
As filed with the Securities and Exchange Commission on November 9, 2017

Registration No. 333-

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

FORM S-8
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)

**Collectar Biosciences, Inc. 2015 Amended and Restated Stock Incentive Plan
Stock Option Agreement with James V. Caruso effective as of June 15, 2015
Stock Option Agreement with Jarrod Longcor effective as of July 15, 2016**
(Full title of the plan)

**James V. Caruso
President and Chief Executive Officer
3301 Agriculture Drive
Madison, WI 53716
(608) 441-8120**

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

**With a copy to:
Gregory J. Lynch, Esq.
Michael Best & Friedrich LLP
One South Pinckney Street, Suite 700
Madison, Wisconsin 53703
(608) 257-3501**

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 definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

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

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

	Proposed maximum offering price	Proposed maximum aggregate offering	Amount of
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Title of securities to be registered	registered(1)	per share(2)	price	registration fee
Common stock, par value \$0.00001 per share(3)	1,620,000	\$ 1.575	\$ 2,551,500	\$ 317.67
Common stock, par value \$0.00001 per share(4)	112,500	\$ 2.737	\$ 307,875	\$ 38.34
Total	1,732,500		\$ 2,859,375	\$ 356.01

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement also covers any additional shares of our common stock, par value \$0.00001 per share, (the “Common Stock”) which may become issuable to prevent dilution resulting from stock splits, stock dividends or other similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) and Rule 457(h)(1) under the Securities Act, based on: (i) the average of the high and low sale prices per share of our Common Stock as reported on the Nasdaq Capital Market on November 7, 2017; and (ii) for the shares underlying stock option agreements, the average exercise price per share of the stock options that may be exercised under such stock option agreements.
- (3) Represents shares of Common Stock reserved and available for issuance pursuant to the 2015 Stock Incentive Plan.
- (4) Represents: (i) 37,500 shares of Common Stock to be offered and sold pursuant to the Stock Option Agreement, effective as of June 15, 2015, between the company and James V. Caruso; and (ii) 75,000 shares of Common Stock to be offered and sold pursuant to the Stock Option Agreement, effective as of July 15, 2016, between the company and Jarrod Longcor (collectively the “Stock Option Agreements”).

EXPLANATORY NOTE

This Registration Statement is being filed by Collectar Biosciences, Inc. (the "Company," "we," "us" or "our") in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the "Securities Act") in order to register 1,620,000 shares of the Company's common stock, par value \$0.00001 per share (the "Common Stock"), issuable in accordance with the terms of the Company's Amended and Restated 2015 Stock Incentive Plan.

This Registration Statement also includes a reoffer prospectus prepared in accordance with the requirements of Part I of Form S-3 (in accordance with the General Instruction C to Form S-8). The reoffer prospectus covers reoffers of (i) up to 400,999 shares of our Common Stock granted to our employees pursuant to the 2015 Stock Incentive Plan; and (ii) up to 112,500 shares of our Common Stock that will be acquired upon the exercise of stock options granted pursuant to the Stock Option Agreements by certain of our officers (collectively, the "Selling Stockholders"), all of which may be deemed to be "control securities" and/or "restricted securities" (as such terms are defined in General Instruction C to Form S-8) of the Company.

PART I

INFORMATION REQUIRED IN SECTION 10(A) PROSPECTUS

In accordance with Rule 428 under the Securities Act and the instructional note to Part I of Form S-8, the information specified in Part I of Form S-8 has been omitted from the filing of this registration statement. The documents containing the information specified in Part I of Form S-8 will be sent or given to participating employees as specified by Rule 428(b)(1) of the Securities Act. Such documents and the documents incorporated by reference herein pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

REOFFER PROSPECTUS

Up to 513,499 Shares of Common Stock Acquired by the Selling Stockholders under the 2015 Stock Incentive Plan and the Stock Option Agreements

This reoffer prospectus relates to an aggregate of up to 513,499 shares (the "Shares") of Common Stock of the Company, which may be offered and sold from time to time by the Selling Stockholders. 400,999 shares of Common Stock were acquired by the Selling Stockholders pursuant to the 2015 Stock Incentive Plan and up to 112,500 shares will be acquired upon the exercise of vested and unvested stock options granted pursuant to the Stock Option Agreements. See "Selling Stockholders." The Company's Common Stock is listed on the Nasdaq Capital Market under the symbol "CLRB." On November 8, 2017, the last reported sales price of the Company's Common Stock on the Nasdaq Capital Market was \$1.56 per share.

The Company will not receive any of the proceeds from sales of the Shares by any of the Selling Stockholders. The Shares may be offered from time to time by any or all of the Selling Stockholders (and their donees and pledgees) through ordinary brokerage transactions, in negotiated transactions or in other transactions, at such prices as the Selling Stockholders may determine, which may relate to market prices prevailing at the time of sale or be a negotiated price. See "Plan of Distribution." All costs, expenses and fees in connection with the registration of the Shares will be borne by the Company. Brokerage commissions and similar selling expenses, if any, attributable to the offer or sale of the Shares will be borne by the Selling Stockholders (or their donees and pledgees).

This reoffer prospectus has been prepared for the purpose of registering the shares under the Securities Act to allow for future sales by the Selling Stockholders, on a continuous or delayed basis, to the public without restriction. Each Selling Stockholder and any broker executing selling orders on behalf of a Selling Stockholder may be deemed to be an "underwriter" as defined in the Securities Act. If any broker-dealers are used to effect sales, any commissions paid to broker-dealers and, if broker-dealers purchase any of the Shares as principals, any profits received by such broker-dealers on the resale of the Shares, may be deemed to be underwriting discounts or commissions under the Securities Act. In addition, any profits realized by the Selling Stockholders may be deemed to be underwriting commissions.

An investment in our securities involves a high degree of risk. See "Risk Factors" beginning at page 7.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this reoffer prospectus is November 9, 2017.

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No person is authorized to give any information or represent anything not contained or incorporated by reference in this reoffer prospectus or any prospectus supplement. This reoffer prospectus and any prospectus supplement do not constitute an offer to sell or a solicitation of any 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. The information contained in this reoffer prospectus or any prospectus supplement, as well as information incorporated by reference, is current only as of the date of that information. Our business, financial condition and results of operations may have changed since that date.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This reoffer prospectus and the documents incorporated by reference herein contain, or will contain, “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, which include statements that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These statements are based on our management’s current beliefs, expectations and assumptions about future events, conditions and results and on information currently available to us. Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should”, “could” or the negative of such terms or other similar expressions, but these are not the exclusive means of identifying forward-looking statements. Forward-looking statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this reoffer prospectus. Such statements are subject to various risks, uncertainties and assumptions that could cause actual results to differ materially from those anticipated or implied in our forward-looking statements due to a number of factors including, but not limited to, those set forth above under the section entitled “Risk Factors” in this reoffer prospectus and any accompanying prospectus supplement. Given these risks, uncertainties and other factors, many of which are beyond our control, you should not place undue reliance on these forward-looking statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this reoffer prospectus, even if new information becomes available in the future.

BUSINESS OVERVIEW

We are a clinical stage biopharmaceutical company focused on the discovery, development and commercialization of drugs for the treatment of cancer. We leverage our proprietary phospholipid drug conjugateTM (PDCsTM) platform to specifically target treatments to cancer cells. The PDC platform possesses the potential for the discovery and development of the next generation of cancer-targeting agents. Our lead product candidate, CLR 131, is a PDC providing targeted delivery of a cytotoxic (cell-killing) radioisotope iodine 131. Our pipeline also includes a series of pre-clinical chemotherapeutic PDC programs. We believe our proprietary PDC platform can provide the next-generation of targeted cancer treatments that result in greater efficacy and less off-target effects reducing patient adverse events.

Our core strategy is to develop new targeted treatments for cancer patients that leverage our PDC cancer-targeting delivery platform. We employ a drug discovery and development approach that allows us to efficiently design, research and advance drug candidates. Our iterative process allows us to rapidly and systematically produce multiple generations of incrementally improved targeted drug candidates. By combining this approach with our PDC platform, we plan to develop proprietary compounds independently and in collaborations with other companies. Through strategic acquisitions and research collaborations, our strategy is to seek to generate near-term capital, supplement internal resources, gain access to novel molecules or payloads, accelerate product candidate development and broaden our product pipeline.

Our PDC platform provides selective delivery of a diverse range of oncologic payloads to cancerous cells, whether a hematologic cancer or solid tumor, the primary tumor, or a metastatic tumor and cancer stem cells. Our PDC platform takes advantage of a metabolic pathway utilized by all tumor cell types in all stages of the tumor “cycle.” This allows the PDC molecules to gain access to the intracellular compartment of the tumor cells and for the PDCs to continue to accumulate over time, which enhances drug efficacy. The PDC platform’s mechanism of entry does not rely upon specific cell surface epitopes or antigens as are required by other targeted delivery platforms. Specific cell surface epitopes are limited in number on the cell surface, undergo internalization and cycling upon binding and are not present on all tumor cells of a particular cancer type. This means a subpopulation of tumor cells will always remain. In addition to the benefits provided by the mechanism of entry, PDCs offer the potential advantage of having the ability to be conjugated to molecules in numerous ways, thereby increasing the types of molecules selectively delivered via the PDC.

The PDC platform features include the capacity to link to a wide variety of molecules, provide a significant increase in targeted oncologic payload delivery and the ability to target all tumor cells. As a result, we believe that we can generate PDCs to treat a broad range of cancers with the potential to improve the therapeutic index of oncologic drug payloads, enhance or maintain efficacy while reducing adverse events by minimizing drug delivery to healthy cells, and increasing delivery to cancerous cells and cancer stem cells. A description of our PDC product candidates follows:

- CLR 131 is a small-molecule, cancer-targeting radiotherapeutic PDC designed to deliver cytotoxic radiation directly and selectively to cancer cells and cancer stem cells. CLR 131 is our lead therapeutic PDC product candidate and is currently being evaluated in both Phase 1 and Phase 2 clinical studies. 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 and the Phase 1 study was initiated in April 2015. This clinical study is a standard three-by-three dose escalation safety study in patients with relapse or refractory multiple myeloma. Multiple myeloma is an incurable cancer of the plasma cells and is the second most common form of hematologic cancers. This cancer type was selected for clinical, regulatory and commercial rationales, including multiple myeloma's highly radiosensitive nature, and continued unmet medical need in the relapse/refractory setting. The primary goal of the Phase 1 study is to assess the compound's safety and tolerability in patients with relapsed or refractory multiple myeloma.

In September 2017, Cohort 4 results were announced. The data monitoring committee determined that these results showed that a single 30 minute infusion of 31.25mCi/m² of CLR 131 was deemed safe and tolerated by the three patients in the cohort with one of those patients achieving a partial response (PR). The International Myeloma Working Group (IMWG) defines a (PR) as a greater than or equal to 50 percent decrease in free light chain (FLC) levels (for patients in whom M protein is unmeasurable) or 50 percent decrease in M protein. Additionally the other two evaluable patients achieved stable disease. One patient experiencing stable disease attained a 44 percent reduction in M protein. The patient experiencing a partial response had an 82 percent reduction in FLC. This patient did not produce M protein, had received seven prior lines of treatment including radiation, stem cell transplantation and multiple combination treatments including one with daratumumab that was not tolerated. As of November 2017, patients in Cohort 1 who received a single 12.5mCi/m² dose experienced a median overall survival (OS) of 26.2 months. Median OS for Cohorts 2 (18.75 mCi/m²) and 3 (25.0 mCi/m²) also continue to progress with patients experiencing OS of 15.4 months and 10 months, respectively as of November 2017. Based upon these data, we elected to initiate a Phase 2 clinical study using Cohort 3's dose of 25.0 mCi/m² with the option to increase the dose based on our ongoing Phase 1 safety and efficacy signals.

In August, 2016 the University of Wisconsin Carbone Cancer Center (UWCCC) was awarded a five year Specialized Programs of Research Excellence (SPORE) grant from the National Cancer Institute to improve treatments and outcomes for head and neck cancer (HNC) patients. HNC is the sixth most common cancer across the world with approximately 56,000 new patients diagnosed every year in the United States. As a key component of this grant, the UWCCC researchers have tested CLR 131 in various animal HNC models as well as initiating the first human clinical trial combining CLR 131 and external beam radiation in patients with recurrent HNC. The UWCCC is currently anticipated to initiate this clinical trial in 2019.

In July 2016, we were awarded a \$2,000,000 National Cancer Institute Fast-Track Small Business Innovation Research (SBIR) grant to further advance CLR 131. The funds are supporting the Phase 2 study initiated in March 2017 to further define the clinical benefits of CLR 131 in multiple myeloma and other niche hematologic malignancies with high unmet clinical need. These niche hematologic malignancies include Chronic Lymphocytic Leukemia, Small Lymphocytic Lymphoma, Marginal Zone Lymphoma, Lymphoplasmacytic Lymphoma, and Diffuse Large B-Cell Lymphoma. The study will be conducted in approximately 10-15 top cancer centers in the United States in patients with orphan-designated relapse or refractory hematologic cancers. The study's primary endpoint is clinical benefit response (CBR), with additional endpoints of progression free survival (PFS), median OS and other markers of efficacy following a single 25.0 mCi/m² dose of CLR 131, with the option for a second 25.0 mCi/m² dose approximately 75-180 days later.

- CLR 1700 Series is an internally developed PDC program leveraging a payload designed to treat a broad range of hematologic cancers. The payload provides further specificity by targeting a pathway within hematologic cancers that is significantly upregulated in comparison to normal tissue. We believe that this additional level of targeting will allow us to provide a new drug candidate that has the ability to significantly improve patient outcomes. Leveraging our iterative discovery and screening process, we have been able to accelerate the development of this program.
- CLR 1800 Series is part of a collaborative PDC program with Pierre Fabre that we entered into in December 2015 and extended in October 2017. Pierre Fabre is the third largest French pharmaceutical company with an extensive oncology research and development infrastructure. The objective of the research collaboration is to co-design a library of PDCs employing Pierre Fabre's chemotherapeutics in combination with our proprietary cancer-targeting delivery vehicle. The newly developed PDCs may provide enhanced therapeutic indices to otherwise highly potent, non-targeted payloads through the targeted delivery to cancer cells provided by our cancer-targeting delivery vehicle. Significant progress has been achieved and the program continues to rapidly advance with a number of PDC molecules showing enhanced pharmacologic behavior over the parent compound alone.
- CLR 1900 Series is an internally developed proprietary PDC program leveraging a novel small molecule cytotoxic compound as the payload. We believe that this program could produce a product candidate targeted to select solid tumors. Currently, the program is in early preclinical development.
- CLR 2000 Series is part of a collaborative PDC program with Avicenna Oncology, or Avicenna, that we entered into in July 2017. Avicenna is a leading developer of antibody drug conjugates (ADCs). The objective of the research collaboration is to design and develop a series of PDCs utilizing Avicenna's proprietary cytotoxic payload. Although Avicenna is a leading developer of ADCs, this collaboration was sought as a means to overcome many of the challenges associated with ADCs, including those associated with the targeting of specific cell surface epitopes.
- CLR 2100 and 2200 Series are part of collaborative PDC programs with Onconova Therapeutics, Inc., or Onconova, that we entered into in September 2017. Onconova is a biotechnology company specializing in the discovery and development of novel small molecule cancer therapies. The collaboration is structured such that we will design and develop a series of PDCs utilizing different small molecules that Onconova was developing as the payloads with the intent to show improved targeting and specificity to the tumor. At least one of the molecules was taken into Phase 1 clinical trials previously by Onconova. We would own all new intellectual property associated with the design of the new PDCs and both companies will have the option to advance compounds.

We believe our PDC platform has the 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 of a broad range of human cancers.

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.

For more information regarding the material risks and uncertainties we face, please see "Risk Factors" beginning on page 7 of this reoffer prospectus.

RISK FACTORS

Investment in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, prospective investors should consider carefully all of the information included and incorporated by reference or deemed to be incorporated by reference in this reoffer prospectus or the applicable prospectus supplement, including the risk factors incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this reoffer prospectus and that are incorporated by reference herein or in the applicable prospectus supplement. Each of these risk factors could have a material adverse effect on our business, results of operations, financial position or cash flows, which may result in the loss of all or part of your investment. For more information, see "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference."

USE OF PROCEEDS

We will not realize any proceeds from the sale of the shares of our Common Stock. The shares which may be sold under this reoffer prospectus will be sold for the respective accounts of each of the Selling Stockholders (who are our employees and directors). We will receive proceeds from the exercise of the options; however, no assurance can be given as to when or if any or all of the options will be exercised. If any options are exercised, the proceeds derived therefrom will be used for working capital and general corporate purposes. All expenses of the registration of the shares will be paid by us. See "Selling Stockholders" and "Plan of Distribution."

SELLING STOCKHOLDERS

This reoffer prospectus relates to shares of Common Stock that are being registered for reoffer and resale of up to 513,499 shares of Common Stock of the Company, which may be offered and sold from time to time by the Selling Stockholders. 400,999 shares of Common Stock were acquired by the Selling Stockholders pursuant to the 2015 Stock Incentive Plan and up to 112,500 shares will be acquired upon the exercise of vested and unvested stock options granted pursuant to the Stock Option Agreements. The shares of Common Stock are "restricted securities" and/or "control securities" under the Securities Act. The Selling Stockholders may resell any or all of the shares at any time while this reoffer prospectus is current.

The following table sets forth certain information regarding the ownership of our Common Stock by the Selling Stockholders as of the date of this reoffer prospectus, and the number of shares of our Common Stock currently being offered by each Selling Stockholder pursuant to this reoffer prospectus. The information set forth in the following table regarding beneficial ownership after resale of securities assumes that the selling shareholders will sell all of the shares of Common Stock owned by that selling shareholder covered by this reoffer prospectus.

There is no assurance that any of the Selling Stockholders will sell any or all of the shares offered by them under this Registration Statement. Any changed information will be set forth in an amendment to the Registration Statement or supplement to this reoffer prospectus, to the extent required by law.

The address of each executive officer and director is c/o Collectar Biosciences, Inc., 3301 Agriculture Drive, Madison, Wisconsin 53716, except as otherwise indicated. The persons named in this table have sole voting and investment power with respect to the shares listed, except as otherwise indicated. In these cases, the information with respect to voting and investment power has been provided to us by the security holder. The identification of natural persons having voting or investment power over securities held by a beneficial owner listed in the table below does not constitute an admission of beneficial ownership of any such natural person. Percentage of beneficial ownership is based on 15,813,961 shares of common stock outstanding as of November 7, 2017.

Name	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Maximum Number of Shares to be Offered for the Account of the Selling Stockholder	Number of Shares of Common Stock Beneficially Owned Assuming Sale of all Shares Offered Hereby	Percentage of Shares Beneficially Owned Assuming Sale of all Shares Offered Hereby
James V. Caruso, President and Chief Executive Officer	413,875 ⁽¹⁾	237,500 ⁽³⁾	195,125	1.23%
John E. Friend II, MD, Chief Medical Officer	100,000	100,000	0	*
Jarrold Longcor, Chief Business Officer	113,332 ⁽²⁾	155,000 ⁽⁴⁾	0	*
Chad Kolean ⁽⁵⁾	0	20,833	0	*
Joe Grudzinski	0	166	0	*

* Less than 1%

(1) Includes 118,749 shares that may be purchased through the exercise of options that are exercisable within 60 days of November 7, 2017 and 46,948 Series A warrants convertible into an equivalent number of shares of common stock.

(2) Includes 33,332 shares that may be purchased through the exercise of options that are exercisable within 60 days of November 7, 2017.

(3) Includes 37,500 shares that may be purchased through the exercise of vested and unvested options.

(4) Includes 75,000 shares that may be purchased through the exercise of vested and unvested options.

(5) Mr. Kolean served as our Vice President, Chief Financial Officer and Treasurer until September 5, 2017.

PLAN OF DISTRIBUTION

The Shares covered by this reoffer prospectus are being registered by us for the account of the Selling Stockholders, which, as used herein, includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock or interests in shares of Common Stock received after the date of this reoffer prospectus from the Selling Stockholders as a gift, pledge, partnership distribution or other transfer. Transferees, successors and donees of the Selling Stockholders will not be able to use this reoffer prospectus for resales until they are named in the table above by prospectus supplement or post-effective amendment. If required, we will add transferees, successors and donees by prospectus supplement in instances where the transferee, successor or donee has acquired its shares from the holder named in this reoffer prospectus after the effective date of this reoffer prospectus.

The Shares offered hereby may be sold from time to time directly by or on behalf of the Selling Stockholder in one or more transactions on The Nasdaq Capital Market or on any stock exchange on which the Shares may be listed at the time of sale, in privately negotiated transactions, or through a combination of such methods, at market prices prevailing at the time of sale, at prices related to such prevailing market prices, at fixed prices (which may be changed) or at negotiated prices. The Selling Stockholders may sell shares through one or more agents, brokers or dealers or directly to purchasers. Such brokers or dealers may receive compensation in the form of commissions, discounts or concessions from the Selling Stockholders and/or purchasers of the Shares or both. Such compensation as to a particular broker or dealer may be in excess of customary commissions.

In connection with sales, the Selling Stockholders and any participating broker or dealer may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions they receive and the proceeds of any sale of shares may be deemed to be underwriting discounts and commissions under the Securities Act.

We are bearing all costs relating to the registration of the Common Stock to be offered hereby. Any commissions or other fees payable to broker-dealers in connection with any sale of shares of Common Stock will be borne by the Selling Stockholders or other party selling such Shares. In order to comply with certain states' securities laws, if applicable, the shares of Common Stock may be sold in such jurisdictions only through registered or licensed brokers or dealers. In certain states, the shares of Common Stock may not be sold unless the shares have been registered or qualified for sale in such state, or unless an exemption from registration or qualification is available and is obtained or complied with. Sales of shares of Common Stock must also be made by the Selling Stockholders in compliance with all other applicable state securities laws and regulations.

In addition to any shares sold hereunder, the Selling Stockholders may sell shares of Common Stock in compliance with Rule 144. There is no assurance that the Selling Stockholders will sell all or a portion of the shares of Common Stock offered hereby.

The Selling Stockholders may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of the Shares against certain liabilities in connection with the offering of the Shares arising under the Securities Act.

We have notified the Selling Stockholders of the need to deliver a copy of this reoffer prospectus in connection with any sale of the Shares.

LEGAL MATTERS

The validity of the shares of Common Stock offered by this reoffer prospectus will be passed upon by Michael Best & Friedrich LLP, Madison, Wisconsin.

EXPERTS

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

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents, which we filed with the Securities and Exchange Commission, are incorporated by reference in this reoffer prospectus:

- (a) Our annual report on Form 10-K for the fiscal year ended December 31, 2016 filed on March 15, 2017.
- (b) Our quarterly report on Form 10-Q, filed with the SEC on May 11, 2017.
- (c) Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 25, 2017.
- (d) Our current report on Form 8-K, filed with the SEC on February 3, 2017.
- (e) Our current report on Form 8-K, filed with the SEC on April 11, 2017.
- (f) Our Current Report on Form 8-K, filed with the SEC on June 1, 2017.
- (g) Our Definitive Proxy Statement on Schedule 14A filed with the SEC on August 11, 2017.
- (h) Our quarterly report on Form 10-Q, filed with the SEC on August 14, 2017.
- (i) Our Current Report on Form 8-K, filed with the SEC on August 18, 2017.
- (j) Our Current Report on Form 8-K, filed with the SEC on September 12, 2017.
- (k) Our Current Report on Form 8-K, filed with the SEC on October 11, 2017.
- (l) Our quarterly report on Form 10-Q, filed with the SEC on November 9, 2017.

- (m) 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, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, are deemed to be incorporated by reference into, and to be a part of, this registration statement.

MATERIAL CHANGES

There have been no material changes since December 31, 2016 which have not been described in the annual report on Form 10-K, quarterly report on Form 10-Q, current report on Form 8-K or in this reoffer prospectus.

COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing, we have been informed that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance with that act, file periodic reports and other information with the SEC. The periodic reports and other information filed by us are available for inspection and copying at prescribed rates at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the operation of the SEC's Public Reference Room. The SEC also maintains an Internet site that contains all reports and other information that we file electronically with the SEC. The address of that website is www.sec.gov.

This reoffer prospectus is a part of a registration statement on Form S-8 that we filed with the SEC. This reoffer prospectus does not contain all of the information set forth in the registration statement and its exhibits and schedules, certain parts of which are omitted in accordance with the SEC's rules and regulations. For further information, we refer you to the registration statement and to such exhibits and schedules. You may review a copy of the registration statement at the SEC's public reference room in Washington, D.C. as well as through the SEC's website. Please be aware that statements in this reoffer prospectus referring to a contract or other document are summaries and you should refer to the exhibits that are part of the registration statement for a copy of the contract or other document.

CELLECTAR BIOSCIENCES, INC.

UP TO 513,499 SHARES OF COMMON STOCK

PROSPECTUS

NOVEMBER 9, 2017

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents, which we filed with the Securities and Exchange Commission, are incorporated by reference in this registration statement:

- (a) Our annual report on Form 10-K for the fiscal year ended December 31, 2016 filed on March 15, 2017.
- (b) Our quarterly report on Form 10-Q, filed with the SEC on May 11, 2017.
- (c) Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 25, 2017.
- (d) Our current report on Form 8-K, filed with the SEC on February 3, 2017.
- (e) Our current report on Form 8-K, filed with the SEC on April 11, 2017.
- (f) Our Current Report on Form 8-K, filed with the SEC on June 1, 2017.
- (g) Our Definitive Proxy Statement on Schedule 14A filed with the SEC on August 11, 2017.
- (h) Our quarterly report on Form 10-Q, filed with the SEC on August 14, 2017.
- (i) Our Current Report on Form 8-K, filed with the SEC on August 18, 2017.
- (j) Our Current Report on Form 8-K, filed with the SEC on September 12, 2017.
- (k) Our Current Report on Form 8-K, filed with the SEC on October 11, 2017.
- (l) Our quarterly report on Form 10-Q, filed with the SEC on November 9, 2017.
- (m) 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, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, are deemed to be incorporated by reference into, and to be a part of, this registration statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interest of Named Experts and Counsel

None.

Item 6. Indemnification of Directors and Officers

Section 102(b)(7) of the Delaware General Corporation Law allows us to adopt a charter provision eliminating or limiting the personal liability of directors to us or our stockholders for breach of fiduciary duty as directors, but the provision may not eliminate or limit the liability of directors for (a) any breach of the director's duty of loyalty to us or our stockholders, (b) any acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) unlawful payments of dividends or unlawful stock repurchases or redemptions under Section 174 of the Delaware General Corporation Law or (d) any transaction from which the director derived an improper personal benefit. Article Seventh of our charter provides that none of our directors shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, subject to the limitations imposed by Section 102(b)(7). Article Seventh also provides that no amendment to or repeal of Article Seventh shall apply to or have any effect on the liability or the alleged liability of any director with respect to any acts or omissions of such director occurring prior to such amendment or repeal. A principal effect of Article Seventh is to eliminate or limit the potential liability of our directors for monetary damages arising from breaches of their duty of care, unless the breach involves one of the four exceptions described in (a) through (d) above.

Section 145 of the Delaware General Corporation Law provides, in general, that a corporation incorporated under the laws of the State of Delaware, such as us, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Article Eighth of our amended and restated certificate of incorporation, and Section 5.1 of our bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the Delaware General Corporation Law, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any shareholders' or directors' resolution or by contract.

The effect of these provisions would be to permit indemnification by us for, among other liabilities, liabilities arising out of the Securities Act.

Item 7. Exemption from Registration Claimed

Not Applicable.

Item 8. Exhibits.

See Exhibit Index following the signature page.

Item 9. Undertakings

The undersigned registrant hereby undertakes to:

(a) (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% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that Paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(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 of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act 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 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-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Madison, Wisconsin, as of November 9, 2017.

CELLECTAR BIOSCIENCES, INC.

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

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below hereby constitutes and appoints James V. Caruso, his true and lawful attorneys-in-fact and agents with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and all 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 which they, or any of them, may deem necessary or advisable to be done in connection with this registration statement, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or any substitute or substitutes for him or her, or any or all of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the indicated capacities as of November 9, 2017.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ James V. Caruso</u> James V. Caruso	Chief Executive Officer and Director (<i>principal executive officer</i>)	November 9, 2017
<u>/s/ John P. Hamill</u> John P. Hamill	Interim Chief Financial Officer (<i>principal financial officer and principal accounting officer</i>)	November 9, 2017
<u>/s/ Stephen A. Hill</u> Stephen A. Hill	Director	November 9, 2017
<u>/s/ Stefan Loren</u> Stefan Loren	Director	November 9, 2017
<u>/s/ John Neis</u> John Neis	Director	November 9, 2017
<u>/s/ Frederick W. Driscoll</u> Frederick W. Driscoll	Director	November 9, 2017
<u>/s/ Douglas J. Swirsky</u> Douglas J. Swirsky	Director	November 9, 2017

EXHIBIT INDEX

Exhibit No.	Description	Incorporated by Reference		Exhibit No.
		Form	Filing Date	
3.1	Second Amended and Restated Certificate of Incorporation	8-K	April 11, 2011	3.1
3.2	Certificate of Ownership and Merger of Collectar Biosciences, Inc. with and into Novelos Therapeutics, Inc.	8-K	February 13, 2014	3.1
3.3	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation	8-K	June 13, 2014	3.1
3.4	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation	8-K	June 19, 2015	3.2
3.5	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation	8-K	March 4, 2016	3.1
3.6	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation	8-K	June 1, 2017	3.2
3.7	Amended and Restated By-laws	8-K	June 1, 2011	3.1
5.1	Opinion of Michael Best & Friedrich LLP			
10.1	Collectar Biosciences, Inc. Amended and Restated 2015 Stock Incentive Plan	8-K	June 1, 2017	10.1
10.2	Form of Non-Statutory Stock Option			
10.3	Form of Restricted Common Stock Award	10-Q	August 14, 2017	10.1
10.4	Stock Option Agreement with James V. Caruso			
10.5	Stock Option Agreement with Jarrod Longcor			
23.1	Consent of Baker Tilly Virchow Krause, LLP			
23.2	Consent of Michael Best & Friedrich LLP (included in Exhibit 5.1)			
24.1	Power of Attorney (included on the signature page to the registration statement)			

Michael Best & Friedrich LLP
Attorneys at Law



November 9, 2017

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

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-8 (the “Registration Statement”), filed with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Act”), as to the offering by the Company of (i) 1,620,000 shares (the “Plan Shares”) of the Company’s common stock, \$0.00001 par value per share (“Common Stock”) that may be issued pursuant to the Company’s 2015 Amended and Restated Stock Incentive Plan (the “Plan”); (ii) up to 400,999 shares of our Common Stock granted to our employees pursuant to the Plan (the “Employee Shares”); and (iii) up to 112,500 shares of our Common Stock that will be acquired upon the exercise of stock options granted pursuant to the Plan by certain of our officers (the “Option Shares” and such holders collectively with holders of the Employee Shares, the “Selling Stockholders”).

You have requested our opinion with respect to the matters set forth below.

We are familiar with the Company’s Second Amended and Restated Certificate of Incorporation, as amended, its Bylaws, as amended and restated and in the form appearing in the Company’s minute books, and the records of meetings and consents of its Board of Directors and committees thereof and of its stockholders provided to us by the Company. In addition, we have examined and relied on the originals or copies certified or otherwise identified to our satisfaction of all such corporate records of the Company and such other instruments and other certificates of public officials, officers and representatives of the Company and such other persons, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinions expressed below.

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.

Based upon and subject to the foregoing, it is our opinion that:

1. The issuance, offer and sale of the Plan Shares, the Employee Shares and the Option Shares, as described in the Registration Statement, have been duly authorized by all necessary corporate action on the part of the Company.
2. The Plan Shares, the Employee Shares and the Option Shares, when issued, sold and delivered in the manner and for the consideration set forth in the Prospectus, will be validly issued, fully paid and non-assessable.

One South Pinckney Street, Suite 700 | Madison, WI 53703 | T 608.257.3501 | F 608.283.2275
michaelbest.com

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to us under the heading “Legal Matters” in the Prospectus. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission.

This opinion letter is given as of the date hereof, and we express no opinion as to the effect of subsequent events or changes in law occurring or becoming effective after the date hereof. We assume no obligation to update this opinion letter or otherwise advise you with respect to any facts or circumstances or changes in law that may hereafter occur or come to our attention (even though the change may affect the legal conclusions stated in this opinion letter).

Very truly yours,

MICHAEL BEST & FRIEDRICH LLP

/s/ Michael Best & Friedrich LLP

NON-STATUTORY STOCK OPTION

Granted by

Collectar Biosciences, Inc.(the “Company”)

Under the 2015 Stock Incentive Plan

This Option is and shall be subject in every respect to the provisions of the Company’s 2015 Stock Incentive Plan, as amended from time to time, which is incorporated herein by reference and made a part hereof. The holder of this Option (the “Holder”) hereby accepts this Option subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) all decisions under and interpretations of the Plan by the Board or the Committee shall be final, binding and conclusive upon the Holder and his or her heirs and legal representatives.

1. **Name of Holder:**2. **Date of Grant:**3. **Maximum Number of Shares for which this Option is exercisable:**4. **Exercise (purchase) price per share: \$**5. **Payment method:**

a personal, certified or bank check or postal money order payable to the order of the Company for an amount equal to the exercise price of the shares being purchased; or

with the consent of the Company, any of the other methods set forth in the Plan.

6. **Expiration Date of Option:**7. **Vesting Schedule:** This Option shall vest quarterly over three years such that 1/12 of the number of shares granted become exercisable on the three-month anniversary of the Date of Grant and an additional 1/12 of the number of shares granted become exercisable at the end of each-three month period thereafter, so that the Option shall be fully vested on the third anniversary of the Date of Grant. All vesting shall cease upon the date of termination of employment.

Notwithstanding the foregoing, the vesting of this Option shall accelerate with respect to all of the then unvested shares upon a Termination Event.

As used herein, a “Termination Event” shall mean either of the following events, but only if such event occurs within one year of a “Change of Control” (as defined in the Plan):

- (i) termination by the Company of the Holder’s employment or service relationship with the Company for any reason other than for “Cause,” as defined in the Plan; or
- (ii) the Holder’s resignation as an employee of, or service provider to, the Company , other than for reasons of Disability (as defined in the Plan), following (x) a significant reduction in the nature or scope of the Holder’s duties, responsibilities, authority or powers, from the duties, responsibilities, authority or powers exercised by the Holder immediately prior to the Change of Control, or (y) a reduction in the Holder’s annual base salary (or base fees, as applicable) or benefits as in effect on the date of the Change of Control, except for across-the-board salary or benefits reductions affecting all similarly situated personnel of the Company, or (z) a transfer of the Holder from the office of the Company where he is based immediately before the Change of Control to an office more than twenty-five (25) miles away such office (unless the distance the Holder has to travel to work is actually shortened as a result of such transfer).

For purposes of this Section 7, “Company” shall include any surviving entity, in the case of a merger or acquisition in which the Company is not the surviving entity.

8. **Termination of Employment or Provision of Services.** This Option shall terminate on the earliest to occur of:

- (i) the date of expiration thereof;
- (ii) immediately upon termination of the Holder’s employment with, or provision of services to, the Company by the Company for Cause (as defined in the Plan);
- (iii) thirty (30) days after the date of voluntary termination of employment or provision of services by the Holder (other than upon death, or for Disability or Normal Retirement, each as defined in the Plan);
- (iv) ninety (90) days after the date of involuntary termination of the Holder’s employment with, or provision of services to, the Company by the Company without Cause (as defined in the Plan), or termination of the Holder’s employment or provision of services by reason of Disability or Normal Retirement (each as defined in the Plan); or
- (v) 180 days after the date of termination of the Holder’s employment with, or provision of services to, the Company by reason of death.

9. **Lock-Up Agreement.** The Holder agrees for a period of up to 180 days from the effective date of any registration of securities of the Company under the Securities Act of 1933, as amended (the "Securities Act"), upon request of the Company or underwriters managing any underwritten offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares issued pursuant to the exercise of this Option, without the prior written consent of the Company and such underwriters.
10. **Tax Withholding.** The Company's obligation to deliver shares shall be subject to the Holder's satisfaction of any federal, state and local income and employment tax withholding requirements.
11. **Notice.** Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, 3301 Agriculture Drive, Madison, WI 53716, attention of the president, or such other address as the Company may hereafter designate.

Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his or her address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

IN WITNESS WHEREOF, the parties have executed this Option, or caused this Option to be executed, as of the Date of Grant.

CELLECTAR BIOSCIENCES, INC.

By: _____

The undersigned Holder hereby acknowledges receipt of a copy of the Plan and this Option, and agrees to the terms of this Option and the Plan.

Holder

NON-STATUTORY STOCK OPTION

Granted by

Collectar Biosciences, Inc. (the "Company")

Under the 2015 Stock Incentive Plan

This Option is and shall be subject in every respect to the provisions of the Company's 2015 Stock Incentive Plan, as amended from time to time, which is incorporated herein by reference and made a part hereof. The holder of this Option (the "Holder") hereby accepts this Option subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) all decisions under and interpretations of the Plan by the Board or the Committee shall be final, binding and conclusive upon the Holder and his or her heirs and legal representatives.

1. **Name of Holder:** James Caruso

2. **Date of Grant:** June 15, 2015

3. **Maximum Number of Shares for which this Option is exercisable:** 37,500

4. **Exercise (purchase) price per share:** \$2.64

5. **Payment method:**

a personal, certified or bank check or postal money order payable to the order of the Company for an amount equal to the exercise price of the shares being purchased; or

with the consent of the Company, any of the other methods set forth in the Plan.

6. **Expiration Date of Option:** June 15, 2025

7. **Vesting Schedule:** This Option shall vest in four equal annual installments beginning on the first anniversary date of the grant.

The unvested portion of the stock option is subject to acceleration and full vesting if the employment is terminated without "cause" or if he terminates his employment for "good reason," in each case within 12 months following, in connection with but prior to, a "change in control" of Collectar.

As used herein, a “Termination Event” shall mean either of the following events, but only if such event occurs within one year of a “Change of Control” (as defined in the Plan):

- (i) termination by the Company of the Holder’s employment or service relationship with the Company for any reason other than for “Cause,” as defined in the Plan; or
- (ii) the Holder’s resignation as an employee of, or service provider to, the Company , other than for reasons of Disability (as defined in the Plan), following (x) a significant reduction in the nature or scope of the Holder’s duties, responsibilities, authority or powers, from the duties, responsibilities, authority or powers exercised by the Holder immediately prior to the Change of Control, or (y) a reduction in the Holder’s annual base salary (or base fees, as applicable) or benefits as in effect on the date of the Change of Control, except for across-the-board salary or benefits reductions affecting all similarly situated personnel of the Company, or (z) a transfer of the Holder from the office of the Company where he is based immediately before the Change of Control to an office more than twenty-five (25) miles away such office (unless the distance the Holder has to travel to work is actually shortened as a result of such transfer).

For purposes of this Section 7, “Company” shall include any surviving entity, in the case of a merger or acquisition in which the Company is not the surviving entity.

8. **Termination of Employment or Provision of Services.** This Option shall terminate on the earliest to occur of:

- (i) the date of expiration thereof;
- (ii) immediately upon termination of the Holder’s employment with, or provision of services to, the Company by the Company for Cause (as defined in the Plan);
- (iii) thirty (30) days after the date of voluntary termination of employment or provision of services by the Holder (other than upon death, or for Disability or Normal Retirement, each as defined in the Plan);
- (iv) ninety (90) days after the date of involuntary termination of the Holder’s employment with, or provision of services to, the Company by the Company without Cause (as defined in the Plan), or termination of the Holder’s employment or provision of services by reason of Disability or Normal Retirement (each as defined in the Plan); or
- (v) 180 days after the date of termination of the Holder’s employment with, or provision of services to, the Company by reason of death.

9. **Lock-Up Agreement.** The Holder agrees for a period of up to 180 days from the effective date of any registration of securities of the Company under the Securities Act of 1933, as amended (the "Securities Act"), upon request of the Company or underwriters managing any underwritten offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares issued pursuant to the exercise of this Option, without the prior written consent of the Company and such underwriters.
10. **Tax Withholding.** The Company's obligation to deliver shares shall be subject to the Holder's satisfaction of any federal, state and local income and employment tax withholding requirements.
11. **Notice.** Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, 3301 Agriculture Drive, Madison, WI 53716, attention of the president, or such other address as the Company may hereafter designate.

Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his or her address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

IN WITNESS WHEREOF, the parties have executed this Option, or caused this Option to be executed, as of the Date of Grant.

CELLECTAR BIOSCIENCES, INC.

By: /s/ Chad Kolean
Chad Kolean, VP of Finance/CFO

The undersigned Holder hereby acknowledges receipt of a copy of the Plan and this Option, and agrees to the terms of this Option and the Plan.

/s/ James Caruso

Holder

NON-STATUTORY STOCK OPTION

Granted by

Collectar Biosciences, Inc.(the "Company")

Under the 2015 Stock Incentive Plan

This Option is and shall be subject in every respect to the provisions of the Company's 2015 Stock Incentive Plan, as amended from time to time, which is incorporated herein by reference and made a part hereof. The holder of this Option (the "Holder") hereby accepts this Option subject to all the terms and provisions of the Plan and agrees that (a) in the event of any conflict between the terms hereof and those of the Plan, the latter shall prevail, and (b) all decisions under and interpretations of the Plan by the Board or the Committee shall be final, binding and conclusive upon the Holder and his or her heirs and legal representatives.

1. **Name of Holder:** Jarrod Longcor

2. **Date of Grant:** July 15, 2016

3. **Maximum Number of Shares for which this Option is exercisable:** 75,000

4. **Exercise (purchase) price per share:** \$2.93

5. **Payment method:**

a personal, certified or bank check or postal money order payable to the order of the Company for an amount equal to the exercise price of the shares being purchased; or

with the consent of the Company, any of the other methods set forth in the Plan.

6. **Expiration Date of Option:** July 15, 2026

7. **Vesting Schedule:** This Option shall vest quarterly over three years such that 1/12 of the number of shares granted become exercisable on the three-month anniversary of the Date of Grant and an additional 1/12 of the number of shares granted become exercisable at the end of each-three month period thereafter, so that the Option shall be fully vested on the third anniversary of the Date of Grant. All vesting shall cease upon the date of termination of employment.

Notwithstanding the foregoing, the vesting of this Option shall accelerate with respect to all of the then unvested shares upon a Termination Event.

As used herein, a “Termination Event” shall mean either of the following events, but only if such event occurs within one year of a “Change of Control” (as defined in the Plan):

- (i) termination by the Company of the Holder’s employment or service relationship with the Company for any reason other than for “Cause,” as defined in the Plan; or
- (ii) the Holder’s resignation as an employee of, or service provider to, the Company , other than for reasons of Disability (as defined in the Plan), following (x) a significant reduction in the nature or scope of the Holder’s duties, responsibilities, authority or powers, from the duties, responsibilities, authority or powers exercised by the Holder immediately prior to the Change of Control, or (y) a reduction in the Holder’s annual base salary (or base fees, as applicable) or benefits as in effect on the date of the Change of Control, except for across-the-board salary or benefits reductions affecting all similarly situated personnel of the Company, or (z) a transfer of the Holder from the office of the Company where he is based immediately before the Change of Control to an office more than twenty-five (25) miles away such office (unless the distance the Holder has to travel to work is actually shortened as a result of such transfer).

For purposes of this Section 7, “Company” shall include any surviving entity, in the case of a merger or acquisition in which the Company is not the surviving entity.

8. **Termination of Employment or Provision of Services.** This Option shall terminate on the earliest to occur of:

- (i) the date of expiration thereof;
- (ii) immediately upon termination of the Holder’s employment with, or provision of services to, the Company by the Company for Cause (as defined in the Plan);
- (iii) thirty (30) days after the date of voluntary termination of employment or provision of services by the Holder (other than upon death, or for Disability or Normal Retirement, each as defined in the Plan);
- (iv) ninety (90) days after the date of involuntary termination of the Holder’s employment with, or provision of services to, the Company by the Company without Cause (as defined in the Plan), or termination of the Holder’s employment or provision of services by reason of Disability or Normal Retirement (each as defined in the Plan); or
- (v) 180 days after the date of termination of the Holder’s employment with, or provision of services to, the Company by reason of death.

9. **Lock-Up Agreement.** The Holder agrees for a period of up to 180 days from the effective date of any registration of securities of the Company under the Securities Act of 1933, as amended (the "Securities Act"), upon request of the Company or underwriters managing any underwritten offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares issued pursuant to the exercise of this Option, without the prior written consent of the Company and such underwriters.
10. **Tax Withholding.** The Company's obligation to deliver shares shall be subject to the Holder's satisfaction of any federal, state and local income and employment tax withholding requirements.
11. **Notice.** Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, 3301 Agriculture Drive, Madison, WI 53716, attention of the president, or such other address as the Company may hereafter designate.

Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his or her address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

IN WITNESS WHEREOF, the parties have executed this Option, or caused this Option to be executed, as of the Date of Grant.

CELLECTAR BIOSCIENCES, INC.

By: /s/ Chad Kolean
Chad Kolean, VP of Finance/CFO

The undersigned Holder hereby acknowledges receipt of a copy of the Plan and this Option, and agrees to the terms of this Option and the Plan.

/s/ Jarrod Longcor

Holder



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 15, 2017, with respect to the consolidated financial statements of Collectar Biosciences, Inc. and Subsidiary included in the Annual Report on Form 10-K for the years ended December 31, 2016 and 2015, which is incorporated by reference in this Registration Statement on Form S-8. 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/ BAKER TILLY VIRCHOW KRAUSE, LLP

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
November 9, 2017
