

**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
(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 Hamilton Sanders LLP
301 Carnegie Center, Suite 400
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 checked="" 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 22,683 shares of its common stock, par value \$0.0001 per share ("Common Stock"), of which (i) 18,517 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 (the "2021 Incentive Plan") and (ii) 4,166 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 "Additional Registration Statement") with the Commission to register 12,500 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.

This Registration Statement registers 26,725 additional shares of Common Stock in connection with Section 4.1(a)(i) of the 2021 Incentive Plan and 585,796 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. Accordingly, and pursuant to General Instruction E to Form S-8, the contents of the Original Registration Statement and the Additional Registration Statement are incorporated by reference herein, except that the provisions contained in Part II of the Original Registration Statement and the Additional Registration Statement are modified as set forth in this Registration Statement.

On October 28, 2022, the Registrant effected a one-for-twenty reverse split of Common Stock (the "2022 Reverse Split"). On March 31, 2023, the Registrant effected a one-for-twelve reverse split of Common Stock (the "2023 Reverse Split" and together with the 2022 Reverse Split 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, 2022, filed with the Commission on March 30, 2023 and the audit report and related consolidated financial statements in Pre-effective Amendment No. 2 to the Registration Statement on [Form S-1](#) filed with the Commission on May 9, 2023 (File no. 333-271480);
- b) The Registrant’s Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2023](#), and [June 30, 2023](#), filed with the Commission on May 15, 2023 and August 11, 2023, respectively;
- c) The Registrant’s Current Reports on Form 8-K, filed with the Commission on [January 13, 2023](#), [January 19, 2023](#), [January 31, 2023](#), [February 1, 2023](#), [February 7, 2023](#), [March 24, 2023](#), [March 30, 2023](#), [March 31, 2023](#), [April 10, 2023](#), [May 15, 2023](#), [June 2, 2023](#), [June 14, 2023](#), [August 11, 2023](#) and [August 28, 2023](#) (in each case other than portions of those documents deemed to be furnished and not filed); and
- d) 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 has been updated with the filing of our Third Amended and Restated Certificate of Incorporation as [Exhibit 3.1](#) to our Current Report on Form 8-K filed with the SEC on July 7, 2021, 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. 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 8. Exhibits.

Exhibit Number	Description of the Exhibit
4.1	Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan, as amended (incorporated by reference to Annex A to the Ensysce Biosciences, Inc. Definitive Proxy Statement on Schedule DEF 14A filed on July 14, 2023 (File No. 001-38306))
5.1*	Opinion of Troutman Pepper Hamilton Sanders LLP
23.1*	Consent of Mayer Hoffman McCann P.C.
23.2*	Consent of Troutman Pepper Hamilton Sanders LLP (contained in Exhibit 5.1 hereto)
24.1*	Power of Attorney (included on signature page to this registration statement)
107*	Filing fee table

* Filed herewith

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 October 19, 2023.

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 October 19, 2023.

Signature	Title	Date
<u>/s/ Dr. Lynn Kirkpatrick</u> Dr. Lynn Kirkpatrick	President, Chief Executive Officer and Director (Principal Executive Officer)	October 19, 2023
<u>/s/ David Humphrey</u> David Humphrey	Chief Financial Officer, Secretary and Treasurer (Principal Financial and Accounting Officer)	October 19, 2023
<u>/s/ Andrew Benton</u> Andrew Benton	Director	October 19, 2023
<u>/s/ William Chang</u> William Chang	Director	October 19, 2023
<u>/s/ Bob Gower</u> Bob Gower	Director and Chairman of the Board	October 19, 2023
<u>/s/ Adam Levin</u> Adam Levin	Director	October 19, 2023
<u>/s/ Steve Martin</u> Steve Martin	Director	October 19, 2023
<u>/s/ Lee Rauch</u> Lee Rauch	Director	October 19, 2023
<u>/s/ Curtis Rosebraugh</u> Curtis Rosebraugh	Director	October 19, 2023

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



troutman.com

October 19, 2023
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 612,521 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 5.1 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 in the course of 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 Hamilton Sanders LLP

Troutman Pepper Hamilton Sanders LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 30, 2023, except for the effects of the March 31, 2023 reverse stock split discussed in Note 2 and Note 12, as to which the date is April 27, 2023, (which report includes an explanatory paragraph regarding the existence of substantial doubt about the ability of Ensysce Biosciences, Inc. (the “Company”) to continue as a going concern), related to the consolidated financial statements of the Company as of December 31, 2022 and 2021, and for each of the two years in the period ended December 31, 2022, included in the Registration Statement and accompanying prospectus on Form S-1 (File No. 333-271480), as amended.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
October 19, 2023

Calculation of Filing Fee Tables

Form S-8
(Form Type)

Ensysce Biosciences, Inc.
(Exact Name of Each Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule ⁽¹⁾	Amount Registered ⁽²⁾	Proposed Maximum Offering Price Per Unit ⁽¹⁾	Maximum Aggregate Offering Price ⁽¹⁾	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.0001 per share	Other	612,521	\$ 1.62	\$ 992,284	0.0001476	\$ 146.46
	Total Offering Amounts				\$ 992,284		\$ 146.46
	Total Fee Offsets						-
	Net Fee Due						\$ 146.46

- (1) Pursuant to Rules 457(c) and 457(h) under the Securities Act, and solely for the purpose of calculating the registration fee, the proposed maximum offering price per share is the average of the high and low prices reported for the registrant's Common Stock quoted on The Nasdaq Capital Market LLC on October 17, 2023.
- (2) Represents 612,521 additional shares reserved for issuance under the Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan, as amended (the "Plan"). Pursuant to Rule 416(a) under the Securities Act, this registration statement also covers an indeterminate number of additional shares as may be necessary to account for adjustment provisions under the Plan as a result of stock splits, stock dividends or similar transactions.