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

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CALADRIUS BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware

22-2343568

(State or other jurisdiction of incorporation or organization)

(I.R.S. employer identification number)

110 Allen Road, Second Floor Basking Ridge, NJ 07920

(Address of principal executive offices; zip code)

Caladrius Biosciences, Inc. 2018 Equity Incentive Compensation Plan

(Full title of the plan)

Todd C. Girolamo, Esq.
Senior Vice President, General Counsel and Secretary
Caladrius Biosciences, Inc.
800 Westchester Avenue
Suite N341
Rye Brook, NY 10573
(212) 584-4180

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

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," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company x

Emerging growth company o

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. o

CALCULATION OF REGISTRATION FEE

			Proposed Maximum	Proposed Maximum	
		Amount to be Registered	Offering Price Per Share	Aggregate Offering Price	Amount of Registration
	Title of Securities to be Registered	(1)(2)	(3)	(3)	Fee
Con	nmon Stock, \$0.001 par value per share	1,500,000	\$4.08	\$6,120,000	\$761.94

- (1) This Registration Statement registers 1,500,000 shares of the registrant's common stock, par value \$.001 per share ("Common Stock"), issuable pursuant to the Caladrius Biosciences, Inc. 2018 Equity Incentive Compensation Plan (the "2018 Equity Plan").
- (2) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such indeterminate number of additional shares as may be issuable pursuant to the 2018 Equity Plan, to prevent dilution resulting from any equity restructuring or change in capitalization of the registrant, including, but not limited to, spin offs, stock dividends, large non-recurring dividends, rights offerings, stock splits or similar transactions. Also includes rights to acquire Common Stock or preferred stock under any shareholder rights plan in effect from time to time, if applicable, under the terms of any such plan.
- (3) Estimated, in accordance with Rule 457(c) and Rule 457(h)(1) of the Securities Act, solely for the purpose of calculating the registration fee. The proposed maximum offering price per share and the proposed maximum aggregate offering price are based on the average of the high and low prices for a share of Common Stock on the Nasdaq Capital Market on June 15, 2018, which is a date within five business days prior to the date of this registration statement.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information required to be contained in the Section 10(a) prospectus is omitted from this registration statement and will be provided to participants in the 2018 Equity Plan pursuant to Rule 428 of the Securities Act of 1933, as amended (the "Securities Act"), and the note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The Securities and Exchange Commission (the "SEC") allows us to incorporate into this registration statement information we file with other documents. This means we may disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this registration statement, and information we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, except to the extent information in those documents is different from the information contained in this registration statement:

- Our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 22, 2018, as amended on April 2, 2018;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the SEC on May 15, 2018;
- Our Current Reports on Form 8-K filed with the SEC on June 20, 2018, May 10, 2018, March 22, 2018 and February 8, 2018; and
- The description of the Common Stock contained in the Registration Statement on Form 8-A filed with the SEC on August 2, 2013 (including any amendment or report filed with the SEC for the purpose of updating that description).

All documents (other than current reports, or portions thereof, furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) subsequently filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this registration statement, which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing of such reports and documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interest of Named Experts and Counsel.

The validity of the issuance of the shares of Common Stock registered under this Registration Statement has been passed upon the Registrant by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. A member of that firm owns 1,000 shares of Common Stock of the Registrant.

Item 6. Indemnification of Directors and Officers.

The Registrant was incorporated under the laws of the State of Delaware. Under the General Corporation Law of the State of Delaware (the "Delaware GCL"), a corporation may indemnify any person who was or is a party or 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 he or she is or was the Registrant's director, officer, employee or agent, or is or was serving at the Registrant's request 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 in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the Registrant's best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

In addition, the Delaware GCL also provides that the Registrant also may 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 Registrant's right to procure a judgment in its favor by reason of the fact that he or she is or was the Registrant's director, officer, employee or agent, or is or was serving at the Registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the Registrant's best interests. However, in such an action by or on the Registrant's behalf, no indemnification may be made in respect of any claim, issue or matter as to which the person is adjudged liable to the Registrant unless and only to the extent that the court determines that, despite the adjudication of liability but in view of all the circumstances, the person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

The Registrant's certificate of incorporation is consistent with the Delaware GCL. Each of the Registrant's directors, officers, employees and agents will be indemnified to the extent permitted by the Delaware GCL. The Registrant also maintains insurance on behalf of its directors and officers against liabilities asserted against such persons and incurred by such persons in such capacities, whether or not the Registrant would have the power to indemnify such persons under the Delaware GCL.

The Registrant has entered into indemnification agreements with its Chief Executive Officer and Chief Financial Officer, and certain other employees and each of the Registrant's directors pursuant to which the Registrant has agreed to indemnify such party to the full extent permitted by law, subject to certain exceptions, if such party becomes subject to an action because such party is the Registrant's director, officer, employee, agent or fiduciary.

In addition to such other rights of indemnification as they may have, the 2018 Equity Plan contains the following indemnification provisions applicable to (i) each member of the Board of Directors of the Company and (ii) each member of the committee which administers the 2018 Equity Plan (the "Committee"), defined as the Compensation Committee of the Board of Directors, or such other committee of members of the Board appointed by the Board, authorized under Section 14 of the 2018 Equity Plan to administer the 2018 Equity Plan and to perform the functions assigned to the Committee under such 2018 Equity Plan:

"The Plan shall be administered by the Committee. The Committee shall have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to determine eligibility and to adjudicate all disputed claims filed under the Plan. Every finding, decision and determination made by the Committee shall, to the full extent permitted by the law, be final and binding upon all parties. The Committee may retain the services of an outside firm to serve as its agent in administering the Plan on a day-to-day basis. No member of the Board or the Committee shall be liable for any act done or omitted to be done by such member or by any other member of the Board or the Committee in connection with the Plan, except for such member's own willful misconduct or as expressly provided by statute."

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

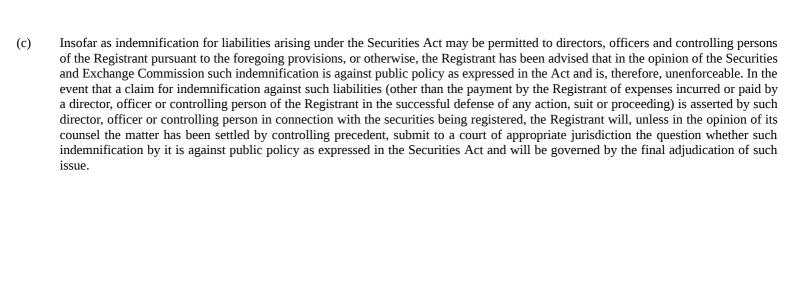
The exhibits accompanying this registration statement are listed on the accompanying exhibit index.

Item 9. 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;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this 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 this 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 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) promulgated under the Securities Act if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (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 this Registration Statement.

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) 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 Exchange Act that are incorporated by reference in this Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, 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.
- (b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this 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.



SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Basking Ridge, State of New Jersey, on this 20th day of June 2018.

CALADRIUS BIOSCIENCES, INC.

By: <u>/s/ David J. Mazzo</u> Name: David J. Mazzo, PhD

Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below under the heading "Signature" constitutes and appoints David J. Mazzo and Joseph Talamo or either of them, his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign any and all amendments (including post-effective amendments) to this registration statement and any related registration statement filed under Rule 462(b), and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ David J. Mazzo	Director, President and Chief Executive Officer	June 20, 2018
David J. Mazzo, PhD	(Principal Executive Officer)	
<u>/s/ Joseph Talamo</u> Joseph Talamo	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	June 20, 2018
<u>/s/ Gregory B. Brown</u> Gregory B. Brown, MD	Chairman of the Board of Directors	June 20, 2018
<u>/s/ Steven M. Klosk</u> Steven M. Klosk	Director	June 20, 2018
<u>/s/ Steven S. Myers</u> Steven S. Myers	Director	June 20, 2018
<u>/s/ Peter G. Traber</u> Peter G. Traber, MD	Director	June 20, 2018

EXHIBIT INDEX

Number		Description
3.1		Amended and Restated Certificate of Incorporation, as amended, incorporated by reference to Exhibit 3.1 of Registrants Quarterly Report on Form 10-Q, filed with the SEC on August 9, 2016.
3.2		Amended and Restated Bylaws, as amended, incorporated by reference to Exhibit 3.2 of the Registrant's Quarterly Report on Form 10-Q, filed with the SEC on August 9, 2016.
3.3		Amendment to the Amended and Restated Bylaws, as amended, incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on September 21, 2017.
4.1		Caladrius Biosciences, Inc. 2018 Equity Incentive Compensation Plan, incorporated by reference to Annex A of the Registrant's Definitive Proxy Statement filed with the SEC on April 24, 2018.
<u>5.1</u>	*	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Registrant
23.1	*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., (included in Exhibit 5.1)
23.2	*	Consent of Grant Thornton LLP, independent registered public accounting firm
24.1	*	Power of Attorney (included on the signature pages of this registration statement)

^{*} Filed herewith.

Exhibit 5.1

MINTZ LEVIN

Chrysler Center 666 Third Avenue New York, NY 10017 212-935-3000 212-983-3115 fax www.mintz.com

June 20, 2018

Caladrius Biosciences, Inc. 110 Allen Road, Second Floor Basking Ridge, New Jersey 07920

Ladies and Gentlemen:

We have acted as counsel to Caladrius Biosciences, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of a Registration Statement on Form S-8 (the "Registration Statement"), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended, of a total of 1,500,000 shares (the "Shares") of its common stock, \$0.001 par value per share (the "Common Stock"), that may be issued pursuant to the Caladrius Biosciences Inc. 2018 Equity Incentive Compensation Plan (the "Plan"). This opinion is being rendered in connection with the filing of the Registration Statement. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company's Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, as amended, both as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company's officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies. In addition, we have assumed that the Company will receive any required consideration in accordance with the terms of the Plan.

Based upon the foregoing, we are of the opinion that (i) the Shares have been duly and validly authorized by the Company and (ii) the Shares, when sold and delivered in accordance with the terms of the Plan, will have been duly and validly issued, fully paid and non-assessable shares of the Common Stock, free of preemptive rights.

Our opinion is limited to the applicable provisions of the Delaware Constitution, the General Corporation Laws of the State of Delaware and the reported judicial decisions interpreting those laws, and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

June 20, 2018 Page 2

We understand that you wish to file this opinion as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 22, 2018 with respect to the consolidated financial statements of Caladrius Biosciences, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2017, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement.

/s/GRANT THORNTON LLP

New York, New York June 20, 2018