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 (State or other jurisdiction of incorporation or organization) **22-2343568** (I.R.S. employer identification number)

420 Lexington Avenue, Suite 350 New York, NY 10170 (Address of principal executive offices; zip code)

Caladrius Biosciences, Inc. 2015 Equity Compensation Plan (Full title of the plan)

> Paige E. Cooperman, Esq. Associate General Counsel Caladrius Biosciences, Inc. 420 Lexington Avenue, Suite 350 New York, NY 10170 (212) 584-4180

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

Copies to:

Neil S. Torpey, Esq. Paul Hastings LLP 75 East 55th Street New York, NY 10022 (212) 318-6000

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

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

Calculation of Registration Fee

Title of Securities	Amount to be	Proposed Maximum	Proposed Maximum	Amount of
to be Registered	Registered	Offering Price per Share (3)	Aggregate Offering Price (3)	Registration Fee
Common Stock, par value \$.001 per share	4,400,000 shares(1) (2)	\$1.91	\$8,404,000	\$976.54

- (1) This Registration Statement registers 4,400,000 shares of the registrant's common stock, par value \$.001 per share ("Common Stock"), issuable pursuant to the Caladrius Biosciences, Inc. 2015 Equity Compensation Plan (the "2015 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 2015 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 July 10, 2015, 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 2015 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 ("SEC") allows us to "incorporate" into this registration statement information we file with other documents. This means that 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 fiscal year ended December 31, 2014, filed with the SEC on March 2, 2015;
- Our Amended Annual Report on Form 10-K/A for the fiscal year ended December 31, 2014, filed with the SEC on April 30, 2015;
- Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015, filed with the SEC on May 6, 2015;
- Our Current Reports on Form 8-K filed with the SEC on January 5, 2015, January 13, 2015, January 16, 2015, January 22, 2015, May 29, 2015 and June 5, 2015 (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of such Current Reports on Form 8-K); and
- Our Definitive Proxy Statement on Schedule14A filed with the SEC on June 8, 2015.
- The description of our common stock set forth in our 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 such 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 or 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 deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Under the General Corporation Law of Delaware (the "DGCL"), 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 our director, officer, employee or agent, or is or was serving at our 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 our 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 DGCL also provides that we 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 our right to procure a judgment in our favor by reason of the fact that he or she is or was our director, officer, employee or agent, or is or was serving at our 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 our best interests. However, in such an action by or on our behalf, no indemnification may be made in respect of any claim, issue or matter as to which the person is adjudged liable to us 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 indemnify for such expenses which the court shall deem proper.

Our amended and restated certificate of incorporation is consistent with the DGCL. Each of our directors, officers, employees and agents will be indemnified to the extent permitted by the DGCL. We have entered into indemnification agreements with our chief executive officer, chief financial officer, certain other employees and each of our directors pursuant to which we have agreed to indemnify each 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 a director, officer, employee, agent or fiduciary of our company. We also maintain insurance on behalf of our directors and officers against liabilities asserted against such persons and incurred by such persons in such capacities, whether or not we would have the power to indemnify such persons under the DGCL.

In addition to such other rights of indemnification as they may have, the 2015 Equity Plan contains the following indemnification provision applicable to (i) the Board of Directors, (ii) the Administrator of the Plan, defined to include a committee of directors appointed by the Board of Directors pursuant to the terms of the Plan to administer the Plan (a "Committee"), or if there is no such Committee, the Board of Directors itself and (iii) any member or delegate of the Board of Directors, the Committee or the Administrator:

Effect of Administrator's Decision. The Administrator's decisions, determinations, findings of fact, and interpretations shall be final and binding on all holders of Awards and Restricted Stock. The validity of any such decisions, determinations, findings of fact, or interpretations shall not be given de novo review if challenged in court, by arbitration or in any other forum, and shall be upheld unless clearly and convincingly shown to have been made in bad faith or materially affected by fraud. None of the Board, the Committee or the Administrator, nor any member or delegate thereof, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan, and each of the foregoing shall be entitled in all cases to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including without limitation reasonable attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under any directors' and officers' liability insurance coverage which may be in effect from time to time.

See also the undertakings set forth in response to Item 9(c) herein.

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 posteffective 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 the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) promulgated under the Securities Act 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)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the undersigned registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement; and that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained to the SEC by the undersigned registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the undersigned registrant pursuant to Section 13 or Section 15(d) of the Exchange Act 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 deemed part of the registration statement. *Provided further, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is for an offering of asset-backed securities on Form S-1 or Form S-3, and the information required to be included in a post-effective amendment is provided pursuant to Item 1100(c) of Regulation AB.

- (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.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
 - (i) If the 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)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act 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 that 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 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; or
 - (ii) If the 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.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the undersigned 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 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 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 SEC such indemnification is against public policy as expressed in the Securities Act 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 and will be governed by the final adjudication of such issue.

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 July 14, 2015.

CALADRIUS BIOSCIENCES, INC.

By: <u>/s/ David J. Mazzo, Ph.D.</u>

David J. Mazzo, Ph.D., 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 Robert S. Vaters 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 Securities and Exchange Commission, 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:

Signature	Title	Date
/s/ David J. Mazzo, Ph.D.	Director and Chief Executive Officer (Principal Executive Officer)	July 14, 2015
David J. Mazzo, Ph.D.		
/s/ Robin L. Smith, M.D.	Director and Chairman of the Board	July 14, 2015
Robin L. Smith, M.D.		
/s/ Robert S. Vaters	Director, President and Chief Financial Officer (Principal Financial Officer)	July 14, 2015
Robert S. Vaters		
	Vice President, Corporate Controller and Chief Accounting Officer (Principal	
/s/ Joseph Talamo	Accounting Officer)	July 14, 2015
Joseph Talamo		
/s/ Richard Berman	Director	July 14, 2015
Richard Berman		
/s/ Steven M. Klosk	Director	July 14, 2015
Steven M. Klosk		
/s/ Steven S. Myers	Director	July 14, 2015
Steven S. Myers		L I
/s/ Andrew L. Pecora, M.D.	Director	July 14, 2015
Andrew L. Pecora, M.D.		
/s/ Peter Traber, M.D.	Director	July 14, 2015
Peter Traber, M.D.		<i>bury</i> 17, 2010
/c/Exic II C M/ci	Director	Inter 14, 2015
/s/ Eric H.C. Wei Eric H.C. Wei	Director	July 14, 2015

EXHIBIT INDEX

Description

4.1	Amended and Restated Certificate of Incorporation of NeoStem, Inc. (1)
4.2	Amended and Restated By-Laws of NeoStem, Inc. dated January 5, 2015 (2)
4.3	Amendment effective June 3, 2015 to Registrant's Amended and Restated By-Laws (3)
4.4	Caladrius Biosciences, Inc. 2015 Equity Compensation Plan*
4.5	Specimen Certificate for Common Stock (4)
5.1	Opinion of Paul Hastings LLP*
23.1	Consent of Grant Thornton LLP*
23.2	Consent of Paul Hastings LLP (contained in Exhibit 5.1)*
24.1	Power of Attorney (included on the signature page of this registration statement)*

* Filed herewith.

- (1) Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed with the SEC on October 3, 2013.
- (2) Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed with the SEC on January 5, 2015.
- (3) Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed with the SEC on June 5, 2015.
- (4) Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-3, File No. 333-145988, filed with the SEC on September 11, 2007.

Caladrius Biosciences, Inc. 420 Lexington Avenue, Suite 350 New York, New York 10170

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Caladrius Biosciences, Inc., a Delaware corporation (the "*Company*"), in connection with the registration statement on Form S-8 (the "*Registration Statement*") to be filed by the Company with the Securities and Exchange Commission (the "*Commission*") on or about the date hereof to effect the registration under the Securities Act of 1933, as amended (the "*Securities Act*"), of an aggregate of 4,400,000 shares (the "*Shares*") of common stock, par value \$0.001 per share, of the Company (the "*Common Stock*") issuable pursuant to the terms, and subject to the conditions, of the Caladrius Biosciences, Inc. 2015 Equity Compensation Plan (the "*Plan*").

As such counsel and for purposes of our opinion set forth below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such documents, resolutions, certificates and other instruments of the Company and corporate records furnished to us by the Company, and have reviewed certificates of public officials, statutes, records and such other instruments and documents as we have deemed necessary or appropriate as a basis for the opinion set forth below, including, without limitation:

- (i) the Registration Statement;
- (ii) the Amended and Restated Certificate of Incorporation of the Company, as certified as of July 14, 2015, by the Office of the Secretary of State of the State of Delaware and by an officer of the Company;
- (iii) the Amended and Restated Bylaws of the Company as presently in effect, as certified by an officer of the Company as of July 14, 2015;
- (iv) the Plan;
- (v) a certificate, dated as of July 14, 2015, from the Office of the Secretary of State of the State of Delaware, as to the existence and good standing of the Company in the State of Delaware (the "Good Standing Certificate"); and
- (vi) (a) resolutions adopted by the board of directors of the Company by unanimous written consent, dated as of June 3, 2015, relating to the Plan and (b) resolutions adopted by the board of directors of the Company on July 14, 2015 relating to the Plan and other matters related thereto, in each case as certified by an officer of the Company as of July 14, 2015.

In addition to the foregoing, we have made such investigations of law as we have deemed necessary or appropriate as a basis for the opinion set forth in this opinion letter.

In such examination and in rendering the opinion expressed below, we have assumed, without independent investigation or verification: (i) the genuineness of all signatures on all agreements, instruments, corporate records, certificates and other documents submitted to us; (ii) the authenticity and completeness of all agreements, instruments, corporate records, certificates and other documents submitted to us; (iii) that all agreements, instruments, corporate records, certificates and other documents submitted to us; (iv) that all agreements, instruments, corporate records, certificates and other documents submitted to us as certified, electronic, facsimile, conformed, photostatic or other copies conform to the originals thereof, and that such originals are authentic and complete; (iv) the legal capacity, competency and authority of all persons or entities executing all agreements, instruments, corporate records, certificates and other documents submitted to us; (v) the due authorization, execution and delivery of all agreements, instruments, corporate records, certificates and other documents by all parties thereto; (vi) that each document submitted to us is the valid and binding obligation of each of the parties thereto, enforceable against such parties in accordance with

their respective terms and that no such documents have been amended or terminated orally or in writing except as has been disclosed to us in writing; (vii) that the statements contained in the certificates and comparable documents of public officials, officers and representatives of the Company and other persons on which we have relied for the purposes of this opinion letter are true and correct; (viii) that there has not been any change in the good standing status of the Company from that reported in the Good Standing Certificate; and (ix) that each of the officers and directors of the Company has properly exercised his or her fiduciary duties. As to all questions of fact material to this opinion letter, and as to the materiality of any fact or other matter referred to herein, we have relied (without independent investigation or verification) upon representations and certificates or comparable documents of officers and representatives of the Company. Our knowledge of the Company and its legal and other affairs is limited by the scope of our engagement, which scope includes the delivery of this opinion letter. We do not represent the Company with respect to all legal matters or issues. The Company employs other independent counsel and handles certain legal matters and issues without the assistance of independent counsel. We have also assumed that the Shares will be issued for the consideration provided under the Plan as currently in effect, that the Shares will be issued for a price per share not less than the par value per share of the Company and duly issued, granted or awarded and exercised in accordance with the requirements of law and the Plan (including, without limitation, the awards and award agreements duly adopted and authorized thereunder and in accordance therewith).

Based upon the foregoing, and in reliance thereon, and subject to the assumptions, limitations, qualifications and exceptions set forth herein, we are of the opinion that the Shares are duly authorized and, when issued as described in the Registration Statement and the related prospectus and in accordance with the Plan, will be validly issued, fully paid and nonassessable.

Without limiting any of the other limitations, exceptions and qualifications stated elsewhere herein, we express no opinion with regard to the applicability or effect of the laws of any jurisdiction other than the General Corporation Law of the State of Delaware, as in effect on the date of this opinion letter.

This opinion letter deals only with the specified legal issues expressly addressed herein, and you should not infer any opinion that is not explicitly stated herein from any matter addressed in this opinion letter.

This opinion letter has been prepared for your use in connection with the Registration Statement and may not be relied on for any other purpose. This opinion letter is rendered to you as of the date hereof, and we assume no obligation to advise you or any other person with regard to any change after the date hereof in the circumstances or the law that may bear on the matters set forth herein even if the change may affect the legal analysis or a legal conclusion or other matters in this opinion letter.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the Commission thereunder.

Very truly yours,

/s/ Paul Hastings LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 2, 2015 with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report on Form 10-K for the year ended December 31, 2014 of Caladrius Biosciences, Inc. (formerly NeoStem, Inc.), which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference in the Registration Statement of the aforementioned reports.

/s/ GRANT THORNTON LLP

New York, New York July 14, 2015