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Registration No. 333-214607

PROSPECTUS SUPPLEMENT

CALADRIUS BIOSCIENCES, INC.

1,398,305 **Shares of Common Stock**

This prospectus relates to the proposed resale or other disposition of up to 1,398,305 shares of Caladrius Biosciences, Inc. common stock, $0.001 par value per share, by the selling stockholders identified in this prospectus. We are not selling any shares of common stock under this prospectus and will not receive any of the proceeds from the sale or other disposition of common stock by the selling stockholders.

The selling stockholders or their pledgees, assignees or successors-in-interest may offer and sell or otherwise dispose of the shares of common stock described in this prospectus from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders will bear all commissions and discounts, if any, attributable to the sales of shares. We will bear all other costs, expenses and fees in connection with the registration of the shares. See "Plan of Distribution" beginning on page 10 for more information about how the selling stockholders may sell or dispose of their shares of common stock.

Our common stock is listed on The NASDAQ Capital Market, under the symbol "CLBS." On December 16, 2016, the last reported sale price of our common stock on The NASDAQ Capital Market was $3.33 per share.

Investing in our common stock involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described on page 7 of this prospectus under the caption "Risk Factors" and in the documents incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is December 19, 2016.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, as well as historical information. When used in this prospectus, statements that are not statements of current or historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "plan," "intend," "may," "will," "expect," "believe," "could," "anticipate," "estimate," "continue" or similar expressions or other variations or comparable terminology are intended to identify such forward-looking statements, although some forward-looking statements are expressed differently. We remind readers that forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors and involve known and unknown risks that could cause the actual results, performance, levels of activity or our achievements or industry results, to be materially different from any future results, performance, levels of activity or our achievements or industry results expressed or implied by such forward-looking statements. Factors that could cause our actual results to differ materially from anticipated results expressed or implied by forward-looking statements include, among others:

- our ability to obtain sufficient capital or strategic business arrangements to fund our operations and expansion plans, including meeting our financial obligations under various licensing and other strategic arrangements, the funding of our clinical trials for product candidates, and the commercialization of the relevant technology;
- our ability to build and maintain the management and human resources infrastructure necessary to support the growth of our business;
- our ability to integrate our acquired businesses successfully and grow such acquired businesses as anticipated, including expanding our PCT business;
- whether a market is established for our cell-based products and services and our ability to capture a meaningful share of this market;
- scientific and medical developments beyond our control;
- our ability to obtain and maintain, as applicable, appropriate governmental licenses, accreditations or certifications or comply with healthcare laws and regulations or any other adverse effect or limitations caused by government regulation of our business;
- whether any of our current or future patent applications result in issued patents, the scope of those patents and our ability to obtain and maintain other rights to technology required or desirable for the conduct of our business; and our ability to commercialize products without infringing the claims of third party patents;
- whether any potential strategic or financial benefits of various licensing agreements will be realized;
- the results of our development activities;
- our ability to complete our other planned clinical trials (or initiate other trials) in accordance with our estimated timelines due to delays associated with enrolling patients due to the novelty of the treatment, the size of the patient population and the need of patients to meet the inclusion criteria of the trial or otherwise; and
- our ability to satisfy our obligations under our loan agreement.

The factors discussed herein, including those risks described in "Item 1A. Risk Factors" of our Annual Report on Form 10-K and in our other periodic filings with the SEC, which are available for review at *www.sec.gov* under "Search for Company Filings," could cause actual results and developments to be materially different from those expressed or implied by such statements. All forward-looking statements attributable to us are expressly qualified in their entirety by these and other factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they were made. Except as required by law, we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the "SEC") pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the securities covered by this prospectus. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or securities are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus, including the Information Incorporated by Reference herein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under the captions "Where You Can Find More Information" and "Incorporation of Information by Reference" in this prospectus.

Neither we nor the selling stockholders have authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any of our securities other than the securities covered hereby, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about, and to observe, any restrictions as to the offering and the distribution of this prospectus applicable to those jurisdictions.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless the context otherwise requires, references in this prospectus to "Caladrius," the "Company," "we," "us," and "our" refer to Caladrius Biosciences, Inc.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed financial statements, notes to the financial statements and other information incorporated by reference from our other filings with the SEC. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Overview

Caladrius Biosciences, Inc. (“we,” “us,” "our," “Caladrius” or the “Company”), through its subsidiary, PCT, LLC, a Caladrius Company™ ("PCT"), is a leading provider of development and manufacturing services to the cell and cell-based gene therapy industry. PCT has significant cell therapy-specific experience and expertise, an expansive list of noteworthy clients and significant revenue growth over the past two years. Notably, PCT and Hitachi Chemical Co. America, Ltd. and Hitachi Chemical Co., Ltd. (each independently or collectively referred to herein as "Hitachi Chemical") are engaged in a strategic collaboration to accelerate the creation of a global commercial cell therapy development and manufacturing enterprise with deep engineering expertise. Caladrius leverages both its internal specialized cell therapy clinical development expertise and PCT’s prowess to select and develop early-stage cell therapy candidates with the intention of partnering these candidates post proof-of-concept in man to both generate value for our shareholders and to expand PCT’s client base. Our current lead product candidate, CLBS03, is a T regulatory cell (“Treg”) clinical Phase 2 therapy targeting adolescents with recent-onset type 1 diabetes.

Cell Therapy Development and Manufacturing

PCT is a leading cell therapy development and manufacturing provider (often called a contract development and manufacturing organization, or "CDMO"), specializing in cell and cell-based gene therapies. PCT offers high-quality development and manufacturing capabilities (e.g., current Good Manufacturing Practice (“cGMP”) manufacturing systems and facilities), quality systems, cell and tissue processing, logistics, storage and distribution and engineering solutions (e.g., process and assay development, optimization and automation) to clients with therapeutic candidates at all stages of development. PCT produces clinical supplies and ultimately, intends also to produce commercial product for its clients. PCT has worked with over 100 clients and produced over 20,000 cell therapy products since it was founded 17 years ago. PCT’s manufacturing services are designed to reduce the capital investment and time required by clients to advance their development programs compared to conducting the process development and manufacturing in-house. PCT has demonstrated regulatory expertise, including the support of over 50 U.S. and European Union ("EU") regulatory filings for clients and expertise across multiple cell types and therapeutic applications, including immunotherapy (e.g. CAR-T therapies), neuro/endocrine therapies, hematopoietic replacement and tissue repair/regeneration. PCT offers a complete development pathway for its clients, with services supporting preclinical through commercial phase, all underpinned by timely process optimization and automation support. We currently operate facilities qualified under cGMPs in each of Allendale, New Jersey and Mountain View, California, including EU-grade production suites. On March 11, 2016, PCT entered into a strategic collaboration and license agreement with Hitachi Chemical to accelerate the creation of a global commercial cell therapy development and manufacturing enterprise with deep engineering expertise. PCT is positioned to expand its capacity both in the United States and internationally, as needed. As the industry continues to mature and a growing number of cell therapy companies approach commercialization, we believe that PCT is well positioned to serve as an external manufacturing partner of choice for commercial-stage cell therapy companies.

CLBS03

We are developing, through the utilization of our core development and manufacturing expertise, a product candidate that is an innovative therapy for type 1 diabetes mellitus ("TID"). This therapy is based on a proprietary platform technology for immunomodulation. We have selected as an initial target the unmet medical need of pediatric patients who are newly diagnosed with T1D. This program is based on the use of Tregs to treat diseases caused by imbalances in an individual's immune system. This novel approach seeks to restore immune balance by enhancing Treg number and function. Tregs are a natural part of the human immune system and regulate the activity of T effector cells; the cells that are responsible for protecting the body from viruses and other foreign antigens. When Tregs function properly, only harmful foreign materials are attacked by T effector cells. In autoimmune disease, however, it is thought that deficient Treg activity and numbers permit the T effector cells to attack the body's own beneficial cells. In the case of T1D, there are currently no curative treatments, only lifelong insulin therapy, which often does not prevent serious co-morbidities. Two Phase 1 clinical trials of this technology in T1D patients demonstrated safety and tolerance, feasibility of manufacturing, an implied durability of effect and an early indication of efficacy through the preservation of beta cell function. In the first quarter of 2016, we commenced patient enrollment in the first of two cohorts in The Sanford Project: T-Rex Study, a Phase 2 prospective, randomized, placebo-controlled, double-blind clinical trial to evaluate the safety and

efficacy of our Treg product candidate, CLBS03, in adolescents with recent onset T1D. In August 2016, we completed enrollment of the first 19 patients, and after a satisfactory evaluation of the safety of this initial cohort by our independent Data Safety Monitoring Board, we resumed the enrollment of the remaining 92 patients. A subsequent interim analysis of early therapeutic effect is planned after approximately 50% of patients reach the six-month follow-up milestone. We entered into a strategic collaboration with Sanford Research to support the execution of this trial. Sanford Research is a U.S.-based non-profit research organization that supports an emerging translational research center focused on finding a cure for T1D. CLBS03 has been granted Fast Track and Orphan Drug designations from the FDA as well as Advanced Therapeutic Medicinal Product classification from the European Medicines Agency.

Additional Technology Platforms

Our broad intellectual property portfolio of cell therapy assets includes notable programs available for out-licensing and partnering in order to continue our clinical development. These include platforms using CD34 technology for ischemic repair and tumor cell/dendritic cell technology for immuno-oncology. Both have the benefit of promising Phase 2 clinical data and are applicable to multiple indications. With respect to our ischemic repair platform, the Company's Clinical Trial Notification for a pivotal Phase 2 trial investigating CLBS12 (a candidate for critical limb ischemia, or "CLI") was submitted to the Japanese Pharmaceuticals and Medical Devices Agency ("PMDA") and was cleared to proceed. The protocol design was agreed with PMDA and if successful, could provide the basis for a conditional approval under Japan's favorable regenerative medicine law. We are seeking to collaborate on CLBS12 with development and/or manufacturing partners. In January 2016, we out-licensed our CD34 technology to SPS Cardio, LLC for chronic heart failure and acute myocardial infarction (candidate CLBS10) in India and other designated territories and non-major world markets outside the United States. The immuno-oncology platform is based on our extensive intellectual property portfolio and includes CLBS20, a candidate for metastatic melanoma which was investigated in two Phase 2 trials and recently in a discontinued Phase 3 clinical trial. In February 2016, we out-licensed a cell-derived dermatological product technology for topical skin application to AiVita Biomedical, Inc. ("AiVita"), which product is distributed through ALPHAEON Corporation. Furthermore, in May 2016, we out-licensed our tumor cell/dendritic cell technology to AiVita for ovarian cancer (candidate CLBS23) for worldwide use. Finally, our Treg immune modulation platform has potential applications across multiple autoimmune and allergic diseases beyond TID for which we are exploring partnering opportunities, including steroid-resistant asthma, multiple sclerosis, chronic obstructive pulmonary disease, inflammatory bowel disease, graft versus host disease, lupus and rheumatoid arthritis.

Our long-term strategy focuses on advancing cell-based therapies to the market and assisting patients suffering from life-threatening medical conditions. Coupling our clinical development expertise with our process development and manufacturing capabilities, we believe we are positioned to realize potentially meaningful value increases within our own proprietary pipeline based on demonstration of proof-of-concept in man as well as process and manufacturing advancements.

Recent Developments

Private Placement

In a private placement, on September 14, 2016, we entered into securities purchase agreements (each, a "Private Placement Purchase Agreement" and collectively, the "Private Placement Purchase Agreements") with certain accredited investors (the "Investors") with whom we had a substantive, pre-existing relationship, including certain existing stockholders, for the sale by us of an aggregate of 4,449,152 shares of common stock, at a purchase price of $4.72 per share. The investments will be placed in two tranches: (i) up to $12.6 million upon an initial closing (the "Initial Closing"), and (ii) up to $8.4 million, subject to certain conditions, including the enrollment of 70 subjects in our Phase 2 CLBS03 clinical trial, in a second closing (the "Second Closing"). The Initial Closing was closed on September 14, 2016 and the Second Closing is expected to occur within two days after the satisfaction of the certain conditions outlined in the Private Placement Purchase Agreements. As of September 30, 2016, $6.6 million of the Initial Closing tranche was received, and 1,398,305 shares of common stock had been issued. Based on management's expectations, the remaining $6.0 million of the Initial Closing tranche is expected to be received in the fourth quarter of 2016, and 1,271,186 shares of common stock will then be issued. The aggregate gross proceeds for the sale of the shares of common stock in the private placement are expected to be approximately $21.0 million.

In connection with the private placement we entered into a Registration Rights Agreement on September 14, 2016, with each of the Investors (the "Registration Rights Agreement"), which requires us to file a registration statement with the SEC, covering the resale of the shares of common stock issued in the private placement, and use our commercially reasonable efforts to cause such registration statement to be declared effective by the SEC within 90 days of the Initial Closing (or 120 days in the event such registration statement is reviewed by the SEC). Failure to do so or meet various other deadlines set forth in the Registration Rights Agreement will give rise to liquidated damages of 1% per month, up to a maximum of 3% so long as the event giving rise to the damages remains uncured, all as set forth in the Registration Rights Agreement. This registration statement is

being filed in connection with our obligations under the Registration Rights Agreement with respect to the sale of an aggregate of 1,398,305 shares of our common stock issued to the Investors in the Initial Closing.

The Investors also agreed to enter into lock-up agreements ranging from 90 to 180 days. In addition, one of the investors in the private placement, with an expected investment of up to $5.0 million, will have a limited right to have a board observer (with no voting rights) for a period commencing on the date of the Initial Closing and ending on the second anniversary of the Initial Closing.

Registered Direct Offering

On September 14, 2016, we also entered into a Securities Purchase Agreement with a single institutional investor (the "Purchaser"), pursuant to which we agreed to issue to the Purchaser, in a registered direct offering, an aggregate of 847,458 shares of our common stock, at a purchase price of $4.72 per share. The closing of the registered direct offering closed on September 14, 2016.

The net proceeds to us from the registered direct offering of the shares of common stock, after deducting our offering expenses, was approximately $3.9 million.

The offer and sale of the shares of common stock in the registered direct offering was registered under the Securities Act of 1933, as amended (the "Securities Act"), on a registration statement on Form S-3 (File No. 333-206175), which became effective on August 28, 2015.

Corporate Information

We were incorporated in 1980 as a Delaware corporation and our principal executive offices are located at 106 Allen Road, Fourth Floor, Basking Ridge, NJ 07920. Our telephone number is (908) 842-0100 and our corporate website address is *www.caladrius.com*. We include our website address in this prospectus only as an inactive textual reference and do not intend it to be an active link to our website. The information on our website is not incorporated by reference into this prospectus.

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports, as well as other documents we file with the SEC, are available free of charge through the Investors section of our website as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The public can obtain documents that we file with the SEC at *www.sec.gov*.

This prospectus includes the following trademarks, service marks and trade names owned by us: Caladrius®, Amorcyte®, Athelos™, and PCT, LLC™. These trademarks, service marks and trade names are the property of Caladrius and its affiliates. This prospectus also includes other trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and traded names included herein are the property of their respective owners.

THE OFFERING

This prospectus relates to the resale of 1,398,305 shares of our common stock, all of which are outstanding shares of common stock held by the selling stockholders. See “Selling Stockholders.”

The selling stockholders may offer to sell the shares being offered in this prospectus at fixed prices, at prevailing market prices at the time of sale, at varying prices or at negotiated prices. Our common stock is listed on The NASDAQ Capital Market under the symbol “CLBS.”

We have agreed to register the offer and sale of the common stock to satisfy registration rights we have granted to the selling stockholders. We will not receive any proceeds from the sale or other disposition of the common stock by the selling stockholders.

RISK FACTORS

Please carefully consider the risk factors described in our periodic reports filed with the SEC, which are incorporated by reference in this prospectus. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus. Additional risks and uncertainties not presently known to us or that we deem currently immaterial may also impair our business operations or adversely affect our results of operations or financial condition.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of shares of our common stock in this offering. The selling stockholders will receive all of the proceeds from this offering.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, fees and expenses of our counsel, certain expenses of counsel to the selling stockholders and our independent registered public accounting firm.

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those previously issued to the selling stockholders. For additional information regarding the issuances of those shares of common stock, see “Prospectus Summary-Private Placement” above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the shares of common stock, as of November 14, 2016. The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of a registration rights agreement with the selling stockholders, this prospectus generally covers the resale of the sum of the number of shares of common stock issued to the selling stockholders on or about September 14, 2016 pursuant to securities purchase agreements dated as of September 14, 2016. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

The selling stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.”

Name of Selling stockholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Beneficially Owned After Offering (1)
Sanford Health (2)	635,593	635,593	—
IEA Private Investments LTD (3)	798,600	381,356	417,244
Jerilyn Holdings Limited (4)	254,237	254,237	—
Union Clinic Partners (5)	127,119	127,119	—

(1) Assumes that all shares being registered in this prospectus are resold to third parties and that with respect to a particular selling stockholder, such selling stockholder sells all shares of common stock registered under this prospectus held by such selling stockholder.

(2) Sanford may be deemed to beneficially own such shares. The address for Sanford Health is 1305 W. 18th Street, Sioux Falls, South Dakota 57105.

(3) Includes warrants to purchase 85,922 shares of common stock exercisable within 60 days of November 14, 2016. Amy Wu Yee and Mark Siao Hing Pu may be deemed to beneficially own such shares. The address for IEA Private Investments LTD is c/o IEA Private Investments LTD, 3003A, ONE Exchange Square, 8 Connaught Place, Central, Hong Kong.

(4) Song Yu Nu may be deemed to beneficially own such shares. The address for Jerilyn Holdings Limited is Suite 1005, Tower #2, No. 189 Nan Dan Road, Shanghai, China, 200030.

(5) Rui Wang and Wei Ji may be deemed to beneficially own such shares. The address for Union Clinic Partners Incorporated is 3/F Zhongfang Building, No. 19 Jianguomennei Ave., Dongcheng, Beijing, China 100005.

PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, donees, transferees, assignees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling stockholders may use one or more of the following methods when disposing of the shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through brokers, dealers or underwriters that may act solely as agents;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions entered into after the effective date of the registration statement of which this prospectus is a part, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of disposition; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, as amended, or Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time under this prospectus, or under a supplement or amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

Upon being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon being notified in writing by a selling stockholder that a donee or pledge intends to sell more than 500 shares of common stock, we will file a supplement to this prospectus if then required in accordance with applicable securities law.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

Upon being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealers(s), (ii) the number of shares involved, (iii) the price at which such shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon being notified in writing by a selling stockholder that a donee or pledge intends to sell more than 500 shares of common stock, we will file a supplement to this prospectus if then required in accordance with applicable securities law.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledges or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the shares of common stock or interests in shares of common stock, the selling stockholders may enter into hedging transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of common stock short after the effective date of the registration statement of which this prospectus is a part and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act and the rules of the Financial Industry Regulatory Authority (FINRA).

We have advised the selling stockholders that they are required to comply with Regulation M promulgated under the Securities and Exchange Act during such time as they may be engaged in a distribution of the shares. The foregoing may affect the marketability of the common stock.

The aggregate proceeds to the selling securityholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling securityholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act or otherwise.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the date on which all securities under such Registration Statement have been disposed of by the holder in accordance with such Registration Statement, have been previously sold in accordance with Rule 144, or after a Registration Statement registering the resale of such securities has been effective for three consecutive years, if such securities are or become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144.

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., New York, New York, will pass upon the validity of the common stock being offered by this prospectus.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the reports of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement and any prospectus supplement filed hereafter, including the exhibits, for further information about us and the securities we may offer pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where You Can Find More Information." The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed on March 15, 2016, and as amended on April 29, 2016;
- our Quarterly Reports on Form 10-Q for the fiscal quarter ended March 31, 2016 filed on May 5, 2016 (as amended on May 6, 2016), for the fiscal quarter ended June 30, 2016 filed on August 9, 2016 and for the fiscal quarter ended September 30, 2016 filed on November 7, 2016;
- our Current Reports on Form 8-K filed on January 6, 2016, January 11, 2016, February 26, 2016, March 14, 2016 (two reports), March 17, 2016, May 5, 2016, June 23, 2016, June 27, 2016, July 27, 2016, August 9, 2016, September 15, 2016, October 12, 2016, October 19, 2016 and November 7, 2016 (excluding any information deemed furnished pursuant to Item 2.02 or Item 7.01 of any Current Report on Form 8-K);
- our Definitive Proxy Statement on Schedule 14A filed with the SEC on May 10, 2016;
- the description of our common stock contained in our Registration Statement on Form 8-A, filed on August 2, 2013, pursuant to Section 12(b) of the Exchange Act; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination or completion of the offering of securities under this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing such reports and other documents;

Unless otherwise noted, the SEC file number for each of the documents listed above is 001-33650.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Caladrius Biosciences, Inc., 106 Allen Road, 4th Floor, Basking Ridge, NJ 07920, telephone (908) 842-0100, Attn: Secretary.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at http://www.sec.gov.

This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We also maintain a website at *www.caladrius.com*, through which you can access our SEC filings. The information set forth on, or accessible from, our website is not part of this prospectus.