pre-Effective Amendment No. 1 to the registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	<u>DATE</u>
/s/ CARSTEN BRUNN, PH.D.	President, Chief Executive Officer and Director	December 1, 2023
Carsten Brunn, Ph.D.	(Principal Executive Officer)	
/s/ BLAINE DAVIS	Chief Financial Officer (Principal Financial Officer	December 1, 2023
Blaine Davis	and Principal Accounting Officer)	
/s/ CARRIE S. COX	Chairman of the Board	December 1, 2023
Carrie S. Cox		
/s/ TIMOTHY C. BARABE	Director	December 1, 2023
Timothy C. Barabe		
/s/ NISHAN DE SILVA, M.D.	Director	December 1, 2023
Nishan de Silva, M.D.		
/s/ MURAT KALAYOGLU, M.D., PH.D.	Director	December 1, 2023
Murat Kalayoglu, M.D. Ph.D.		
/s/ AYMERIC SALLIN	Director	December 1, 2023
Aymeric Sallin		
/s/ MICHAEL SINGER, M.D., PH.D.	Director	December 1, 2023
Michael Singer, M.D., Ph.D.		
/S/ TIMOTHY SPRINGER, PH.D.	Director	December 1, 2023
Timothy Springer, Ph.D.	-	•
/s/ PATRICK ZENNER	Director	December 1, 2023
Patrick Zenner		2000111001 1, 2023

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Cartesian Therapeutics, Inc. for the registration of up to \$200,000,000 of its common stock, preferred stock, debt securities, warrants, and units, and to the incorporation by reference therein of our report dated March 2, 2023, with respect to the consolidated financial statements of Selecta Biosciences, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts December 1, 2023