

PROSPECTUS SUPPLEMENT NO. 7

Ensysce™ biosciences

This prospectus supplement amends and supplements the prospectus dated September 27, 2021, as supplemented or amended from time to time (the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (No. 333-258609). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our Current Report on Form 8-K, filed with the U.S. Securities and Exchange Commission on June 17, 2022 (the “Current Report”). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the issuance by us and the resale by the selling security holders named in the Prospectus (the “Selling Securityholders”) of up to an aggregate of 27,132,398 shares of our common stock, par value \$0.0001 per share (“common stock”), which consists of (i) up to 500,000 shares of common stock that are issuable upon the exercise of 500,000 warrants issued to DelMorgan Group LLC (“DelMorgan”) under the terms of the Email Agreement, dated January 31, 2021, among Ensysce Biosciences, Inc. (the “Company”) and DelMorgan, as amended by the First Amendment to the Email Agreement, dated June 7, 2021 (the “Email Agreement”), (ii) up to an aggregate of approximately 10,000,000 shares of common stock that are issuable upon the exercise of 10,000,000 warrants (the “Public Warrants”) issued in connection with the initial public offering of our predecessor company, Leisure Acquisition Corp., a Delaware corporation (“LACQ”), (the “LACQ IPO”), (iii) up to an aggregate of 6,325,000 shares of common stock that are issuable upon the exercise of 6,325,000 warrants issued in connection with a private placement that closed simultaneously with the consummation of the LACQ IPO (the “Private Placement Warrants”), (iv) up to an aggregate of 1,000,001 shares of common stock that are issuable upon the exercise of 1,000,001 warrants issued in exchange for outstanding loans under the Expense Advancement Agreement dated December 1, 2017 among LACQ, Hydra Management, LLC (“Hydra”), Matthews Lane Capital Partners LLC (“MLCP”) and together with Hydra, the “Sponsors”), and HG Vora Capital Management LLC on behalf of one or more funds or accounts managed by it (the “Strategic Investor”) (the “Expense Advancement Agreement”), (v) up to an aggregate of 566,288 shares of common stock that are issuable upon exercise of 566,288 warrants issued in exchange for previously outstanding loans under the Expense Advancement Agreement dated December 5, 2019 between LACQ and Gateway Holdings Limited, as amended (the “GTWY Expense Advancement Agreement”) (collectively with the warrants described in (iv) herein, the “other private warrants”), (vi) up to an aggregate of 510,001 shares of common stock that are issuable upon exercise of 510,001 warrants issued at the closing of the business combination (as defined below) in exchange for outstanding loans under the Expense Advancement Agreement, (vii) up to 1,106,108 shares of common stock that are issuable upon exercise of 1,106,108 warrants issued at the closing of the business combination (as defined below) in connection with the GEM Agreement (as defined below) (the “GEM Warrants”), (viii) 125,000 shares of common stock issuable in satisfaction of \$2,000,000 of deferred underwriting fees payable to the underwriters, (ix) 500,000 shares of common stock issuable to DelMorgan under the terms of the Email Agreement, (x) 5,000,000 shares of common stock purchased by the Sponsors and Strategic Investor in a private placement prior to the LACQ IPO (the “founder shares”), (xi) up to an aggregate of 500,000 shares of common stock issuable to David J. Kovacs and Mercury FundingCo, LLC (David Tanzer, Managing Member) (together, the “Consultants”), and (xii) up to 1,000,000 shares of common stock that are issuable upon the exercise of 1,000,000 warrants issued to the Consultants.

On June 30, 2021, we consummated the transactions contemplated by that certain Agreement and Plan of Merger, dated as of January 31, 2021 (the “Merger Agreement”), by and among the Company, LACQ and EB Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of LACQ (“Merger Sub”), with the Company surviving such merger as a wholly-owned subsidiary of LACQ (the “Merger”). The Merger, together with the other transactions contemplated by the Merger Agreement and the related agreements, are referred to herein as the “Transactions.” In connection with the consummation of the Transactions, LACQ changed its name to “Ensysce Biosciences, Inc.”

Our registration of the securities covered by the Prospectus and this prospectus supplement does not mean that either we or the Selling Securityholders will issue, offer or sell, as applicable, any of the securities hereby registered. The Selling Securityholders may offer, sell, or distribute all or a portion of the securities hereby registered publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any of the proceeds from such sales of our common stock or warrants by the Selling Securityholders pursuant to the Prospectus and this prospectus supplement, except with respect to amounts received by us upon exercise of the Warrants to the extent such Warrants are exercised for cash. We will bear all costs, expenses and fees in connection with the registration of these securities, including with regard to compliance with state securities or “blue sky” laws. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of shares of our common stock. Most of the Selling Securityholders are subject to lock-up arrangements. See “Plan of Distribution” beginning on page 128 of the Prospectus.

You should read the Prospectus, this prospectus supplement and any additional prospectus supplement or amendment carefully before you invest in our securities.

Our common stock is listed on the Nasdaq under the symbol “ENSC” and our Public Warrants are listed on the OTC Pink Open Market under the symbol “ENSCW.” On January 14, 2022, the closing sale price of our common stock as reported on Nasdaq was \$3.28 and the closing sale price for our Public Warrants as reported on the OTC Pink Open Market was \$0.20.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

We are an “emerging growth company” as defined in Section 2(a) of the Securities Act of 1933, as amended, and, as such, have elected to comply with certain reduced disclosure and regulatory requirements.

Our business and investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 9 of the Prospectus and in the other documents that are incorporated by reference in the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 17, 2022.

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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): June 17, 2022 (June 16, 2022)

Ensysce Biosciences, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

001-38306
(Commission
File Number)

82-2755287
(I.R.S. Employer
Identification Number)

7946 Ivanhoe Avenue, Suite 201
La Jolla, California
(Address of principal executive offices)

92037
(Zip Code)

(858) 263-4196
Registrant's telephone number, including area code

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation to the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.0001 per share	ENSC	The Nasdaq Stock Market LLC
Warrants to purchase one share of Common Stock	ENSCW	OTC Pink Open Market

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 13(a) of the Exchange Act.

Item 3.01 Notice of Delisting or Failure to Satisfy Continued Listing Rule or Standard; Transfer of Listing

June 16th Event. On June 16, 2022, Ensysce Biosciences Inc. (the "Company") received a notice in the form of a letter (the "Notice") from the listing qualifications department staff of The Nasdaq Stock Market ("Nasdaq") notifying the Company that for the last 30 consecutive business days, the Company's Minimum Value of Listed Securities ("MVLS") was below the minimum of \$35 million required for continued listing on the Nasdaq Capital Market pursuant to Nasdaq listing rule 5550(b)(2).

The Notice has no immediate effect on the listing of the Company's common stock, and the Company's common stock continues to trade on the Nasdaq Capital Market under the symbol "ENSC."

In accordance with Nasdaq listing rule 5810(c)(3)(C), the Company has 180 calendar days, or until December 13, 2022, to regain compliance. The Notice states that to regain compliance, the Company's MVLS must close at \$35 million or more for a minimum of ten consecutive business days (or such longer period of time as the Nasdaq staff may require in some circumstances, but generally not more than 20 consecutive business days) during the compliance period ending December 13, 2022. The Company could also regain compliance by meeting the continued listing standard of a minimum stockholders' equity of at least \$2.5 million, which standard the Company does not meet currently.

If the Company does not regain compliance by December 13, 2022, Nasdaq staff will provide written notice to the Company that its securities are subject to delisting. At that time, the Company may appeal any such delisting determination to a Nasdaq hearings panel.

The Company intends to actively monitor the Company's MVLS between now and December 13, 2022 and may, if appropriate, evaluate available options to resolve the deficiency and regain compliance with the MVLS rule. While the Company is exercising diligent efforts to maintain the listing of its common stock on Nasdaq, there can be no assurance that the Company will be able to regain or maintain compliance with Nasdaq listing standards.

June 17th Event. On June 17, 2022, the Company received a notice in the form of a letter ("Deficiency Letter") from the Listing Qualifications Staff of the Nasdaq stating that the Company was not in compliance with Nasdaq Listing Rule 5550(a)(2) because the bid price for the Company's common stock had closed below \$1.00 per share for the previous 30 consecutive business days.

In accordance with Nasdaq listing rule 5810(c)(3)(A), the Company has 180 calendar days, or until December 14, 2022, to regain compliance. The Deficiency Letter states that to regain compliance, the bid price for the Company's common stock must close at \$1.00 per share or more (the "Minimum Bid Price") for a minimum of 10 consecutive business days during the compliance period ending December 14, 2022. The Deficiency Letter does not explicitly address that the Nasdaq staff may require a longer period of time in some circumstances, but generally not more than 20 consecutive business days.

The Deficiency Letter has no immediate effect on the listing of the Company's common stock, and the Company's common stock continues to trade on the Nasdaq Capital Market under the symbol "ENSC."

If the Company does not regain compliance by December 14, 2022, Nasdaq staff will provide written notice to the Company that its securities are subject to delisting. At that time, the Company may appeal any such delisting determination to a Nasdaq hearings panel.

The Company intends to actively monitor the closing bid price for the Company's common stock between now and December 14, 2022 and may, if appropriate, evaluate available options to resolve the deficiency and regain compliance with the Minimum Bid Price requirement. While the Company is exercising diligent efforts to maintain the listing of its common stock on Nasdaq, there can be no assurance that the Company will be able to regain or maintain compliance with Nasdaq listing standards.

Item 7.01 Regulation FD Disclosure

On June 17, 2022, the Company updated its expected timing related to the Bioequivalence ("BE") trial data of TAAP™ opioid, PF614, to be available prior to the end of July 2022.

2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: June 17, 2022

Ensysce Biosciences, Inc.

By: /s/ Lynn Kirkpatrick

Name: Dr. Lynn Kirkpatrick

Title: President and Chief Executive Officer

3