UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant \boxtimes Filed by a Party other than the Registrant \square

Check the appropriate box:

- Preliminary Proxy Statement
- □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material under to §240.14a-12

CARTESIAN THERAPEUTICS, INC.

(Exact name of Registrant as Specified in its Charter) (Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- \boxtimes No fee required.
- □ Fee paid previously with preliminary materials.
- □ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11

CARTESIAN THERAPEUTICS. INC. 704 QUINCE ORCHARD ROAD GAITHERSBURG, MD 20878



VOTE BY INTERNET Before The Meeting - Go to <u>www.proxyvote.com</u> or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time on March 26, 2024. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/RNAC2024SM

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903 Use any touch-tone telephone to transmit your voting instructions up until 11:59 pm. Eastern Time on March 26, 2024. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

UIE, I		V29161-Z87092 KEEP THIS P		PORTION FOR YOUR RECORD RETURN THIS PORTION ON		
	THIS PROXY CARD IS VALID ONL					
RTES	IAN THERAPEUTICS, INC.					
					_	
The	Board of Directors recommends you vote FOR the following proposals:			For	Against	Abstai
1.	To approve, in accordance with Nasdaq Listing Rule 5635(a), the issuance of shares of Carte: \$0.0001 per share ("Common Stock"), upon conversion of the Company's Series A Non-	sian Therapeutics, Inc. (the "Company")'s com -Voting Convertible Preferred Stock, par value	mon stock, par value \$0.0001 per share.	0	0	0
2.	To approve an amendment to the Company's restated certificate of incorporation, as amended, to effect a reverse stock split of the Company's issued and outstanding Common Stock, at a ratio in the range of 1-for-20 and 1-for-30, with such ratio to be determined at the discretion of the board of directors of the Company.			0	0	0
3.	To approve the adjournment or postponement of the special meeting of stockholder Proposal Nos. 1 or 2.	rs of the Company, if necessary, to continue	to solicit votes for	0	0	0
NOT	E: To transact such other business as may properly come before the Special Meeting or	any continuation, postnonoment or adjourne	mont thereof			
NOT	L to transact such other business as may properly come before the special meeting of	any continuation, postponement or aujourni	nent thereof.			
Pleas	e sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, inistrator, or other fiduciary, please give full title as such. Joint owners should each sign onally. All holders must sign. If a corporation or partnership, please sign in full corporate					
perso or pa	analy. All holders must sign. If a corporation or partnership, please sign in full corporate artnership name by authorized officer.					
-	ature [PLEASE SIGN WITHIN BOX] Date	Signature (Joint Owners)	Date			

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting: The Notice and Proxy Statement is available at www.proxyvote.com.

V29162-787092

CARTESIAN THERAPEUTICS, INC. Special Meeting of Stockholders March 27, 2024, 9:00 a.m., Eastern Time This proxy is solicited by the Board of Directors

The undersigned stockholder(s) of Cartesian Therapeutics, Inc. hereby appoint(s) Carsten Brunn, Ph.D. and Blaine Davis, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this proxy card, all of the shares of Common Stock of CARTESIAN THERAPEUTICS, INC. that the stockholder(s) is/are entitled to vote at the Special Meeting of Stockholders to be held at 9:00 a.m., Eastern Time on March 27, 2024, virtually via live webcast at www.virtualshareholdermeeting.com/RNAC2024SM, by means of remote communication as authorized by Section 211(a) of the General Corporation Law of the State of Delaware, and any continuation, postponement or adjournment thereof.

Such proxies are authorized to vote in their discretion (x) on any matter that the Board of Directors did not know would be presented at the Special Meeting by a reasonable time before the proxy solicitation was made, and (y) on such other business as may properly be brought before the meeting or any continuation, postponement or adjournment thereof.

This proxy, when properly executed, will be voted in the manner directed herein by the undersigned stockholder(s). If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side