

---

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

**FORM S-8**

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**ENSYSCE BIOSCIENCES, INC.**  
(Exact name of Registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

82-2755287  
(I.R.S. Employer  
Identification No.)

7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037  
(Address of Principal Executive Offices) (Zip Code)

Ensysce Biosciences, Inc.  
Amended and Restated 2021 Omnibus Incentive Plan, as Amended  
(Full title of the plan)  
Dr. Lynn Kirkpatrick

President, Chief Executive Officer & Director  
7946 Ivanhoe Avenue, Suite 201  
La Jolla, California 92037  
(858) 263-4196  
(Name and address of agent for service)  
(Telephone number, including area code, of agent for service)

*Copy to:*

Gregory J. Rubis, Esq.  
Eric D. Kline, Esq.  
Troutman Pepper Locke LLP  
104 Carnegie Center Drive, Suite 203  
Princeton, New Jersey 08540  
Telephone: (609) 452-0808

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

On October 7, 2021, Ensysce Biosciences, Inc. (the “registrant”) filed a Registration Statement on Form S-8 (File No. 333-260116) (the “Original Registration Statement”) with the Securities and Exchange Commission (the “Commission”) to register 1,512 shares of its common stock, par value \$0.0001 per share (“Common Stock”), of which (i) 1,234 shares of Common Stock were reserved for issuance upon the exercise of outstanding options that were assumed under the registrant’s 2021 Omnibus Incentive Plan (as amended and restated and subsequently amended, the “2021 Incentive Plan”) and (ii) 278 shares Common Stock were reserved for future grants of awards under the 2021 Incentive Plan. On January 31, 2022, the registrant filed a Registration Statement on Form S-8 (File No. 333-262419) (the “2022 Registration Statement”) with the Commission to register 833 additional shares of Common Stock in connection with the amendment and restatement of the 2021 Incentive Plan, which was approved by the registrant’s shareholders on January 26, 2022. On October 20, 2023, the registrant filed a Registration Statement on Form S-8 (File No. 333-275095) (the “2023 Registration Statement”) with the Commission to register 1,782 additional shares of Common Stock in connection with Section 4.1(a)(i) of the 2021 Incentive Plan and 39,054 additional shares of Common Stock in connection with an amendment of the 2021 Incentive Plan, which was approved by the registrant’s shareholders on August 24, 2023. On May 2, 2025, the registrant filed a Registration Statement on Form S-8 (File No. 333-286948) (the “2025 Registration Statement”) with the Commission to register 78,276 additional shares of Common Stock in connection with Section 4.1(a)(i) of the 2021 Incentive Plan (10,487 shares for an annual increase on January 1, 2024 and 67,789 shares for an annual increase on January 1, 2025). This registration Statement registers 828,749 additional shares of Common Stock in connection with Section 4.1(a)(i) of the 2021 Incentive Plan (600,000 shares in connection with the second amendment to the 2021 Incentive Plan, which amendment was approved by the registrant’s shareholders on January 7, 2026, and 228,749 shares for an annual increase on January 1, 2026).

Accordingly, and pursuant to General Instruction E to Form S-8, the contents of the Original Registration Statement, the 2022 Registration Statement and 2023 Registration Statement are incorporated by reference herein, except that the provisions contained in Part II of the Original Registration Statement, the 2022 Registration Statement, the 2023 Registration Statement and the 2025 Registration Statement are modified as set forth in this Registration Statement.

The registrant has effected, over time, several reverse splits of Common Stock (the “Reverse Splits”). All share and per share information has been restated retroactively, giving effect to the Reverse Splits for all periods presented.

---

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference**

The following documents, which have been filed with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are hereby incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

- a) The registrant’s Annual Report on [Form 10-K](#) for the year ended December 31, 2025, filed with the Commission on March 30, 2026;
- b) The registrant’s Current Reports on Form 8-K, filed with the Commission on [January 8, 2026](#), [February 27, 2026](#), [March 23, 2026](#), [March 30, 2026](#), [March 30, 2026](#), [April 3, 2026](#) and [April 8, 2026](#) (in each case other than portions of those documents deemed to be furnished and not filed); and
- c) The description of the registrant’s Common Stock contained in the [Form 8-A](#) filed with the Commission on November 28, 2017 by our predecessor corporation, Leisure Acquisition Corp., included a description of common stock that was updated with the filing of our: (i) Third Amended and Restated Certificate of Incorporation as [Exhibit 3.1](#) to our Current Report on Form 8-K filed with the Commission on July 7, 2021 and (ii) Certificate of Amendment to Third Amended and Restated Certificate of Incorporation that was filed as [Exhibit 3.1\(b\)](#) to our Registration Statement on Form S-1 (File No. 333-268038), which was filed with the Commission on October 28, 2022, including any subsequently filed amendments or reports updating such description.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act 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, shall be deemed to be incorporated herein by reference and shall be deemed a part hereof from the date of filing of such documents. Unless expressly incorporated into this Registration Statement, a report furnished but not filed on Form 8-K under the Exchange Act shall not be incorporated by reference into this Registration Statement. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein and to be a part hereof 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 other subsequently filed document which 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.

**Item 5. Interests of Named Experts and Counsel**

Not applicable.

**Item 6. Indemnification of Directors and Officers**

Section 102(b)(7) of the Delaware General Corporation Law (the “*DGCL*”) allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the 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. The registrant’s third amended and restated certificate of incorporation provides for this limitation of liability.

Section 145 of the *DGCL*, provides, among other things, that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending or completed 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 an officer, director, 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 person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation’s best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful. A Delaware corporation may indemnify any persons who were or are a party to any threatened, pending or completed action or suit 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 another corporation or enterprise. The indemnity may include expenses (including attorneys’ fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation’s best interests, provided further that no indemnification is permitted without judicial approval if the officer, director, employee or agent is adjudged to be liable to 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 (including attorneys’ fees) which such officer or director has actually and reasonably incurred.

---

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who 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 corporation or enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would otherwise have the power to indemnify such person under Section 145.

The registrant's amended and restated bylaws provide that it must indemnify and advance expenses to its directors and officers to the full extent authorized by the DGCL.

The registrant has entered into indemnification agreements with each of its directors and executive officers. Such agreements may require the registrant, among other things, to advance expenses and otherwise indemnify its executive officers and directors against certain liabilities that may arise by reason of their status or service as executive officers or directors, to the fullest extent permitted by law.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, any provision of the registrant's third amended and restated certificate of incorporation, the registrant's amended and restated bylaws, agreement, vote of stockholders or disinterested directors or otherwise. Notwithstanding the foregoing, the registrant shall not be obligated to indemnify a director or officer in respect of a proceeding (or part thereof) instituted by such director or officer, unless such proceeding (or part thereof) has been authorized by the board of directors pursuant to the applicable procedure outlined in the registrant's amended and restated bylaws.

Section 174 of the DGCL provides, among other things, that a director, who wilfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held jointly and severally liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time may avoid liability by causing his or her dissent to such actions to be entered in the books containing the minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

The registrant maintains and expects to maintain standard policies of insurance that provide coverage (1) to its directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to the registrant with respect to indemnification payments that the registrant may make to such directors and officers.

These provisions may discourage stockholders from bringing a lawsuit against the registrant's directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit the registrant and its stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent the registrant pays the costs of settlement and damage awards against officers and directors pursuant to these indemnification provisions.

The registrant believes that these provisions, the insurance and the indemnity agreements are necessary to attract and retain talented and experienced officers and directors.

**Item 7. Exemption from Registration Claimed**

Not applicable.

---

## Item 8. Exhibits

Exhibit Number	Description of the Exhibit
4.1+	<a href="#">Amended and Restated 2021 Omnibus Incentive Plan, as further amended (incorporated by reference to Annex A to the registrant's Definitive Proxy Statement on Schedule DEF 14A (File No. 001-38306) filed on July 14, 2023)</a>
4.2+	<a href="#">Amended and Restated 2021 Omnibus Incentive Plan Form of Stock Option Grant Notice and Award Agreement (incorporated by reference to Exhibit 10.22(a) filed with the registrant's Annual Report on Form 10-K (File No. 001-38306) filed on March 31, 2022)</a>
4.3+	<a href="#">Form of Restricted Stock Unit Agreement under the Amended and Restated 2021 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.9(c) filed with the registrant's Registration Statement on Form S-1 (File No. 333-275456) on November 9, 2023)</a>
4.4+	<a href="#">Second Amendment to the Amended and Restated 2021 Omnibus Incentive Plan (incorporated by reference to Annex A to the registrant's Definitive Proxy Statement on Schedule DEF 14A (File No. 001-38306) filed on December 2, 2025)</a>
5*	<a href="#">Opinion of Troutman Pepper Locke LLP</a>
23.1*	<a href="#">Consent of Baker Tilly US, LLP</a>
23.2*	<a href="#">Consent of Troutman Pepper Locke LLP (contained in Exhibit 5 hereto)</a>
24*	<a href="#">Power of Attorney (included on signature page to this registration statement)</a>
107*	<a href="#">Filing fee table</a>

\* Filed herewith

+ Denotes compensatory plans or arrangements or management contracts

## 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 Filing Fee Tables" or "Calculation of Registration Fee" table, as applicable, 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) of this section 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 the registration statement; and

(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.

(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 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, 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 San Diego, State of California, on April 30, 2026.

### ENSYSCE BIOSCIENCES, INC.

By: /s/ Dr. Lynn Kirkpatrick  
Dr. Lynn Kirkpatrick  
President, Chief Executive Officer  
and Director

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Lynn Kirkpatrick and David Humphrey, and each of them, as his true and lawful attorney-in-fact and agent, upon the action of such appointee, with full power of substitution and resubstitution, to do any and all acts and things and execute, in the name of the undersigned, any and all instruments which each of said attorneys-in-fact and agents may deem necessary or advisable in order to enable Ensysce Biosciences, Inc. to comply with the Securities Act, and any requirements of the Commission in respect thereof, in connection with the filing with the Commission of this Registration Statement on Form S-8 under the Securities Act, including specifically but without limitation, power and authority to sign the name of the undersigned to such Registration Statement, and any amendments to such Registration Statement (including post-effective amendments), and to file the same with all exhibits thereto and other documents in connection therewith, with the Commission, to sign any and all applications, Registration Statements, notices or other documents necessary or advisable to comply with applicable state securities laws, and to file the same, together with other documents in connection therewith with the appropriate state securities authorities, granting unto each of said attorneys-in-fact and agents full power and authority to do and to perform each and every act and thing requisite or necessary to be done in and about the premises, as fully and to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents 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 capacities indicated on April 30, 2026

<u>Name</u>	<u>Title</u>
By: <u>/s/ Dr. Lynn Kirkpatrick</u> Dr. Lynn Kirkpatrick	President, Chief Executive Officer and Director (Principal Executive Officer)
By: <u>/s/ David Humphrey</u> David Humphrey	Chief Financial Officer, Secretary and Treasurer (Principal Financial and Accounting Officer)
By: <u>/s/ William Chang</u> William Chang	Director
By: <u>/s/ Bob Gower</u> Bob Gower	Director and Chairman of the Board
By: <u>/s/ Adam Levin</u> Adam Levin	Director
By: <u>/s/ Steve Martin</u> Steve Martin	Director

Troutman Pepper Locke LLP  
Union Trust Building, 501 Grant Street,  
Suite 300  
Pittsburgh, PA 15219-4429

troutman.com



April 30, 2026  
Ensysce Biosciences, Inc.  
7946 Ivanhoe Avenue, Suite 201  
La Jolla, California 92037

**Re: Registration Statement on Form S-8**

Ladies and Gentlemen:

We have acted as counsel to Ensysce Biosciences, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 (the "Registration Statement"), as filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof, pursuant to the Securities Act of 1933, as amended (the "Securities Act"), to register 828,749 shares of common stock, par value \$0.0001 per share of the Company (the "Shares"), issuable by the Company from time to time pursuant to the Company's Amended and Restated 2021 Omnibus Incentive Plan, as amended.

This opinion is being furnished in accordance with the requirements of Item 8(a) of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

We have examined originals or copies, certified or otherwise identified to our satisfaction, of such corporate records, agreements and instruments of the Company, statements and certificates of public officials and officers of the Company, and such other documents, records and instruments, and we have made such legal and factual inquiries as we have deemed necessary or appropriate as a basis for us to render the opinions hereinafter expressed. In our examination of the foregoing, we have assumed the genuineness of all signatures, the legal competence and capacity of natural persons, the authenticity of documents submitted to us as originals and the conformity with authentic original documents of all documents submitted to us as copies. When relevant facts were not independently established, we have relied without independent investigation as to matters of fact upon statements of governmental officials and upon representations made in or pursuant to the certificates and statements of appropriate representatives of the Company.

In connection herewith, we have assumed that all of the documents referred to in this opinion letter have been duly authorized by, have been duly executed and delivered by, and constitute the valid, binding and enforceable obligations of, all of the parties to such documents, all of the signatories to such documents have been duly authorized and all such parties are duly organized and validly existing and have the power and authority (corporate or other) to execute, deliver and perform such documents.

We do not purport to express an opinion on any laws other than the laws of the State of Delaware. The opinions set forth herein are made as of the date hereof and are subject to, and may be limited by, future changes in the factual matters set forth herein, and we undertake no duty to advise you of the same. The opinions expressed herein are based upon the law in effect (and published or otherwise generally available) on the date hereof, and we assume no obligation to revise or supplement these opinions should such law be changed by legislative action, judicial decision or otherwise. In rendering our opinions, we have not considered, and hereby disclaim any opinion as to, the application or impact of any laws, cases, decisions, rules or regulations of any other jurisdiction, court or administrative agency.

Based upon the foregoing and in reliance thereon, and subject to the assumptions, comments, qualifications, limitations and exceptions set forth herein, we are of the opinion that the Shares have been duly authorized for issuance, and when issued, delivered and paid for in accordance with the Plan (assuming that, upon any issuance of the Shares, the total number of shares of common stock issued and outstanding will not exceed the total number of shares of common stock that the Company is then authorized to issue under its Certificate of Incorporation), the Shares will be legally issued, fully paid and non-assessable.

We do not render any opinions except as set forth above. We hereby consent to the filing of this opinion as Exhibit 5 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the prospectus filed as a part thereof. We also consent to your filing copies of this opinion as an exhibit to the Registration Statement with such agencies of such states as you deem necessary while complying with the laws of such states regarding the offering and sale of the securities addressed herein. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations promulgated thereunder by the Commission.

Very truly yours,

*/s/ Troutman Pepper Locke LLP*  
Troutman Pepper Locke LLP

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Ensysce Biosciences, Inc. (the "Company") of our report dated March 30, 2026, related to the consolidated financial statements of the Company (which report expresses an unqualified opinion and includes an explanatory paragraph relating to a going concern uncertainty), appearing in the Annual Report on Form 10-K of the Company for the year ended December 31, 2025, filed with the Securities and Exchange Commission.

*/s/ Baker Tilly US, LLP*

San Diego, California

April 30, 2026

---

