Registration No. 333-

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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

LIFECORE BIOMEDICAL, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or jurisdiction of incorporation or organization)

94-3025618

(I.R.S. Employer Identification No.)

3515 Lyman Boulevard Chaska, Minnesota 55318 (Address of principal executive offices and zip code)

> Lifecore Biomedical, Inc. 2019 Stock Incentive Plan (Full Title of the Plan)

> > Copy of all communications to:

April Hamlin Ballard Spahr LLP 2000 IDS Center 80 South 8th Street Minneapolis, MN 55402 (612) 371-3211

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

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 []

Ryan D. Lake

(952) 368-4300

Chief Financial Officer Lifecore Biomedical, Inc.

3515 Lyman Boulevard Chaska, Minnesota 55318

> Accelerated filer [X] 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. []

EXPLANATORY NOTE

This Registration Statement on Form S-8 (the "Registration Statement") is filed by Lifecore Biomedical, Inc. (the "Company" or "Registrant") for the purpose of registering an additional 300,000 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") that may be issued pursuant to awards under the Company's 2019 Stock Incentive Plan, as amended (the "Plan"). At the Company's annual meeting of stockholders held on August 15, 2024, the Company's stockholders approved the amendment to the Plan to increase in the number of shares reserved by the additional 300,000 shares being registered by this Registration Statement.

In accordance with General Instruction E to Form S-8, the Company incorporates herein by reference the Form S-8 filed by the Company on October 16, 2019 registering 2,000,000 shares of Common Stock reserved under the Plan (SEC File No. 333-234229) and the Form S-8 filed by the Company on April 26, 2023 registering 759,797 shares of Common Stock reserved under the Plan (SEC File No. 333-271175), together with all exhibits filed therewith or incorporated therein by reference.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information called for in Part I of Form S-8 is not being filed with or included in this Registration Statement (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission").

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission are hereby incorporated by reference:

- (a) The Registrant's Annual Report on Form 10-K for the year ended May 26, 2024, filed on August 26, 2024;
- (b) The Registrant's definitive proxy statement filed on September 23, 2024 for its Annual Meeting of Stockholders to be held on November 7, 2024;
- (c) The Registrant's Quarterly Report on Form 10-Q for the quarter ended August 25, 2024, filed on October 4, 2024;
- (d) The Registrant's Current Reports on Form 8-K filed (but not furnished) on June 7, 2024, July 1, 2024, July 12, 2024, July 24, 2024, August 21, 2024, August 29, 2024, September 12, 2024, September 23, 2024, and October 4, 2024; and
- (e) The Registrant's Registration Statement on Form 8-A filed with the Commission on December 21, 1995 (File No. 000-27446) relating to the Registrant's common stock, as updated by "Description of Capital Stock" filed as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K for the year ended May 26, 2024, filed on August 26, 2024 (File No. 000-27446), and any amendment or report filed for the purpose of updating such description.

All documents subsequently filed (but not furnished) by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the completion or termination of this offering of securities will be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of these documents.

Any statement contained in this Registration Statement, in an amendment hereto or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed amendment to this Registration Statement or in any document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement, except as to such specific section of such statements as set forth therein.

Under no circumstances shall any information furnished under Item 2.02 and/or Item 7.01 of Current Report on Form 8-K and any corresponding exhibits thereto be deemed incorporated herein by reference unless such Current Report on Form 8-K expressly provides to the contrary.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Registrant is a Delaware corporation. Reference is made to Section 102(b)(7) of the General Corporation Law of the State of Delaware (the "DGCL"), which permits a corporation to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty through its certificate of incorporation, except:

- for any breach of the director's duty of loyalty to the corporation or its stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- pursuant to Section 174 of the DGCL (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions); or
- for any transaction from which a director derived an improper personal benefit.

Reference is also made to Section 145 of the DGCL, which provides that a corporation may indemnify any persons, including officers and directors, who are, or are threatened to be made, parties to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was a director, officer, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include 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, provided such director, officer, employee or agent acted in good faith and in a manner the 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 that the person's conduct was unlawful. A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses that such officer or director actually and reasonably incurred. The indemnification permitted under the DGCL is not exclusive, and a corporation is empowered to purchase and maintain insurance against liabilities whether or not indemnification would be permitted by statute.

The Registrant's Certificate of Incorporation provides that, to the fullest extent permitted by the DGCL, as the same may be amended from time to time, a director of the Registrant will not be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director.

The Registrant's Certificate of Incorporation further provides that, to the fullest extent permitted by applicable law, the Registrant is authorized to provide indemnification of and advancement of expenses to such agents (and any other persons to which Delaware law permits the Registrant to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the DGCL of Delaware, subject only to limits created by applicable Delaware law (statutory or non-statutory), with respect to actions for breach of duty to a corporation, its stockholders, and others.

The Registrant's bylaws provide that the Registrant will, to the maximum extent and in the manner permitted by the DGCL, indemnify each of its directors and officers against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the Registrant.

The Registrant's bylaws additionally provide that expenses incurred in defending any action or proceeding for which indemnification is required pursuant to the Registrant's bylaws will be paid by the Registrant in advance of the final disposition of such action or proceeding upon receipt of an undertaking.

The Registrant has also entered into agreements with its directors and officers that will require the Registrant, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors and officers to the fullest extent permitted by Delaware law. The Registrant also maintains directors' and officers' liability insurance which covers certain liabilities of its directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

| Exhibit No. | Description of Exhibit |
|----------------|--|
| 3.1 | Certificate of Incorporation of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 7, 2008. |
| <u>3.2</u> | Certificate of Amendment to Certificate Incorporation of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 16, 2022. |
| <u>3.3</u> | Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Company, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on August 21, 2024. |
| <u>3.4</u> | Amended and Restated By-Laws of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on October 16, 2012. |
| <u>3.5</u> | Amendment No. 1 to By-Laws of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 7, 2019. |
| <u>3.6</u> | Amendment No. 2 to By-Laws of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2019. |
| <u>3.7</u> | Amendment No. 3 to By-Laws of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on October 19, 2020. |
| <u>3.8</u> | Amendment No. 4 to By-Laws of the Registrant, incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on November 16, 2022. |
| <u>3.9</u> | Certificate of Designations of Lifecore Biomedical, Inc., dated January 9, 2023, incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 10, 2023. |
| <u>5.1</u> * | Opinion of Ballard Spahr LLP. |
| <u>10.1</u> + | Lifecore Biomedical, Inc. 2019 Stock Incentive Plan, as amended, incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 21, 2024. |
| <u>23.1</u> * | Consent of Ballard Spahr LLP (included in Exhibit 5.1). |
| <u>23.2</u> * | Consent of BDO USA, P.C., Independent Registered Public Accounting Firm. |
| <u>23.3</u> * | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm. |
| <u>24.1</u> | Power of Attorney (included on signature page hereto). |
| <u>107.1</u> * | Filing Fee Table. |

*

Filed herewith. Indicates management contract or compensatory plan or arrangement. +

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act 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 the undertakings set forth in paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if 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 Exchange Act that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Chaska, State of Minnesota, on October 10, 2024.

LIFECORE BIOMEDICAL, INC.

By /s/ Paul Josephs

Paul Josephs President and Chief Executive Officer

POWER OF ATTORNEY

The undersigned officers and directors of Lifecore Biomedical, Inc. hereby constitute and appoint Paul Josephs and Ryan D. Lake, each acting alone, with power to act as our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for us and in our stead, in any and all capacities to sign any and all amendments (including post-effective amendments) to this Registration Statement and all documents relating thereto, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing necessary or advisable to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities indicated on October 10, 2024.

| /s/ Paul Josephs | President and Chief Executive Officer (Principal | | | |
|-------------------------|--|--|--|--|
| Paul Josephs | Executive Officer) and Director | | | |
| /s/ Ryan D. Lake | Chief Financial Officer | | | |
| Ryan D. Lake | (Principal Financial and Accounting Officer) | | | |
| /s/ Humberto C. Antunes | Director | | | |
| Humberto C. Antunes | | | | |
| /s/ Jason Aryeh | Director | | | |
| Jason Aryeh | | | | |
| /s/ Raymond Diradoorian | Director | | | |
| Raymond Diradoorian | | | | |
| /s/ Jeffrey L. Edwards | Director | | | |
| Jeffrey L. Edwards | | | | |
| /s/ Katrina L. Houde | Director | | | |
| Katrina L. Houde | | | | |
| /s/ Paul H. Johnson | Director | | | |
| Paul H. Johnson | | | | |
| /s/ Christopher Kiper | Director | | | |
| Christopher Kiper | | | | |
| /s/ Matthew Korenberg | Director | | | |
| Matthew Korenberg | | | | |
| /s/ Nelson Obus | Director | | | |
| Nelson Obus | | | | |
| /s/ Joshua E. Schechter | Director | | | |
| Joshua E. Schechter | | | | |

Calculation of Filing Fee Tables

Form S-8

(Form Type)

Lifecore Biomedical, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

| Security Type | Security Class Title | Fee Calculation Rule | Amount Registered ⁽¹⁾⁽²⁾ | Unit | Maximum Aggregate Offering Price | Fee Rate | Amount of Registration Fee | | | |
|-----------------------------|---|-----------------------------------|--|--------|--|-----------|-------------------------------|--|--|--|
| Newly Registered Securities | | | | | | | | | | |
| Equity | Common Stock, par value \$0.001 per share | Rule 457(c) and Rule 457(h) | 300,000 | \$4.96 | \$1,488,000 | 0.0001531 | \$227.81 | | | |
| Total Offering Amount: | | | | | | | \$227.81 | | | |
| Total Fee Offsets: | | | | | | | | | | |
| Net Fee Due: | | | | | | | \$227.81 | | | |

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the registration statement on Form S-8 shall also cover any additional shares of the common stock of Lifecore Biomedical, Inc. (the "Registrant") that become issuable in respect of the securities identified in the above table by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration that results in an increase in the number of the outstanding shares of the Registrant's common stock.
- (2) Represents 300,000 shares of the Registrant's common stock that were additionally reserved under the Registrant's 2019 Stock Incentive Plan, as amended, by approval of the Registrant's stockholders on August 15, 2024.
- (3) Estimated solely for the purpose of calculating the registration fee and computed in accordance with Rule 457(c) and (h) under the Securities Act using the average of the high and low sale prices of the common stock on October 8, 2024, as reported on The Nasdaq Global Select Market.

Ballard Spahr

2000 IDS Center 80 South 8th Street Minneapolis, MN 55402-2119 Tel: 612.371.3211 Fax: 612.271.3207 www.ballardspahr.com

October 10, 2024

Lifecore Biomedical, Inc. 3515 Lyman Boulevard Chaska, Minnesota 55318

RE: Lifecore Biomedical, Inc. 2019 Stock Incentive Plan, As Amended August 15, 2024

Ladies and Gentlemen:

We have acted as counsel to Lifecore Biomedical, Inc., a Delaware corporation (the "Company"), in connection with the registration by the Company under the Securities Act of 1933 (the "Act") of 300,000 shares of the Company's common stock, par value \$0.001 per share (the "Shares"), pursuant to the Registration Statement on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on the date hereof (such registration statement, as amended to the date hereof, is herein referred to as the "Registration Statement"). The Shares may be offered and sold under the Lifecore Biomedical, Inc. 2019 Stock Incentive Plan, as amended August 15, 2024 (the "Plan").

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement and all exhibits thereto, (ii) the Certificate of Incorporation, as amended, of the Company as currently in effect, (iii) the Amended and Restated Bylaws, as amended, of the Company as currently in effect, (iv) the Plan, and (v) such corporate records, agreements, documents and other instruments, and such certificates or comparable documents of public officials and officers and representatives of the Company, and have made such inquiries of such officers and representatives and have considered such matters of law as we have deemed appropriate as the basis for the opinions hereinafter set forth. As to facts material to this opinion letter, we have relied upon certificates, statements or representations of public officials, of officers and representatives of the Company and of others, without any independent verification thereof.

In rendering this opinion, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as certified, photostatic or conformed copies, the authenticity of originals of all such latter documents, and the accuracy and completeness of all records, information and statements submitted to us by officers and representatives of the Company.

Exhibit 5.1

Lifecore Biomedical, Inc. October 10, 2024 Page 2

The opinion expressed below is based on the assumption that the Registration Statement has been filed by the Company with the Commission and will have become effective before any of the Shares are issued, and that persons acquiring the Shares will do so strictly in accordance with the terms of the Plan and will receive a prospectus containing all the information required by Part I of the Registration Statement before acquiring such Shares. The opinion is also based on the assumption that the Shares will continue to be duly and validly authorized on the dates that the Shares are issued to participants pursuant to the terms of the Plan and, upon the issuance of any of the Shares, the total number of shares of common stock of the Company issued and outstanding, after giving effect to such issuance of such Shares, will not exceed the total number of shares of common stock that the Company is then authorized to issue under its Certificate of Incorporation, as amended. We have also assumed that the Company's board of directors, or a duly authorized committee thereof, will have approved the issuance of each award under the Plan prior to the issuance thereof and that the Shares will be issued for legal consideration in excess of par value.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that (a) the Shares to be issued under the Plan are duly authorized and (b) the Shares, when issued pursuant to the Plan and any applicable award agreement in accordance with the terms and conditions thereof (including, where applicable, the payment of any exercise price, the satisfaction of any vesting or forfeiture restrictions and the achievement of applicable performance goals), will be legally issued, fully paid and non-assessable.

Our opinion is limited to the laws of the General Corporation Law of the State of Delaware and the federal laws of the United States of America, and we express no opinion with respect to the laws of any other jurisdiction.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act. 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 Securities Act or the rules and regulations of the Commission.

Sincerely,

/s/ Ballard Spahr LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement of our reports dated August 26, 2024, relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, of Lifecore Biomedical, Inc. (the Company) appearing in the Company's Annual Report on Form 10-K for the year ended May 26, 2024. Our report on the effectiveness of internal control over financial reporting expresses an adverse opinion on the effectiveness of the Company's internal control over financial reporting as of May 26, 2024.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, P.C.

Minneapolis, Minnesota

October 10, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2019 Stock Incentive Plan of Lifecore Biomedical, Inc. of our report dated March 19, 2024, with respect to the consolidated financial statements of Lifecore Biomedical, Inc. included in its Annual Report (Form 10-K) for the year ended May 26, 2024, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Minneapolis, Minnesota October 10, 2024