
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

CELLECTAR BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
*(State or other jurisdiction of
incorporation or organization)*

04-3321804
*(I.R.S. Employer
Identification Number)*

**3301 Agriculture Drive
Madison, WI 53716
(608) 441-8120**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**James Caruso
President and Chief Executive Officer
3301 Agriculture Drive
Madison, WI 53716**

(Name and address of agent for service)

(608) 441-8120

(Telephone number, including area code, of agent for service)

Copy to:

**Paul Bork, Esq.
Foley Hoag LLP
155 Seaport Boulevard
Boston, Massachusetts 02210
(617) 832-1000**

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a
smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock	300,006	\$ 3.785	\$ 1,135,522.71	\$ 114.35
Total	300,006	\$ 3.785	\$ 1,135,522.71	\$ 114.35

- (1) Consists of 300,006 shares of common stock of the registrant, par value \$0.00001 per share, issuable upon exercise of certain outstanding warrants at an exercise price of \$2.13 per share, to be offered and sold by the selling stockholders identified in this registration statement. This registration statement also relates to an indeterminate number of shares of common stock that may be issued upon stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act of 1933 (the "Securities Act").
- (2) Estimated solely for the purpose of calculating the registration fee for the shares of common stock issuable upon the exercise of warrants to be registered in accordance with Rule 457(g) under the Securities Act, based upon the higher of (i) the price at which the warrants may be exercised and (ii) the average of the high and low prices for a share of the registrant's common stock as reported on the NASDAQ Capital Market on June 9, 2016.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS

SUBJECT TO COMPLETION, DATED June 17, 2016



300,006 SHARES OF COMMON STOCK

OFFERED BY SELLING STOCKHOLDERS

This prospectus relates to the resale of up to 300,006 shares of our common stock issuable upon the exercise of outstanding warrants to purchase common stock issued on April 20, 2016. We are not selling any shares of our common stock under this prospectus and will not receive any proceeds from the sale of shares by the selling stockholders. The selling stockholders will bear all commissions and discounts, if any, attributable to the sale of the shares. We will bear all costs, expenses and fees in connection with the registration of the shares.

The selling stockholders may sell the shares of our common stock offered by this prospectus from time to time on terms to be determined at the time of sale through ordinary brokerage transactions or through any other means described in this prospectus under "Plan of Distribution." The prices at which the selling stockholder may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions.

Our common stock is listed on the NASDAQ Capital Market under the symbol "CLRB." On June 9, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$3.44 per share.

On March 4, 2016 at 5:00 p.m. Eastern Standard Time, the Company effected a reverse stock split at a ratio of 1-for-10. All share and per share information presented herein has been retroactively restated to reflect the reverse split.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 6 of this prospectus for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is [●], 2016.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the “SEC”) utilizing a shelf registration process. Using the shelf registration process, the selling stockholders may, from time to time, offer and sell shares of our common stock pursuant to 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 of the document 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 on a later date. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under the caption “Where You Can Find More Information” in the prospectus.

We have not 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 securities other than the registered securities to which it relates, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

Unless otherwise stated or unless the context otherwise requires, all references to “we,” “us,” “our,” “our company” or “the Company” in this prospectus refer collectively to Collectar Biosciences, Inc., a Delaware corporation.

PROSPECTUS SUMMARY

This section contains a general summary of the information contained in this prospectus. It may not include all of the information that is important to you. You should read the entire prospectus, any accompanying prospectus supplement and the documents incorporated by reference before making an investment decision.

Overview

Cellectar Biosciences, Inc. (the Company) is a clinical stage biopharmaceutical company focused on the development of targeted phospholipid drug conjugates (PDCs) for the treatment and imaging of cancer. The Company's research and development program is based on its proprietary PDC cancer targeting delivery platform. The delivery platform possesses the potential for the discovery and development of a broad range of cancer targeting agents. The company's pipeline is comprised of pre-clinical and clinical product candidates including radiotherapeutic and chemotherapeutic PDC's. The pipeline also includes diagnostic and optical imaging assets. The company's research and development resources are focused on the clinical advancement of its therapeutic PDC's.

Our core company strategy is to leverage our industry leading PDC, proprietary cancer targeting delivery platform to generate capital, supplement internal resources and accelerate and broaden product candidate clinical development through strategic asset and research collaborations.

Our shares are listed on the NASDAQ® Capital Market under the symbol CLRB; prior to August 15, 2014, our shares were quoted on the OTCQX® marketplace, and prior to February 12, 2014 were quoted under the symbol NVLT.

Our PDC platform is based on our cancer-targeting and delivery technology which provides selective delivery of a diverse range of oncologic payloads to cancer cells and cancer stem cells. By linking various drug payloads to our proprietary phospholipid ether cancer-targeting vehicle, we believe we can create PDCs with the potential to provide highly targeted delivery of chemotherapeutic and radiotherapeutic payloads to a broad range of cancers. As a result, our PDC platform has the potential to improve the therapeutic index of drug payloads, enhancing or maintaining efficacy while reducing adverse events by minimizing drug delivery to healthy cells, increasing delivery to cancer cells and a broad range of cancerous tumors. The PDC product portfolio includes:

- CLR 131 is a small-molecule, broad-spectrum, cancer-targeting radiotherapeutic PDC that is designed to deliver cytotoxic (cell-killing) radiation directly and selectively to cancer cells and cancer stem cells. CLR 131 is our lead PDC radiotherapeutic product candidate and is currently being evaluated in a Phase 1 study for the treatment of relapse or refractory multiple myeloma. Multiple myeloma is an incurable cancer of plasma cells. This cancer type was selected for both clinical and commercial rationales, including multiple myeloma's highly radiosensitive nature, continued unmet medical need in the relapse/refractory setting and the receipt of an orphan drug designation. The Investigational New Drug (IND) application was accepted by the U.S. Food and Drug Administration (FDA) in March 2014. In December 2014, the FDA granted orphan drug designation for CLR 131 for the treatment of multiple myeloma. The Phase 1 study was initiated in April 2015 and we announced performance results from the first patient cohort in January of 2016. The study's Data Monitoring Committee (DMC), unanimously agreed to advance CLR 131 into the second cohort. Patient enrollment is currently ongoing and the company plans to provide a study update in the third quarter of 2016. The primary goals of the Phase 1 study are to assess the compound's safety, identify the optimal Phase 2 dose, and possibly obtain an early evaluation of low dose drug activity.
- The Company is exploring the creation of additional PDCs ranging from newly discovered to well-characterized chemotherapeutic payloads under its CLR CTX Chemotherapeutic PDC program. The objective of our CTX program is to develop PDC chemotherapeutics through conjugation of our delivery vehicle and non-targeted anti-cancer agents to improve therapeutic indices and expand potential indications through the targeted delivery of chemotherapeutic payloads. Initial CTX product candidates include CLR 1601-PTX, CLR 1602-PTX and CLR 1603-PTX; all are small-molecule, broad-spectrum, cancer-targeting chemotherapeutics in pre-clinical research. These PDCs are designed to selectively deliver paclitaxel, a chemotherapeutic payload to cancer cells and cancer stem cells to increase the therapeutic index of paclitaxel as a monotherapy. Each of our paclitaxel PDC's have been evaluated *in vitro* to demonstrate formulation stability and CLR 1602-PTX is currently being studied *in vivo* to further explore the PDC's cancer targeting selectivity. In December of 2015, the Company initiated a research collaboration for our PDC technology with Pierre Fabre Laboratories, the third largest French pharmaceutical company. The objective of the research collaboration is to co-design a library of PDC's employing Pierre Fabre's natural product derived chemotherapeutics in combination with our proprietary cancer targeting delivery vehicle. The newly developed PDC's may provide enhanced therapeutic indices to otherwise highly potent, non-targeted payloads through the targeted delivery to cancer cells provided by our cancer targeted delivery vehicle.
- CLR 125 is a broad-spectrum, cancer-targeting radiotherapeutic currently under pre-clinical investigation for the treatment of micrometastatic disease. In October, 2015, the company was awarded a national Cancer Institute Fast-Track Small Business Innovation Research (SBIR) grant to further advance its PDC delivery platform through CLR 125 preclinical and clinical research. The collaboration is designed to further explore the targeted delivery of radioisotopes for improved cancer therapy outcomes. The grant is awarded in two installments with up to \$2.3 million in funding. Similar to CLR 131, the selective uptake and retention of CLR 125 has been observed in malignant tissues during pre-clinical studies. CLR 125 uses the radioisotope Iodine-125 (which has a 60-day half-life), which may provide an excellent tumor kinetics match with Cellectar's proprietary delivery vehicle. Ongoing pre-clinical research includes: chemistry, manufacturing and controls of CLR 125; biodistribution and toxicity studies of CLR 125 in pre-clinical models; and efficacy and dose-response studies.



- CLR 124 is a small-molecule, broad-spectrum, cancer-targeting positron emission tomography (PET) imaging PDC that we believe has the potential to be the first of its kind for the selective detection of tumors and metastases in a broad range of cancers. CLR 124 has been used for PET/CT imaging in a broad array of tumor types through Company and investigator-sponsored clinical trials. We are in the process of evaluating the data from those studies. In April 2014, the FDA granted CLR 124 orphan status as a diagnostic for the management of glioma.
- CLR 1502 is a small-molecule, broad-spectrum, cancer-targeting NIR-fluorophore optical imaging PDC for intraoperative tumor and tumor margin illumination. This past June, after review of the Company's IND application, the FDA determined that CLR 1502 will be evaluated as a combination product and assigned to the Center for Devices and Radiological Health (CDRH). As a result of this classification, the FDA has advised Celectar that it will need to submit a new investigational application for the combination product prior to initiating its Phase I study in breast cancer surgery. As a result, Celectar is working to identify the optimal clinical development and value optimizing strategic pathway. Based on our assessment, the Company believes that product will be similarly treated post marketing approval regardless of the regulatory pathway.

We believe our PDC platform has potential to provide targeted delivery of a diverse range of oncologic payloads, as exemplified by the product candidates listed above, that may result in improvements upon current standard of care (SOC) for the treatment and imaging of a broad range of human cancers.

Corporate Information

Our headquarters and manufacturing operation is located at 3301 Agriculture Drive, Madison, Wisconsin 53716. We maintain a website at www.celestar.com. The information included or referred to on, or accessible through, our website does not constitute part of, and is not incorporated by reference into, this prospectus.

Recent Developments

Warrant Restructuring

On April 13, 2016, we entered into an amendment and exchange agreement (the "Warrant Restructuring Agreement") with the holders of two series of warrants to purchase shares of the Company's common stock issued on October 1, 2015. One series of warrants to purchase up to 150,003 shares at an initial exercise price of \$28.30 per share was exercisable for five years beginning on April 1, 2016 (the "Series A Warrants"). The second series of warrants (the "Series B Warrants") were pre-funded (i.e., the exercise price of \$22.00 per share had been paid at issuance), and the Series B Warrants are exercisable upon notice and do not expire. The foregoing share and per share amounts reflect the one-for-ten reverse stock split effected by the Company in March 2016.

The Warrant Restructuring Agreement provided that upon the consummation of the firm commitment underwritten offering by the Company of shares of common stock, traditional warrants to purchase shares of common stock and pre-funded warrants to purchase shares of common stock, pursuant to the registration statement on Form S-1 (File No. 333-208638) filed by the Company (the "Underwritten Offering"), the exercise price of the Series A Warrants would be reduced to the public offering price per share of the shares of common stock sold in the Underwritten Offering (\$2.13) and that the Series A Warrants would be amended so that the exercise price would no longer be subject to adjustment in connection with future equity offerings by the Company. The Underwritten Offering closed on April 20, 2016. In consideration of this amendment of the Series A Warrants, the Company agreed to issue to the holders new warrants ("New Warrants") to purchase an additional number of shares of common stock twice the number of shares of common stock underlying the Series A Warrants (300,006 shares). The New Warrants would have an exercise price equal to the public offering price of the shares of common stock sold in the Underwritten Offering (\$2.13), will become exercisable on the date that is six months following their initial issuance date (October 20, 2016) and will expire on the fifth anniversary of the date on which they initially become exercisable. The New Warrants are callable by the Company in certain circumstances. The shares of common stock issuable upon exercise of these New Warrants are the subject of the offering by the Selling Stockholders.

On May 2, 2016, the Company and certain holders of the New Warrants for the purchase of 172,730 shares of common stock entered into an agreement (the "Warrant Exercise Agreement") in which the holders agreed to forebear from exercising the New Warrants unless and until the Company obtained approval of its stockholders of the issuance of the New Warrants as required by the applicable rules and restrictions of the Nasdaq Stock Market. The Company agreed to seek to obtain approval of stockholders at a meeting to be held by July 19, 2016. In addition the Company agreed to refrain from issuing, without the consent of these holders, additional equity securities (other than equity securities being issued for compensatory reasons to employees and consultants) until the stockholder approval is obtained.

Regaining Compliance with Nasdaq Listing Requirements

On August 14, 2015 we received a notice from Nasdaq of non-compliance with its continued listing rules, namely that our stockholders' equity at June 30, 2015 of \$2,373,371, as reported in our Form 10-Q for the quarter then ended, was less than the required minimum of \$2.5 million. We did not satisfy the terms of the initial compliance plan approved by Nasdaq. On February 11, 2016, Nasdaq issued a second notice of noncompliance. At a hearing on March 31, 2016, the Company requested, and Nasdaq granted, an extension through May 16, 2016, to effect transactions to allow us to regain compliance and to report the same. On April 20, 2016, we closed the 2016 Underwritten Offering, and on May 16, 2016, Nasdaq issued a determination that the company had evidenced compliance with all requirements for continued listing on The Nasdaq Capital Market and, accordingly, the listing qualifications matter had been closed.

On January 21, 2016 we received a notice from Nasdaq of non-compliance with its listing rules regarding the requirement that the listed securities maintain a minimum bid price of \$1 per share. On March 4, 2016, the Company effected a reverse stock split at a ratio of 1-for-10, and on March 21, 2016, Nasdaq notified the Company that we had regained compliance with the minimum bid price requirement.

The Offering

<i>Shares of common stock offered by us:</i>	None
<i>Shares of common stock offered by the selling stockholders:</i>	300,006 shares issuable upon the exercise of outstanding warrants to purchase common stock
<i>Shares of common stock outstanding before this offering, assuming no exercise of the New Warrants:</i>	5,271,635 shares
<i>Shares of common stock outstanding after completion of this offering, assuming full exercise of the New Warrants:</i>	5,571,641 shares
<i>Use of Proceeds:</i>	We will not receive any proceeds from the resale of the shares of common stock by the selling stockholders.
<i>Risk Factors:</i>	See “Risk Factors” on page 4 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding whether to purchase our securities.
<i>NASDAQ symbol for our common stock:</i>	CLRB

Unless we specifically state otherwise, the share information in this prospectus, including the number of shares of common stock outstanding before this offering, is as of June 9, 2016 and reflects or assumes no exercise of outstanding options or warrants to purchase shares of our common stock.

The number of shares of our common stock outstanding before and after this offering is based on 5,271,635 shares of common stock outstanding as of June 9, 2016 and excludes, as of that date:

- an aggregate of 99,882 shares of common stock issuable upon the exercise of outstanding stock options issued to employees, directors and consultants;
- an aggregate of 4,726,442 additional shares of common stock reserved for issuance under outstanding warrants having expiration dates between December 6, 2016 and October 20, 2021, and exercise prices ranging from \$2.13 per share to \$250.00 per share.

RISK FACTORS

Prior to making an investment decision, prospective investors should carefully consider, in light of their particular investment objectives and financial circumstances, the specific factors set forth under the caption “Risk Factors” in the applicable prospectus supplement pertaining thereto and in our most recent annual report on Form 10-K and any subsequent quarterly reports on Form 10-Q filed with the SEC, as well as any amendments thereto reflected in subsequent filings with the SEC, and in any of our other filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, incorporated by reference into this prospectus and the applicable prospectus supplement. For more information, see “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus, contain forward-looking statements. You should carefully consider the various risk factors described above that are incorporated by reference into this prospectus from our SEC filings, which risk factors may cause our actual results to differ materially from those indicated by such forward-looking statements. You should not place undue reliance on our forward-looking statements.

USE OF PROCEEDS

All proceeds from the resale of the shares of our common stock offered by this prospectus will belong to the selling stockholders. We will not receive any proceeds from the sale or other disposition by the selling stockholders of the shares of our common stock covered by this prospectus. However, we will receive proceeds upon any cash exercise of the New Warrants, the underlying shares of which are offered by this prospectus. If the New Warrants are all exercised for cash, we will receive gross proceeds of approximately \$639,000. We intend to use any proceeds from any such exercise to fund our research and development activities and for general corporate purposes. There is no assurance that the New Warrants will ever be exercised.

SELLING STOCKHOLDERS

This prospectus relates to the offering by the selling stockholders of up to 300,006 shares of common stock issuable upon exercise of warrants issued on April 20, 2016.

The following table sets forth, based on information provided to us by the selling stockholders or known to us, the name of the selling stockholders, the nature of any position, office or other material relationship, if any, which the selling stockholders have had, within the past three years, with us or with any of our predecessors or affiliates, and the number of shares of our common stock beneficially owned by the selling stockholders before this offering, in each case as of June 9, 2016. The number of shares owned are those beneficially owned, as determined under the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares of common stock as to which a person has sole or shared voting power or investment power and any shares of common stock which the person has the right to acquire within 60 days through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement. No selling stockholder is a broker-dealer or an affiliate of a broker-dealer.

We have assumed all shares of common stock reflected on the table will be sold from time to time in the offering covered by this prospectus. Because the selling stockholders may offer all or any portions of the shares of common stock listed in the table below, no estimate can be given as to the amount of those shares of common stock covered by this prospectus that will be held by the selling stockholders upon the termination of the offering. As of June 9, 2016, there were 5,271,635 shares of our common stock issued and outstanding.

Selling Stockholder	Number of Shares Beneficially Owned Before Offering (1)	Number of Shares Offered (1)	Number of Shares Beneficially Owned After Offering (1)	Percentage of Shares Beneficially Owned After Offering (1)
Lincoln Park Capital Fund LLC (2)	—	127,274	—	—%
Sabby Healthcare Master Fund, Ltd. (2)	—	84,850	—	—%
Sabby Volatility Warrant Master Fund, Ltd. (2)	—	42,426	—	—%
Greenway Properties, Inc. (2)	481,342	45,456	481,342	8.93%

(1) The New Warrants do not become exercisable until October 20, 2016. Because that date is more than 60 days from the date of this prospectus, the shares of common stock offered hereby, which are issuable upon exercise of the New Warrants, are not included in the number of shares beneficially owned before or after the offering, or in the calculation of the percentage of shares beneficially owned after the offering.

(2) Based on information provided by Selling Stockholder.

PLAN OF DISTRIBUTION

Each selling stockholder (the “Selling Stockholders”) of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Stock Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- 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;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-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 securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities 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 securities 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 securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Securities and Exchange Commission allows us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus, except for any information that is superseded by information that is included directly in this prospectus or incorporated by reference subsequent to the date of this prospectus. We do not incorporate the contents of our website into this prospectus. We incorporate by reference the filed documents listed below, except as superseded, supplemented or modified by this prospectus, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the selling stockholders sell all of our securities registered under this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 11, 2016;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed with the SEC on May 12, 2016;
- our Definitive Proxy Statement on Schedule 14A for a special meeting of stockholders, filed with the SEC on January 7, 2016;
- our Definitive Proxy Statement on Schedule 14A for our special meeting in lieu of our 2016 annual meeting of stockholders, filed with the SEC on June 1, 2016;
- our Current Report on Form 8-K dated January 21, 2016, filed with the SEC on January 26, 2016;
- our Current Report on Form 8-K dated February 8, 2016, filed with the SEC on February 11, 2016;
- our Current Report on Form 8-K dated February 11, 2016, filed with the SEC on February 17, 2016;

- our Current Report on Form 8-K dated March 4, 2016, filed with the SEC on March 4, 2016;
- our Current Report on Form 8-K dated March 11, 2016, filed with the SEC on March 17, 2016;
- our Current Report on Form 8-K dated April 14, 2016, filed with the SEC on April 14, 2016;
- our Current Report on Form 8-K dated April 15, 2016, filed with the SEC on April 21, 2016;
- our Current Report on Form 8-K dated May 2, 2016, filed with the SEC on May 3, 2016;
- our Current Report on Form 8-K dated May 16, 2016, filed with the SEC on May 19, 2016;
- our Current Report on Form 8-K dated May 12, 2016, filed with the SEC on May 20, 2016; and
- the description of our securities contained in our Registration Statement on Form 8-A filed on August 14, 2014, including any amendment or report filed for the purpose of updating such description.

In addition, we incorporate by reference all documents that we may file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after (1) the date of the initial registration statement and prior to the effectiveness of the registration statement and (2) the date of effectiveness of the registration statement until the date on which this registration statement has been withdrawn. These documents will become a part of this prospectus from the date that the documents are filed with the SEC. These documents include periodic reports, such as annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, excluding any information filed or furnished pursuant to Item 2.02, Item 7.01 or Item 9.01 and excluding any information furnished pursuant to Item 8.01 of any current report on Form 8-K solely for purposes of satisfying the requirements of Regulation FD under the Exchange Act, unless such Form 8-K expressly provides to the contrary.

Upon oral or written request and at no cost to the requester, we will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus. You may request copies of these filings, at no cost, by writing to us at Collectar Biosciences, Inc., 3301 Agriculture Drive, Madison, WI 53716, Attention: Chief Financial Officer.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC under the Securities Act. This prospectus does not contain all of the information contained in the registration statement. For further information about us and our securities, you should read the prospectus and the exhibits filed with the registration statement, as well as all prospectus supplements.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and special reports, and other information with the Securities and Exchange Commission. Copies of the reports and other information may be read and copied at the SEC's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. You can request copies of such documents by writing to the SEC and paying a fee for the copying cost. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a web site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

LEGAL MATTERS

The validity of the securities being offered by this prospectus has been passed upon for us by Foley Hoag LLP, Boston, Massachusetts.

EXPERTS

The audited financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The expenses in connection with the issuance and distribution of the securities being registered are set forth in the following table (all amounts other than the registration fee are estimated):

SEC registration fee	\$	114.35
Accounting fees and expenses	\$	10,000.00
Legal fees and expenses	\$	25,000.00
Miscellaneous	\$	3,500.00
Total	\$	38,614.35

Item 15. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our certificate of incorporation and bylaws provide that: (i) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (ii) we may, in our discretion, indemnify our employees and agents as set forth in the Delaware General Corporation Law; (iii) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors and officers in connection with certain legal proceedings; (iv) the rights conferred in the bylaws are not exclusive; and (v) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

Item 16. Exhibits.

Exhibit Number	Description	Incorporated by Reference			Exhibit Number
		Filed with this Form S-3	Form	Filing date with SEC	
4.1	Form of Common Stock Certificate		S-1/A	November 9, 2011	4.1
4.2	Form of Series A Warrant		8-K	September 30, 2015	4.2
4.3	Securities Purchase Agreement dated September 28, 2015		8-K	September 30, 2015	10.1
4.4	Registration Rights Agreement dated September 28, 2015		8-K	September 30, 2015	10.2
4.5	Amendment and Exchange Agreement dated April 13, 2016		S-1/A	April 14, 2016	10.43
5.1	Opinion of Foley Hoag LLP regarding the legality of securities being registered	X			
23.1	Consent of Grant Thornton LLP	X			
23.2	Consent of Foley Hoag LLP (contained in Exhibit 5.1)	X			
24.1	Powers of Attorney (included on signature page)	X			

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent 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 the registration statement.

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b).

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.:

(b) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 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-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Madison, State of Wisconsin, on June 17, 2016.

CELLECTAR BIOSCIENCES, INC.

By: /s/ James Caruso
James Caruso
President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Cellectar Biosciences, Inc., hereby severally constitute and appoint James Caruso and Chad J. Kolean, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign for us and in our names in the capacities indicated below any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their 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 indicated capacities as of June 17, 2016.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ James Caruso</u> James Caruso	Chief Executive Officer and Director (<i>principal executive officer</i>)	June 17, 2016
<u>/s/ Chad J. Kolean</u> Chad J. Kolean	Chief Financial Officer (<i>principal financial officer and principal accounting officer</i>)	June 17, 2016
<u>/s/ Paul L. Berns</u> Paul L. Berns	Chairman of the Board of Directors	June 17, 2016
<u>/s/ Stephen A. Hill</u> Stephen A. Hill	Director	June 17, 2016
<u>/s/ Stefan Loren</u> Stefan Loren	Director	June 17, 2016
<u>/s/ John Neis</u> John Neis	Director	June 17, 2016

EXHIBIT INDEX

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24.1	Powers of Attorney (included on signature page)	X			



Seaport West
155 Seaport Boulevard
Boston, MA 02210-2600

617 832 1000 *main*
617 832 7000 *fax*

June 17, 2016

Collectar Biosciences, Inc.
3301 Agriculture Drive
Madison, WI 53716

Re: S-3 Registration Statement

Ladies and Gentlemen:

We have acted as counsel to Collectar Biosciences, Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3 (the "Registration Statement") being filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), covering the resale by the selling stockholders identified therein (the "Selling Stockholders") of up to 300,006 shares (the "Shares") of the Company's common stock, \$0.00001 par value per share ("Common Stock"), issuable upon exercise of outstanding warrants to purchase Common Stock issued on April 20, 2016 (the "Warrants").

In rendering the opinion set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic, and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; and (v) the certificates or other documents representing the Shares will be duly executed and delivered. We have further assumed that the Company will have sufficient authorized, unissued and otherwise unreserved shares of Common Stock available for issuance at the time of each issuance of the Shares upon exercise of the Warrants.

We express no opinion as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware (including applicable provisions of the Delaware Constitution and reported judicial decisions interpreting such Law and such Constitution) and the federal laws of the United States of America.

We have examined the Registration Statement, including the exhibits thereto, and such other documents, corporate records, and instruments and have examined such laws and regulations as we have deemed necessary for purposes of rendering the opinion set forth herein.

Based upon such examination and subject to the further provisions hereof, we are of the opinion that the Shares, if and when issued, paid for and delivered in compliance with the terms of the Warrants and in compliance with the terms of the Company's Certificate of Incorporation as in effect from time to time, will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and the reference to us under the caption "Legal Matters" in the prospectus included in the Registration Statement. 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.

This opinion letter is given to you solely for use in connection with the offer and sale by the Selling Stockholders of the Shares pursuant to the Registration Statement. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares or the Registration Statement.

Very truly yours,

FOLEY HOAG LLP

By: /s/ Paul Bork
A Partner

Consent of Independent Registered Public Accounting Firm

We have issued our report dated March 11, 2016, with respect to the consolidated financial statements of Collectar Biosciences, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2015, which is incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement, and to the use of our name as it appears under the caption "Experts."

/s/ GRANT THORNTON LLP

Appleton, Wisconsin
June 17, 2016
