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

Amendment No. 1 to 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)

2834
(Primary Standard Industrial
Classification Code Number)

04-3321804 (I.R.S. Employer Identification No.)

100 Campus Drive, Florham Park, New Jersey 07932 Telephone (608) 441-8120

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

James V. Caruso
President and Chief Executive Officer
Cellectar Biosciences, Inc.
100 Campus Drive, Florham Park, New Jersey 07932
Telephone (608) 441-8120

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

Copies to:
Asher M. Rubin, Esq.
Istvan Hajdu, Esq.
Kostian Ciko, Esq.
Sidley Austin LLP
787 Seventh Avenue
New York, New York 10019
Telephone (212) 839-5300

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: x

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer " Non-accelerated filer x Accelerated filer "
Smaller reporting company x
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 complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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 of 1933 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.

This Amendment No. 1 is being filed for the purpose of filing Exhibit 5.1 to the Registration Statement (Commission File No. 333-274880) as indicated in Item 16 of Part II of the Registration Statement. No changes or additions are being made hereby to the Prospectus constituting Part I of the Registration Statement (not included herein) or to Items 14, 15 or 17 of Part II of the Registration Statement.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

We estimate that expenses in connection with the distribution described in this registration statement (other than brokerage commissions, discounts or other expenses relating to the sale of the shares by the selling stockholders) will be as set forth below. We will pay the following expenses with respect to the distribution, and such amounts, with the exception of the SEC registration fee is an estimate:

SEC Registration Fee	\$ 14,278.30
Accounting Fees and Expenses	\$ 20,000.00
Legal Fees and Expenses	\$ 30,000.00
Miscellaneous Fees and Expenses	\$ 4,000.00
Total	\$ 68,278.30

Item 15. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law (the "DGCL") permits a corporation to eliminate the personal liability of its directors for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her 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. Our amended and restated certificate of incorporation 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, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL 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 or she 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 or she 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 or her 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.

Our amended and restated certificate of incorporation contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by the DGCL. Consequently, our directors are not personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- · any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- · unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- · any transaction from which the director derived an improper personal benefit.

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Our amended and restated certificate of incorporation provides that we shall indemnify any and all persons whom we shall have power to indemnify under Section 145 from and against any and all of the expenses, liabilities or other matters referred to in or covered by Section 145. Our amended and restated certificate of incorporation provides for the advancement of expenses to each of our directors, officers, employees or agents for the defense of any action for which indemnification is required or permitted.

We have entered into indemnification agreements with certain of our directors and our executive officers. These agreements will provide that we will indemnify such directors and officers to the fullest extent permitted by law and our amended and restated certificate of incorporation.

We also maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

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Item 16 Exhibits.

Exhibit No. Description

Agreement and Plan of Merger by and among Novelos Therapeutics, Inc., Cell Acquisition Corp. and Cellectar, Inc. dated April 8, 2011 (filed as Exhibit 2.1 on Form 8-K on April 11, 2011)

3.2	Certificate of Ownership and Merger of Cellectar Biosciences, Inc. with and into Novelos Therapeutics, Inc. (filed as Exhibit 3.1 on Form 8-K on February 13, 2014)
3.3	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 8-K on June 13, 2014)
<u>3.4</u>	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.2 on Form 8-K on June 19, 2015)
3.5	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 8-K on March 4, 2016)
3.6	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.2 on Form 8-K on June 1, 2017)
3.7	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 8-K on July 13, 2018)
3.8	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 8-K on February 25, 2021)
3.9	Certificate of Correction of Certificate of Amendment of Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 10-Q on May 10, 2022)
3.10	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 on Form 8-K on July 21, 2022)
3.11	Form of Amended and Restated Bylaws (filed as Exhibit 3.1 on Form 8-K on November 29, 2022 and incorporated herein by reference)
3.12	Certificate of Elimination of the Series A Convertible Preferred Stock, the Series B Convertible Preferred Stock and the Series C Convertible Preferred Stock (filed as Exhibit 3.1 on Form 8-K on September 8, 2023)
3.13	Amendment No. 1 to Certificate of Designation of the Series D Preferred Stock(filed as Exhibit 3.2 on Form 8-K on September 8, 2023)
3.14	Certificate of Designation of Preferences, Rights and Limitations of the Series E Convertible Voting Preferred Stock (filed as Exhibit 3.3 on Form 8-K on September 8, 2023)
4.1	Form of Tranche A Warrant (filed as Exhibit 4.1 on Form 8-K on September 8, 2023)
4.2	Form of Tranche B Warrant (filed as Exhibit 4.2 on Form 8-K on September 8, 2023)
4.3	Form of Series D Preferred Stock certificate (filed as Exhibit 4.1 on Form 8-K on December 28, 2020)
<u>5.1*</u>	Opinion of Sidley Austin, LLP
23.1*	Consent of Sidley Austin LLP (included in Exhibit 5.1)
23.2**	Consent of Baker Tilly US, LLP
24.1**	Powers of Attorney
107**	Filing Fee Table
* Filed herewith. ** Filed previously.	

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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% 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 the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above 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, as amended (the "Exchange Act"), that are incorporated by reference in this registration statement or are contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this 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 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 the 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) 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 (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 SEC 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.

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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 City of Florham Park, State of New Jersey on October 25, 2023.

CELLECTAR BIOSCIENCES, INC.

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

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities indicated on the date indicated:

Signature	Title
/s/ James V. Caruso	President, Chief Executive Officer and Director
James V. Caruso	(principal executive officer)
/s/ Chad J. Kolean	Chief Financial Officer
Chad J. Kolean	(principal financial officer and principal accounting officer)
/s/ *	Director
Asher Alban Chanan-Khan	
/s/ *	Director
Frederick W. Driscoll	
/s/ *	Director
Stefan D. Loren, Ph.D.	
/s/ *	Director
John Neis	
/s/ *	Director
Douglas J. Swirsky	
* By: /S/ Chad J. Kolean	
Chad J. Kolean	
Attorney-in-fact	
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SIDLEY AUSTIN LLP 787 SEVENTH AVENUE NEW YORK, NY 10019 +1 212 839 5300 +1 212 839 5599 FAX

AMERICA · ASIA PACIFIC · EUROPE

October 25, 2023

Cellectar Biosciences, Inc. 100 Campus Drive Florham Park, New Jersey 07932

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-3 (the "Registration Statement") being filed by Cellectar Biosciences, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act of 34,487,159 shares (the "Shares") of common stock, \$0.00001 par value per share (the "Common Stock"), of the Company, which are comprised of (i) up to 13,461,531 shares of our common stock issuable upon conversion of 1,225 shares of Series E-1 Preferred Stock, par value \$0.00001 per share, of the Company (the "Series E-1 Preferred Stock, par value \$0.00001 per share, of the Company (the "Series E-3 Preferred Stock, par value \$0.00001 per share, of the Company (the "Series E-3 Preferred Stock,") that are issuable upon the exercise of tranche A warrants (the "Tranche A Warrants") and (iii) up to 7,179,482 shares of our common stock issuable upon conversion of 1,715 shares of Series E-4 Preferred Stock, par value \$0.00001 per share, of the Company (the "Series E-4 Preferred Stock") that are issuable upon the series E-1 Preferred Stock, the Series E-2 Preferred Stock (as defined below) and the Series E-3 Preferred Stock (the "Series E Preferred Stock") that that are issuable upon the exercise of tranche B warrants (together with the Tranche A Warrants, the "Warrants"). The Series E-1 Preferred Stock and the Warrants were issued on September 8, 2023 pursuant to the securities purchase agreement, dated September 5, 2023, between the Company and the investors named thereto (the "Securities Purchase Agreement"). The Series E-2 Preferred Stock, par value \$0.00001 per share, of the Company (the "Series E-2 Preferred Stock") are issuable in lieu of shares of Common Stock at the option of holders of Series E-1 Preferred Stock.

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

Sidley Austin (DC) LLP is a Delaware limited liability partnership doing business as Sidley Austin LLP and practicing in affiliation with other Sidley Austin partnerships.

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Cellectar Biosciences, Inc. October 25, 2023 Page 2

We have examined the Registration Statement, the Company's Amended and Restated Certificate of Incorporation, as amended to the date hereof (the "Certificate of Incorporation"), the Company's Amended and Restated Bylaws, the Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Voting Preferred Stock (the "Certificate of Designation"), the Securities Purchase Agreement, the Warrants and the resolutions adopted by the board of directors of the Company relating to the Registration Statement and the issuance of the Series E-1 Preferred Stock and the Warrants by the Company. We have also examined originals, or copies of originals certified to our satisfaction, of such agreements, documents, certificates and statements of the Company and other corporate documents and instruments, and have examined such questions of law, as we have considered relevant and necessary as a basis for this opinion letter. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures, the legal capacity of all persons and the conformity with the original documents of any copies thereof submitted to us for examination. As to facts relevant to the opinions expressed herein, we have relied without independent investigation or verification upon, and assumed the accuracy and completeness of, certificates, letters and oral and written statements and representations of public officials and officers and other representatives of the Company.

Based on the foregoing, and subject to the other qualifications and limitations set forth herein, we are of the opinion that (i) the portion of the Shares issuable upon conversion of the Series E-1 Preferred Stock or the Series E-2 Preferred Stock, when duly issued and delivered in accordance with the terms of the Series E-1 Preferred Stock or the Series E-2 Preferred Stock, as applicable, will be validly issued, fully paid and non-assessable and (ii) the portion of the Shares issuable upon conversion of the Series E-3 Preferred Stock and the Series E-4 Preferred Stock, when duly issued and delivered in accordance with the terms of the Series E-3 Preferred Stock and the Series E-4 Preferred Stock, as applicable, following issuance of the Series E-3 Preferred Stock and the Series E-4 Preferred Stock in accordance with the terms of the applicable Warrants (including the payment of the applicable exercise price), will be validly issued, fully paid and non-assessable

In rendering the opinion set forth above, we have assumed that (i) at the time of the issuance of any Series E-3 Preferred Stock or any Series E-4 Preferred Stock, upon exercise of any Warrant, there will be a sufficient number of shares of Series E-3 Preferred Stock and Series E-4 Preferred Stock, as applicable, authorized and then available for issuance under the Company's Certificate of Incorporation as in effect at such time and (ii) at the time of the issuance of any Shares upon conversion of any share of Series E Preferred Stock, there will be a sufficient number of shares of Common Stock authorized and then available for issuance under the Company's Certificate of Incorporation as in effect at such time.

This opinion letter is limited to the General Corporation Law of the State of Delaware. We express no opinion as to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America or any state securities or blue sky laws.

We hereby consent to the filing of this opinion letter as an Exhibit to the Registration Statement and to all references to our Firm included in or made a part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.



Very truly yours,

/s/ Sidley Austin LLP