UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant ⊠ Filed by a Party other than the Registrant □									
Check the appropriate box:									
 □ Preliminary Proxy Statement □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) □ Definitive Proxy Statement □ Definitive Additional Materials □ Soliciting Material Pursuant to §240.14a-12 									
Ensysce Biosciences, Inc. (Name of Registrant as Specified In Its Charter)									
(Name of Person(s) Filing Proxy Statement, if other than the Registrant)									
Payment of Filing Fee (Check the appropriate box):									
☑ No fee required.									
☐ Fee paid previously with preliminary materials.									
☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.									



7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS To Be Held On November 21, 2024

To Our Stockholders:

Notice is hereby given that a Annual Meeting of stockholders (the "Annual Meeting") of Ensysce Biosciences, Inc., a Delaware corporation (the "Company" or "Ensysce"), will be held virtually at https://agm.issuerdirect.com/ensc on November 21, 2024, at 9:00 a.m. (Pacific time), for the following purposes (which are more fully described in the proxy statement, which is attached and made a part of this Notice):

- 1. To approve, for purposes of complying with Nasdaq Listing Rule 5635(d), the full issuance of shares of common stock and exercise of warrants for common stock issued by the Company to certain investors ("Proposal 1");
- 2. To approve an amendment to our Certificate of Incorporation to authorize the Company's Board of Directors to combine outstanding shares of the Company's common stock into a lesser number of outstanding shares, a "Reverse Stock Split," by a ratio of not less than one-for-ten and not more than one-for-forty, with the exact ratio to be set within this range by the Board in its sole discretion, in the form attached as Annex A to this Proxy Statement ("Proposal 2");
- 3. To elect the three Class III directors named in our Proxy Statement (collectively, the "Director Nominees") to hold office until the annual meeting of stockholders for the calendar year ended December 31, 2027 (the "2027 Annual Meeting") and until their respective successors have been duly elected and qualified ("Proposal 3");
- 4. To approve an amendment to the Company's bylaws to decrease the number of shares of common stock needed to establish a quorum for meetings of stockholders ("Proposal 4")
- 5. To ratify the appointment of Moss Adams LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2024 ("Proposal 5");
- 6. To consider and vote upon the adjournment of the Annual Meeting, if necessary or appropriate, to solicit additional proxies in favor of any or all the other proposals set forth in this Proxy Statement (the "Additional Solicitation Proposal"); and
- 7. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

Pursuant to the Amended and Restated Bylaws of the Company, no business is proper for consideration, or may be acted upon, at the Annual Meeting, except as set forth in this Notice of Annual Meeting of Stockholders.

The Board of Directors recommends that stockholders vote "FOR" each of Proposal 1, Proposal 2, Proposal 3, Proposal 4, Proposal 5 and the Additional Solicitation Proposal. The Board of Directors' reasons for seeking approval of each of the proposals are set forth in the attached Proxy Statement.

Stockholders of record at the close of business on October 7, 2024 (the "Record Date") are entitled to notice of, and to, virtually, attend and to vote at, the Annual Meeting and any postponement or adjournment thereof.

The Annual Meeting will be a virtual meeting. Please see "Questions and Answers about the Annual Meeting and Voting — 10. How do I attend the Annual Meeting?" for more information. All stockholders are cordially invited to attend the Annual Meeting online by visiting https://agm.issuerdirect.com/ensc. Stockholders of record as of the Record Date may also cast their votes virtually at the Annual Meeting by submitting a ballot via the live webcast. Please note that if your shares are held in the name of a bank, broker, or other nominee, and you wish to vote at the Annual Meeting, you must instruct your bank, broker or other nominee how to vote your shares or you may cast your vote virtually at the Annual Meeting by obtaining a proxy from your bank, broker or other nominee.

Whether or not you plan to attend the Annual Meeting, you are encouraged to read the Proxy Statement and then cast your vote as promptly as possible in accordance with the instructions contained in the Proxy Statement. Even if you have given your proxy, you may still vote online if you follow the instructions contained in the Proxy Statement.

By Order of the Board of Directors of Ensysce Biosciences, Inc.

Sincerely,

/s/ Dr. Lynn Kirkpatrick
Dr. Lynn Kirkpatrick

President and Chief Executive Officer

La Jolla, California October 22, 2024

Your vote is important, whether you expect to attend the Annual Meeting of Stockholders. You are urged to vote either via the Internet or to mark, sign and date and promptly return the proxy in the stamped return envelope provided with such materials. Voting promptly will help avoid the additional expense of further solicitation to assure a quorum at the meeting.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on November 21, 2024: This notice of meeting and the accompanying proxy statement are available at www.iproxydirect.com/ensc.

TABLE OF CONTENTS

PROXY STATEMENT	1
PROPOSAL 1: PROPOSAL TO APPROVE, FOR PURPOSES OF COMPLYING WITH NASDAQ LISTING RULE 5635(d), THE FULL ISSUANCE OF	
SHARES OF COMMON STOCK AND EXERCISE OF WARRANTS FOR COMMON STOCK ISSUED BY THE COMPANY TO CERTAIN INVESTORS	3
PROPOSAL 2: PROPOSAL TO ADOPT AND APPROVE AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE	
STOCK SPLIT OF ISSUED AND OUTSTANDING SHARES OF THE COMPANY'S COMMON STOCK INTO A LESSER NUMBER OF OUTSTANDING	
SHARES BY A RATIO OF NOT LESS THAN ONE-FOR-TEN AND NOT MORE THAN ONE-FOR-FORTY, WITH THE EXACT RATIO TO BE SET	
WITHIN THIS RANGE BY THE BOARD IN ITS SOLE DISCRETION WITHOUT FURTHER APPROVAL OR AUTHORIZATION OF OUR	
STOCKHOLDERS, IN THE FORM ATTACHED AS ANNEX A TO THIS PROXY STATEMENT	7
PROPOSAL 3; TO ELECT THE THREE CLASS III DIRECTORS NAMED IN OUR PROXY STATEMENT TO HOLD OFFICE UNTIL THE ANNUAL	
MEETING OF STOCKHOLDERS FOR THE CALENDAR YEAR 2027 AND UNTIL THEIR RESPECTIVE SUCCESSORS HAVE BEEN DULY	
ELECTED AND QUALIFIED ("PROPOSAL 3")	15
PROPOSAL 4: PROPOSAL TO ADOPT AND APPROVE AN AMENDMENT TO OUR BYLAWS TO DECREASE THE NUMBER OF SHARES OF	
COMMON STOCK NEEDED TO ESTABLISH A QUORUM FOR MEETINGS OF STOCKHOLDERS (PROPOSAL 4")	22
PROPOSAL 5: TO RATIFY APPOINTMENT OF THE INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ("PROPOSAL 5")	23
PROPOSAL 6: PROPOSAL TO CONSIDER AND VOTE UPON THE ADJOURNMENT OF THE ANNUAL MEETING, IF NECESSARY OR	
APPROPRIATE, TO SOLICIT ADDITIONAL PROXIES IN FAVOR OF ANY OR ALL OF THE OTHER PROPOSALS SET FORTH IN THIS PROXY	
STATEMENT (THE "ADDITIONAL SOLICITATION PROPOSAL")	32
VOTING AND PROXY PROCEDURES	34
SOLICITATION OF PROXIES	36
OTHER MATTERS AND ADDITIONAL INFORMATION	37
;	

ENSYSCE BIOSCIENCES, INC.

November 21, 2024

PROXY STATEMENT

The following information is furnished to each stockholder in connection with the foregoing Notice of Annual Meeting of Stockholders of Ensysce Biosciences, Inc. to be held virtually at https://agm.issuerdirect.com/ensc, on November 21, 2024, at 9:00 a.m. (Pacific time). The enclosed proxy is for use at the Annual Meeting of stockholders (the "Annual Meeting") and any postponement or adjournment thereof. Unless the content requires otherwise, references to "Ensysce," "the Company," "we," "our," and "us" in this Proxy Statement refer to Ensysce Biosciences, Inc. and its subsidiaries.

In accordance with the Amended and Restated Bylaws of the Company (the "Bylaws"), the Annual Meeting has been called for the following purposes:

- 1. To approve, for purposes of complying with Nasdaq Listing Rule 5635(d), the full issuance of shares of common stock and exercise of warrants for common stock issued by the Company to certain investors ("Proposal 1");
- 2. To approve an amendment to our Certificate of Incorporation authorizing the Company's Board of Directors to combine outstanding shares of the Company's common stock into a lesser number of outstanding shares, a "Reverse Stock Split," by a ratio of not less than one-for-ten and not more than one-for-forty, with the exact ratio to be set within this range by the Board in its sole discretion, in the form attached as Annex A to this Proxy Statement (Proposal 2");
- 3. To elect the three Class III directors named in our Proxy Statement (collectively, the "Director Nominees") to hold office until the annual meeting of stockholders for the calendar year ended December 31, 2027 (the "2027 Annual Meeting") and until their respective successors have been duly elected and qualified ("Proposal 3");
- 4 To approve an amendment to the Company's bylaws to decrease the number of shares of common stock needed to establish a quorum for meetings of stockholders ("Proposal 4");
- 5 To ratify the appointment Moss Adams LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2024 ("Proposal 5");
- 6. To consider and vote upon the adjournment of the Annual Meeting, if necessary or appropriate, to solicit additional proxies in favor of any or all the other proposals set forth in this Proxy Statement (the "Additional Solicitation Proposal"); and
- 7. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

Pursuant to our Bylaws, no business is proper for consideration, or may be acted upon, at the Annual Meeting, except as set forth in the Notice of Annual Meeting of Stockholders.

The Annual Meeting will be a virtual meeting. You will be able to attend and participate in the Annual Meeting online by visiting https://agm.issuerdirect.com/ensc. Please see "Questions and Answers about the Annual Meeting and Voting — 10. How do I attend the Annual Meeting?" for more information.

Shares represented by duly executed and unrevoked proxies will be voted at the Annual Meeting and any postponement or adjournment thereof in accordance with the specifications made therein. If no such specification is made, shares represented by duly executed and unrevoked proxies will be voted "FOR" Proposal 1, "FOR" Proposal 2, "FOR" Proposal 3, "FOR" Proposal 4, "FOR" Proposal 5 and "FOR" the Additional Solicitation Proposal.

Questions and Answers about the Annual Meeting and Voting

1. Why am I receiving these materials?

The Company sent you this Proxy Statement and enclosed proxy card because the Board of Directors is soliciting your proxy to vote at the Annual Meeting.

2. What is the purpose of the Annual Meeting?

At the Annual Meeting, the stockholders will act upon the matters outlined in the Notice of Annual Meeting of Stockholders.

3. Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on October 7, 2024 (the "Record Date"). Each stockholder will be entitled to cast one vote on the proposal presented at the Annual Meeting for each share of common stock that such holder owned as of the Record Date.

4. What are my voting rights?

Holders of common stock are entitled to one vote per share. As of the Record Date, a total of [13,870,510] shares of common stock were outstanding. There is no cumulative voting.

1

5. How do I cast my vote?

If you are a stockholder of record on the Record Date, you may vote virtually at the Annual Meeting or by submitting a ballot during the live webcast or by submitting a proxy for the Annual Meeting. You can authorize your proxy by completing, signing, dating and returning the enclosed proxy card in the accompanying pre-addressed, postage-paid envelope. Please see the answer to "— 10. How do I attend the Annual Meeting?" for additional information.

If your shares of common stock are held in "street name" by a bank, broker or other nominee, you have the right to direct your bank, broker or other nominee on how to vote the shares in your account. Please see the answer to "— 10. How do I attend the Annual Meeting?" for additional information.

6. How do I change my vote?

You may revoke your proxy and change your vote at any time before the final vote at the Annual Meeting. You can revoke a proxy (i) by giving written revocation to the Company's secretary, (ii) delivering an executed, later-dated proxy or (iii) voting virtually by submitting a ballot at the Annual Meeting live webcast. However, your attendance at the Annual Meeting will not automatically revoke your proxy unless you vote again at the meeting or specifically request in writing that your proxy be revoked. If your common stock is held in street name and you wish to change or revoke your voting instructions, you should contact your financial institution for information on how to do so.

7. You may vote "FOR," "AGAINST" or "ABSTAIN" on each of the proposals.

If you submit your proxy but abstain from voting on one or more matters, your shares will be counted as present at the meeting for the purpose of determining if a

quorum exists. If you abstain from voting on a proposal, your abstention will have no effect on that proposal.

If your shares are registered in your name or if you have stock certificates, they will not be counted if you do not vote as described above under "—5. How do I cast my vote?" If your shares are held in street name and you do not provide voting instructions to your financial institution as described above, your financial institution does not have the discretionary authority to vote your shares regarding Proposal 1, Proposal 2, Proposal 3, Proposal 4 or the Additional Solicitation Proposal. Therefore, we encourage you to provide voting instructions to your financial institution. This ensures your shares will be voted at the Annual Meeting and in the manner you desire. A "Broker Non-Vote" will occur if your financial institution does not receive instructions from you.

8. Where and when will I be able to find the results of the voting?

Preliminary results will be announced at the Annual Meeting. The Company will publish the final results in a Current Report on Form 8-K to be filed with the Securities and Exchange Commission no later than four business days after the date of the Annual Meeting.

9. Where is the Annual Meeting being held?

We will hold the Annual Meeting virtually at https://agm.issuerdirect.com/ensc, on November 21, 2024, at 9:00 a.m. (Pacific time), unless postponed or adjourned to a later date.

10. How do I attend the Annual Meeting?

The Annual Meeting will be a virtual meeting. Any stockholder wishing to attend the Annual Meeting must register in advance. To register for and attend the Annual Meeting, please follow these instructions as applicable to the nature of your ownership of common stock:

Record Owners. If you are a record holder and you wish to attend the Annual Meeting, go to https://agm.issuerdirect.com/ensc, enter the control number you received on your proxy card or notice of the meeting and click on the "Click here to preregister for the online meeting" link at the top of the page. You will need to log back into the meeting site using your control number immediately prior to the start of the Annual Meeting. You must register before the meeting starts.

Beneficial Owners. Beneficial owners who wish to attend the Annual Meeting must obtain a legal proxy from the stockholder of record and e-mail a copy of their legal proxy to proxy@issuerdirect.com. Beneficial owners should contact their bank, broker, or other nominee for instructions regarding obtaining a legal proxy. Beneficial owners who e-mail a valid legal proxy will be issued a meeting control number that will allow them to register to attend and participate in the Annual Meeting. You will receive an e-mail prior to the meeting with a link and instructions for entering the Annual Meeting. Beneficial owners should contact Issuer Direct on or before 5:00 p.m. Eastern Time on November 19, 2024, the date that is two days prior to the Annual Meeting.

2

PROPOSAL 1

TO APPROVE, FOR PURPOSES OF COMPLYING WITH NASDAQ LISTING RULE 5635(d), THE FULL ISSUANCE OF SHARES OF COMMON STOCK AND EXERCISE OF WARRANTS FOR COMMON STOCK ISSUED BY THE COMPANY TO CERTAIN INVESTORS.

Background and Overview

On August 28, 2024, the Company entered into a definitive Securities Purchase Agreement (the "Purchase Agreement") with certain institutional investors (the "Purchasers"), pursuant to which the Company agreed to issue and sell in a registered direct offering (the "Registered Direct Offering"), (i) an aggregate of 2,490,798 shares (the "Shares") of common stock of the Company, par value \$0.0001 per share (the "Common Stock"), at an offering price of \$0.47 per share, (ii) pre-funded warrants (the "Pre-funded Warrants") to purchase up to 1,062,396 shares of Common Stock, at a price per Pre-funded Warrant equal to \$0.4699, the price per Share less \$0.0001, for gross proceeds of approximately \$1.67 million before the deduction of placement agent fees and offering expenses. The closing of the Registered Direct Offering occurred on August 29, 2024. The Shares, Pre-funded Warrants and the shares issuable upon exercise of the Pre-funded Warrants (the "Pre-funded Warrant Shares") were offered by the Company pursuant to a shelf registration statement on Form S-3 (File No. 333-269157), which was initially filed with the Securities and Exchange Commission (the "Commission") on January 9, 2023 and was declared effective by the Commission on January 17, 2023 (the "Registration Statement"), including a related prospectus, and a prospectus supplement filed with the Commission on August 29, 2024.

The Pre-funded Warrants were sold, in lieu of shares of Common Stock, to the Investors whose purchase of shares of common stock in the Registered Direct Offering would otherwise result in such Investor, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at such Investor's option upon issuance 9.99%) of the Company's outstanding common stock immediately following the consummation of the Registered Direct Offering. The Pre-funded Warrants have an exercise price of \$0.4699 per share, become exercisable upon issuance and remain exercisable until exercised in full.

The Company also entered an inducement offer letter agreement (the 'Inducement Agreement') with certain warrant holders for the exercise of certain outstanding warrants to purchase up to an aggregate of 7,203,504 shares of common stock of the Company originally issued in February 2024, having an exercise price of \$1.06 per share, at a reduced exercise price of \$0.47 per share. The shares of common stock issuable upon exercise of such outstanding warrants are registered pursuant to an effective registration statement on Form S-1 (No. 333-276537). The Company also agreed to amend certain existing warrants to purchase up to an aggregate of 2,000,000 shares of common stock that were previously issued in November 2023 and have an exercise price of \$1.5675 per share such that the amended warrants will have a reduced exercise price of \$0.47 per share effective upon the closing of the offering and will be exercisable from the date on which stockholder approval is received with respect to the issuance of the shares of common stock issuable upon exercise of such warrants (the "Reset Warrants").

In a concurrent private placement, pursuant to the terms of the Inducement Agreement and Purchase Agreement, the Company also agreed to issue and sell unregistered warrants (the "Common Warrants") to purchase up to 28,716,900 shares of Common Stock (the 'Private Placement' and, together with the Inducement Agreements and the Registered Direct Offering, the "Offerings"). The Common Warrants have an exercise price of \$0.47 per share (subject to customary adjustments as set forth in the Common Warrants), are exercisable from the date on which stockholder approval is received with respect to the issuance of the shares of common stock issuable upon exercise of the Common Warrants (the "Warrant Shares"). One half of the Common Warrants will expire eighteen (18) months after they are exercisable and the other half will expire five (5) years after they are exercisable. The Common Warrants contain customary anti-dilution adjustments to the exercise price, including for share splits, share dividends, rights offering and pro rata distributions.

A holder of a Common Warrant or Pre-funded Warrant will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or 9.99% at the election of the holder prior to the date of issuance) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise (the "Beneficial Ownership Limitation"); provided, however, that upon 61 days' prior notice to the Company, the holder may increase or decrease the Beneficial Ownership Limitation, provided that in no event shall the Beneficial Ownership Limitation exceed 9.99%.

any securities convertible into or exercisable or exchangeable for Common Stock for a period of 90 days following the closing of the Offering, subject to a limited exception. Our officers and directors agreed, subject to limited exceptions, for a period of 90 days after the closing of the Offering, to not offer, sell, contract to sell, hypothecate, pledge or otherwise dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, with respect to, any shares of Common Stock or securities convertible, exchangeable or exercisable into, shares of Common Stock beneficially owned, held or thereafter acquired by them.

The Company filed registration statements providing for the resale of the shares issuable upon the exercise of the Common Warrants, Reset Warrants and warrants issued to its placement agent. Pursuant to the Inducement Letter, the Company agreed not to issue any shares of common stock or common stock equivalents or to file any other registration statement with the Commission (in each case, subject to certain exceptions) until 90 days after the closing date.

The Company is using the net proceeds from the Offerings, estimated to be approximately \$4.5 million, for continued development of its TAAP and MPAR® programs and for working capital. The net proceeds from the offerings will supplement the recently announced \$14 million grant award from the National Institutes of Health supporting clinical development of PF614-MPAR, and abuse-deterrent opioid with overdose protection that has received Breakthrough Therapy designation from the FDA.

H.C. Wainwright & Co., LLC ("Placement Agent") acted as the exclusive placement agent in connection with the Offerings under an Engagement Letter, dated August 23, 2024, between the Company and the Placement Agent (the "Engagement Letter"). Pursuant to the Engagement Letter, the Company agreed to pay the Placement Agent a cash fee equal to 7% of the aggregate gross proceed of the Offerings. The Company also agreed to pay the Placement Agent \$35,000 for non-accountable expenses, up to \$50,000 for accountable expenses and \$15,950 for a clearing agent fee. We issued warrants (the "Placement Agent Warrants") to purchase up to 752,969 shares of Common Stock to the Placement Agent (including its designees). These warrants have an exercise price equal to \$0.5875 per share and are exercisable following shareholder approval and until August 28, 2029. The Common Warrants and Placement Agent Warrants were not registered under the Securities Act of 1933, as amended (the "Securities Act"), are not being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

Pursuant to the Securities Purchase Agreement, we are required to use the proceeds for working capital purposes. The Securities Purchase Agreement also includes other customary restrictions for transactions of this type, including a limitation on our ability to enter into any variable rate transaction. In addition, the Securities Purchase Agreement includes customary representations and warranties made by each of the Purchasers and us.

Under the Securities Purchase Agreement, if we have not obtained shareholder approval required by the Nasdaq Stock Market from our shareholders with respect to the transactions contemplated by the Securities Purchase Agreement and related documents, including the issuance of all shares in excess of 19.99% of the issued and outstanding common stock at the Initial Closing, then the Company shall be required to call a meeting every forty-five days thereafter to seek stockholder approval until the earlier of the date on which stockholder approval is obtained or the securities are no longer outstanding.

4

Effect of Issuance of Additional Securities

If shareholder approval is obtained at the Annual Meeting, the Common Warrants and Reset Warrants will be exercisable at the discretion of the holder at an exercise price per share of \$0.47. As of October 2, 2024, we had 13,870,510 shares of common stock outstanding (such amount not giving effect to the exercise of any outstanding options, warrants or any other rights to purchase our securities) (the "October 2nd Outstanding Share Amount"). Based on the October 2nd Outstanding Share Amount:

- if the Purchasers were to exercise the Common Warrants without regard to the Beneficial Ownership Limitation, the Purchasers would hold an aggregate of 29,469,869 shares of our common stock, equal to 212% of our outstanding common stock on a pre-transaction basis (using the October 2nd Outstanding Share Amount as the denominator) and 68% of our common stock on a post-transaction basis (using 43,340,379 shares of common stock as the denominator, which includes the October 2nd Outstanding Share Amount and the shares assumed issued upon exercise of the Common Warrants) and
- if the Purchasers were to exercise the Reset Warrants and the holders of the Placement Agent Warrants purchased were to exercise the Placement Agent Warrants, in each case without regard to the Beneficial Ownership Limitation, the holders of those warrants would hold an aggregate of 2,752,969 shares of our common stock, equal to an additional 20% of our outstanding common stock on a pre-transaction basis (using the October 2nd Outstanding Share Amount as the denominator) and 17% of our common stock on a post-transaction basis (using 16,623,479 shares of common stock as the denominator, which includes the October 2nd Outstanding Share Amount and the shares assumed issued upon exercise of the Reset Warrants and Placement Agent Warrants).

As such, the Purchasers could significantly influence future Company decisions. Our stockholders will incur dilution of their percentage ownership to the extent that the Purchasers exercise the Common Warrants and Reset Warrants. Additional information about dilution is set forth in the next section, "Why We Need Stockholder Approval." Further, because of the possibility that the conversion price and exercise price may be further adjusted to a lower amount, stockholders may experience an even greater dilutive effect. The exact magnitude of the dilutive effect cannot be conclusively determined, but the dilutive effect may be material to our current stockholders.

Why We Need Stockholder Approval

We are seeking stockholder approval in order to comply with Nasdaq Listing Rule 5635(d) and to give our board of directors the authority to authorize any subsequent issuance(s) of common stock in excess of 19.99% of the issued and outstanding common stock as a consequence of any corporate action, including the possible negative impact of implementing a reverse stock split, that impacts the Company's obligations under the Private Placement.

Our common stock is currently listed on the Nasdaq Capital Market and trades under the ticker symbol "ENSC". As such, we are subject to Nasdaq Marketplace Rules. Nasdaq Listing Rule 5635(d) requires us to obtain stockholder approval prior to the sale, issuance or potential issuance of common stock (or securities convertible into or exercisable for common stock) in connection with a transaction other than a public offering at a price less than the "Minimum Price" which either alone or together with sales by officers, directors or substantial stockholders of the company equals 20% or more of the common stock or 20% or more of the voting power outstanding before the issuance. For Nasdaq purposes, "Minimum Price" means a price that is the lower of: (i) the Nasdaq Official Closing Price (as reflected on Nasdaq.com) immediately preceding the signing of the binding agreement; or (ii) the average Nasdaq Official Closing Price of the common stock (as reflected on Nasdaq.com) for the five trading days immediately preceding the signing of the binding agreement. In determining whether multiple issuances should be aggregated for purposes of Nasdaq Listing Rule 5635(d), Nasdaq will consider several factors, including the timing of the issuances.

Based on the October 2nd Outstanding Share Amount and based on the current exercise price of the Common Warrants and Reset Warrants of \$0.47 and the current exercise price of the Placement Agent Warrants of \$0.5875, the exercise of the (i) Common Warrants purchased in full,(ii) the Reset Warrants previously purchased in full and (iii) Placement Agent Warrants purchased in full in each case without regard to the Beneficial Ownership Limitation, would result in the Purchasers and holders of the Placement Agent Warrants holding an aggregate of 32,222,838 shares of our common stock, equal to 232% of our outstanding common stock on a pre-transaction basis (using the October 2nd Outstanding Share Amount as the denominator) and 70% of our common stock on a post-transaction basis (using 46,093,348 shares of common stock as the denominator, which includes the October 2nd Outstanding Share Amount and exercise of the Common Warrants, Reset Warrants and Placement Agent Warrants (collectively, the "Warrants"). Additional information about the exercise of the Warrants is set forth in the bullet paragraphs under "Effect of Issuance of Additional Securities" within this Proposal 1. The exercise of the Common Warrants could, in the future, result in the issuance of more than 20% of our common stock. We generally have no control over whether the Purchasers or other holders will exercise the Warrants.

Given the foregoing, we are seeking stockholder approval under this Proposal, to comply with Nasdaq Listing Rule 5635(d), to issue more than 20% of our outstanding common stock to the Purchasers under the terms of the Securities Purchase Agreement and Warrants issued in connection with the Private Placement to allow for the full issuance and exercise of shares of common stock issued by the Purchasers and holders of the Placement Agent Warrants.

Any transaction requiring approval by our stockholders under Nasdaq Listing Rule 5635(d) to allow for the full issuance and exercise of shares of common stock issued to the Purchasers would likely result in a significant increase in the number of shares of our common stock outstanding, and, as a result, if the Warrants are exercised, our current stockholders will own a smaller percentage of outstanding shares of our common stock.

The issuance of securities in the Private Placement, may cause a reduction in the percentage interests of our current stockholders in the voting power, any liquidation value, our book and market value, and in any future earnings. Further, the issuance or resale of our common stock issued to the Purchasers upon exercise of the Warrants could cause the market price of our common stock to decline. In addition to the foregoing, the increase in the number of issued shares of our common stock that may be issued upon exercise of the Warrants may have an incidental anti-takeover effect in that additional shares could be used to dilute the stock ownership of parties seeking to obtain control of us. The increased number of issued shares could discourage the possibility of, or render more difficult, certain mergers, tender offers, proxy contests or other change of control or ownership transactions.

Consequences of Not Approving this Proposal

If our stockholders do not approve this Proposal 1, the Warrants will not be exercisable in a manner that satisfies Nasdaq Listing Rule 5635(d). As a result, to the extent that any future exercise of the Warrants would result in the issuance of more than 20% of our outstanding common stock, we would, in lieu of issuing such shares above these thresholds, be obligated to call a meeting of stockholders every forty-five (45) days to seek stockholder approval until the earlier of the date stockholder approval is obtained or the Warrants are no longer outstanding.

Additional Information

This summary is intended to provide you with basic information concerning the Securities Purchase Agreement and Warrants. The full text of the Securities Purchase Agreement and forms of warrants was included in exhibits to our Current Report on Form 8-K filed with the SEC on August 29, 2024.

Additional Board Rationale

The Board determined that Proposal 1 is advisable and in the best interest of our stockholders and recommended that our stockholders vote in favor of Proposal 1. In reaching its determination to approve Proposal 1, the Board, with advice from our management and legal advisors, considered a number of factors, including:

- the fact that the proceeds from the sale of the Common Stock and Warrants will provide the necessary working capital to enable us to continue clinical trials for TAAP and MPAR® technology and our lead program PF614 and our pipeline programs PF614-MPAR;
- our continuing requirement with the investors to seek approval of Proposal 1;
- our current financial condition, results of operations, cash flow and liquidity, which require us to raise additional capital for ongoing operational needs; and
- the fact that our management explored various possible financing options with other potential investors and volatility in the current financial markets, we are not aware of an ability for us to obtain the financing needed for our interim cash needs from other sources at this time.

In view of the variety of factors considered in connection with the evaluation of Proposal 1, the Board did not find it practicable to, and did not, quantify or otherwise attempt to assign any relative weight to the various factors considered. In addition, in considering the various factors, individual members of the Board may have assigned different weights to different factors.

6

Recommendation of our Board

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" APPROVAL, FOR PURPOSES OF COMPLYING WITH NASDAQ LISTING RULE 5635(d), OF THE FULL ISSUANCE AND EXERCISE OF SHARES OF COMMON STOCK ISSUED BY THE COMPANY TO CERTAIN INVESTORS.

Required Vote of Stockholders

A quorum being present, this proposal must receive a "For" vote from the holders of a majority of the shares of common stock properly casting votes for or against this proposal at the Annual Meeting in person (including virtually) or by proxy. Abstentions will have no effect on the proposal. Broker non-votes will have no effect on the proposal.

PROPOSAL 2

ADOPTION AND APPROVAL OF AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF OUR ISSUED AND OUTSTANDING SHARES OF THE COMPANY'S COMMON STOCK INTO A LESSER NUMBER OF OUTSTANDING SHARES BY A RATIO OF NOT LESS THAN ONE-FOR-TEN AND NOT MORE THAN ONE-FOR-FORTY, WITH THE EXACT RATIO TO BE SET WITHIN THIS RANGE BY THE BOARD IN ITS SOLE DISCRETION WITHOUT FURTHER APPROVAL OR AUTHORIZATION OF OUR STOCKHOLDERS, IN THE FORM ATTACHED AS ANNEX A TO THIS PROXY STATEMENT.

Introduction

The Board has approved the form of an amendment to our Third Amendment and Restated Certificate of Incorporation, as previously amended (as previously amended the "Certificate of Incorporation") to combine the outstanding shares of our common stock, into a lesser number of outstanding shares, a so-called "Reverse Stock Split". As of October 2, 2024, there were 13,870,510 shares of our common stock outstanding. If approved by the stockholders as proposed, the Board would have the sole discretion to effect the amendment and combination at any time before April 30, 2025 and to fix the specific ratio for the combination, provided that the ratio would be not less than one-forten and not more than one-for-forty. The Board would also have the discretion to abandon the amendment prior to its effectiveness.

On March 27, 2024, we received a notice (the "Deficiency Letter") from Nasdaq stating that we were not in compliance with Nasdaq Listing Rule 5550(a)(2) because the bid price for our common stock had closed below \$1.00 per share for the previous 30 consecutive business days. Nasdaq requires that our common stock have a minimum bid price of at least \$1 per share (the "Minimum Bid Price").

In accordance with Nasdaq listing rule 5810(c)(3)(A), we had 180 calendar days, or until September 23, 2024, to regain compliance. The Deficiency Letter stated that to regain compliance, the bid price for our common stock must close at the Minimum Bid Price for a minimum of ten consecutive business days during the compliance period ending September 23, 2024. We did not regain compliance by September 23, 2024, and Nasdaq staff provided written notice to us that our securities are subject to delisting. We have appealed such delisting determination to a Nasdaq hearings panel. There can be no assurance that the appeal will be successful. To maintain our listing with Nasdaq, we expect that the reverse stock split ration will be no greater than one-for-twenty. At the Board's discretion, it may be greater if we are unable to maintain our Nasdaq listing.

7

If approved by stockholders, this Reverse Stock Split Proposal would permit (but not require) the Board to effect a Reverse Stock Split of our common stock at any time before April 30, 2025, by a ratio of not less than one-for-ten and not more than one-for-forty, with the specific ratio to be fixed within this range by the Board in its sole discretion without further stockholder approval (the "Reverse Stock Split Ratio"). We believe that enabling the Board to fix the specific ratio of the Reverse Stock Split within the stated range will provide us with the flexibility to implement it in a manner designed to maximize the anticipated benefits for our stockholders. In fixing the ratio, the Board may consider, among other things, factors such as:

- the historical trading price and trading volume of our common stock;
- the number of shares of common stock outstanding;
- the then-prevailing trading price and trading volume of the common stock;
- the anticipated impact of the Reverse Stock Split on the trading market for the common stock;
- potential financing opportunities; and
- prevailing general market and economic conditions.

The Board anticipates fixing a specific ratio designed to target a post-split per share price of approximately \$8.

If approved by our stockholders, the Reverse Stock Split would become effective upon the filing of the amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware, or at the later time set forth in the amendment. The exact timing of the amendment will be decided by the Board based on its evaluation as to when such action will be the most advantageous to the Company and its stockholders. In addition, the Board reserves the right, notwithstanding stockholder approval and without further action by the stockholders, to abandon the amendment and the Reverse Stock Split if, at any time prior to effectiveness of the filing of the amendment with the Secretary of State of the State of Delaware, the Board, in its sole discretion, determines that it is no longer in our best interest and the best interests of our stockholders to proceed.

The proposed form of amendment to the Certificate of Incorporation to effect the Reverse Stock Split is attached as *Annex A* to this Proxy Statement. Any amendment to the Certificate of Incorporation to effect the Reverse Stock Split will include the Reverse Stock Split Ratio fixed by the Board, within the range approved by our stockholders.

Reasons for the Reverse Stock Split

The Company's common stock is listed on Nasdaq, which has as one of its continued listing requirements that listed securities maintain a minimum bid price of not less than \$1.00 per share.

The Reverse Stock Split proposal is intended primarily to increase our per share bid price and satisfy Nasdaq continued listing requirements. Reducing the number of outstanding shares of our common stock should, absent other factors, increase the per share market price of the common stock, although we cannot provide any assurance that we will be able to meet or maintain a bid price over the minimum bid price requirement for continued listing on Nasdaq or any other exchange. The delisting of our common stock from Nasdaq may result in decreased liquidity, increased volatility in the price and trading volume of our common stock, a loss of current or future coverage by certain sell-side analysts, a diminution of institutional investor interest and/or the impairment of our ability to raise capital. Delisting could also cause a loss of confidence of our customers, collaborators, vendors, suppliers and employees, which could harm our business and future prospects. If our common stock were delisted from Nasdaq, it may qualify for quotation on the OTC Bulletin Board or other over-the-counter marketplace.

We also believe that the low market price of our common stock impairs its acceptability to important segments of the institutional investor community and the investing public. Many investors look upon low-priced stock as speculative in nature and, as a matter of policy, avoid investment in such stocks. Moreover, the low market price of our common stock may have reduced the effective marketability of its shares because of the reluctance of many brokerage firms to recommend low-priced stock to their clients. Further, a variety of brokerage house policies and practices tend to discourage individual brokers within those firms from dealing in low-priced stocks. Some of those policies and practices pertain to the payment of brokers' commissions and to time-consuming procedures that function to make the handling of low-priced stocks unattractive to brokers from an economic standpoint. In addition, the structure of trading commissions also tends to have an adverse impact upon holders of low-priced stock because the brokerage commission on a sale of low-priced stock generally represents a higher percentage of the sales price than the commission on a relatively higher-priced issue.

8

In evaluating this Reverse Stock Split Proposal, in addition to the considerations described above, the Board also considered various negative factors associated with reverse stock splits generally. These factors include: the negative perception of reverse stock splits held by some investors, analysts and other stock market participants; the fact that the stock price of some companies that have effected reverse stock splits has subsequently declined in share price and corresponding market capitalization; the adverse effect on liquidity that might be caused by a reduced number of shares outstanding; and the costs associated with implementing a reverse stock split.

After considering a range of available options to regain compliance with the minimum bid price requirement, in order to provide flexibility, the Board determined to seek stockholder approval for a range of reverse split ratios of not less than one-for-ten and not greater than one-for-forty. The need for the range is due to the volatility of our stock price, the sales price of which ranged from a high of \$2.06 to a low of \$0.22 between January 1, 2024 and October 2, 2024.

Reducing the number of outstanding shares of our common stock through a Reverse Stock Split is intended, absent other factors, to increase the per share market price of the common stock. However, other factors, such as our financial results, market conditions and the market perception of our business may adversely affect the market price of our common stock. As a result, there can be no assurance that the Reverse Stock Split, if completed, will result in the intended benefits described above, that the market price of our common stock will increase following the Reverse Stock Split or that the market price of the common stock will not decrease in the future. Additionally, we cannot assure you that the market price per share of our common stock after a Reverse Stock Split will increase in proportion to the reduction in the number of shares of common stock outstanding before the Reverse Stock Split. Accordingly, the total market capitalization of our common stock after the Reverse Stock Split may be lower than the total market capitalization before the Reverse Stock Split. In addition, the Reverse Stock Split may not result in a market price per share that will attract certain segments of the institutional investor community and the investing public that previously refrained from investing in us because of the low market price of our common stock. We have effected reverse stock splits in the past and have been unable to keep the stock price from falling lower.

The Board will have sole discretion as to any implementation of, and the exact timing and actual ratio of, the Reverse Stock Split within the range of ratios specified in this proposal if stockholder approval is received and before April 30, 2025. The Board may also determine that the Reverse Stock Split is no longer in the best interests of the Company and its stockholders and decide to abandon the Reverse Stock Split at any time before, during or after the Annual Meeting and prior to its effectiveness, without further action by the stockholders.

If our stockholders approve the Reverse Stock Split and the Board effects it, the number of shares of common stock issued and outstanding will be reduced, depending upon the ratio determined by the Board. The Reverse Stock Split will affect all holders of our common stock uniformly and will not affect any stockholder's percentage ownership interest in the Company, except that, as described below in "Fractional Shares," holders of common stock otherwise entitled to a fractional share as a result of the Reverse Stock Split because they hold a number of shares not evenly divisible by the reverse stock split ratio will, in lieu of a fractional share, receive one whole share of common stock. In addition, the Reverse Stock Split will not affect any stockholder's proportionate voting power (subject to the treatment of fractional shares).

The Reverse Stock Split alone would have no effect on our authorized capital stock, and the total number of authorized shares would remain the same as before the Reverse Stock Split. This would have the effect of increasing the number of shares of common stock available for issuance. The additional available shares would be available for issuance from time to time at the discretion of the Board when opportunities arise, without further stockholder action or the related delays and expenses, except as may be required for a particular transaction by law, the rules of any exchange on which our securities may then be listed, or other agreements or restrictions. There are no preemptive rights relating to the common stock. As such, any issuance of additional shares of common stock would increase the number of outstanding shares of common stock and (unless such issuance was pro-rata among existing stockholders) the percentage ownership of existing stockholders would be diluted accordingly. In addition, any such issuance of additional shares of common stock could have the effect of diluting the earnings per share and book value per share of outstanding shares of common stock.

9

The increase in the authorized number of shares of common stock and any subsequent issuance of such shares of common stock could have the effect of delaying or preventing a change in control of the Company without further action by the stockholders as such additional shares could be used to dilute the stock ownership or voting rights of a person seeking to obtain control of the Company. This proposal is not being made in response to any effort of which the Board is aware to accumulate shares of common stock or obtain control of the Company.

In addition to sales of common stock, if our stockholders approve the Reverse Stock Split and the Board effects it, the additional authorized shares of common stock would also be available for conversions of convertible securities that we may issue, acquisition transactions, strategic relationships with corporate and other partners, stock splits, stock dividends and other transactions that may contribute to the growth of our business. Any decision to issue equity will depend on, among other things, our evaluation of funding needs, developments in business and technologies, current and expected future market conditions and other factors. There can be no assurance, however, even if the Reverse Stock Split is approved and implemented, that any financing transaction or other transaction would be undertaken or completed.

The Reverse Stock Split will not change the terms of the common stock. After the Reverse Stock Split, the shares of common stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to common stock now authorized.

The Reverse Stock Split may result in some stockholders owning "odd-lots" of less than 100 shares of common stock. Brokerage commissions and other costs of transactions in odd-lots are generally higher than the costs of transactions in "round-lots" of even multiples of 100 shares.

After the effective time of the Reverse Stock Split, we will continue to be subject to the periodic reporting and other requirements of the Securities Exchange Act of 1934 (the "Exchange Act"). Subject to compliance with applicable continued listing requirements, our common stock will continue to be listed on Nasdaq and traded under the symbol "ENSC," although the exchange will add the letter "D" to the end of the trading symbol for a period of 20 trading days after the effective time to indicate that a Reverse Stock Split has occurred. After the effective time of the Reverse Stock Split, it is expected that our common stock will have a new CUSIP number. The Reverse Stock Split is not intended as, and will not have the effect of, a "going private transaction" as described by Rule 13e-3 under the Exchange Act.

As described above in the introduction to this Proposal 2, we have appealed a Nasdaq Staff Delisting Determination to a Nasdaq hearings panel. Nasdaq listing rule 5810(c)(3)(A)(iv) provides that if an issuer's security fails to meet the Minimum Bid Price and the issuer has effected one or more reverse stock splits over the prior two-year period with a cumulative ratio of 250 shares or more to one, then the issuer is ineligible for additional periods to regain compliance and Nasdaq will issue a Staff Delisting Determination under that listing rule.

Nasdaq has proposed an amendment to Nasdaq listing rule 5810(c)(3)(A)(iv) that would eliminate the 180 day compliance grace period generally available for issuers that had effected a reverse stock split over the prior one-year period. The proposed amendment, if adopted in its current form, would not become effective before October 3, 2024. The cumulative effect of the amendment with the existing listing rule would be (i) an issuer that effected a reverse stock split of any ratio would be subject to delisting if it fell out of compliance with the Minimum Bid Price within one year of the previous reverse stock split and (ii) an issuer that effected one or more reverse stock splits with a cumulative ratio of 1-for-250 or higher would be subject to delisting if it fell out of compliance with the Minimum Bid Price within two years of the reverse stock split(s).

In addition to the Reverse Stock Split being proposed, we effected reverse stock splits on March 31, 2023 and October 28, 2022 and expect that we will be unable to effect a Reverse Stock Split Ratio of more than one-for-twenty and remain listed on Nasdaq. We do not expect to effect a Reverse Stock Split Ratio of more than one-for-twenty unless our common stock is or will be delisted from Nasdaq.

10

After the effective time of the Reverse Stock Split, the post-split market price of our common stock may be less than the pre-split price multiplied by the Reverse Stock Split Ratio. In addition, a reduction in the number of shares outstanding may impair the liquidity for our common stock, which may reduce the value of the common stock.

Beneficial Holders of Common Stock

Upon the implementation of the Reverse Stock Split, we intend to treat shares held by stockholders through a stockbroker, bank or other nominee in the same manner as registered stockholders whose shares are registered in their names. Stockbrokers, banks or other nominees will be instructed to effect the Reverse Stock Split for their beneficial holders holding our common stock in street name. However, these stockbrokers, banks or other nominees may have different procedures than registered stockholders for processing the Reverse Stock Split. Stockholders who hold shares of common stock with a stockbroker, bank or other nominee and who have any questions in this regard are encouraged to contact their stockbrokers, banks or other nominees.

Registered "Book-Entry" Holders of Common Stock

Certain registered holders of common stock may hold some or all of their shares electronically in book-entry form with our transfer agent. These stockholders do not have stock certificates evidencing their ownership of the common stock. They are, however, provided with statements reflecting the number of shares registered in their accounts. Stockholders who hold shares electronically in book-entry form with our transfer agent will not need to take action to receive evidence of their shares of post-Reverse Stock Split common stock.

Holders of Certificated Shares of Common Stock

Stockholders holding shares of our common stock in certificated form will be sent a transmittal letter by our transfer agent after the effective time of the Reverse Stock Split. The letter of transmittal will contain instructions on how a stockholder should surrender his, her or its certificate(s) representing shares of our common stock (the "Old Certificates") to the transfer agent. Unless a stockholder specifically requests a new paper certificate or holds restricted shares, upon the stockholder's surrender of all of the stockholder's Old Certificates to the transfer agent, together with a properly completed and executed letter of transmittal, the transfer agent will register the appropriate number

of shares of post-Reverse Stock Split common stock electronically in book-entry form and provide the stockholder with a statement reflecting the number of shares of common stock registered in the stockholder's account. No stockholder will be required to pay a transfer or other fee to exchange his, her or its Old Certificates. Until surrendered, we will deem outstanding Old Certificates held by stockholders to be cancelled and only to represent the number of shares of post-Reverse Stock Split common stock to which these stockholders are entitled. Any Old Certificates submitted for exchange, whether because of a sale, transfer or other disposition of stock, will automatically be exchanged for the appropriate number of shares of post-Reverse Stock Split common stock. If an Old Certificate has a restrictive legend on its reverse side, then a new certificate will be issued with the same restrictive legend on its reverse side.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY STOCK CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

Fractional Shares

Ensysce will not issue fractional shares in connection with the Reverse Stock Split. Instead, stockholders who would otherwise be entitled to receive a fractional share as a result of the Reverse Stock Split will receive one whole share of common stock in lieu of such fractional share.

11

Effect of the Reverse Stock Split on Stock-Based Awards

Based upon the Reverse Stock Split Ratio, proportionate adjustments are generally required to be made to the per share exercise price or the per share base price and the number of shares issuable upon the exercise of all outstanding options and to the per share base price of all outstanding restricted stock units. This would result in approximately the same aggregate price being required to be paid under such options upon exercise, and approximately the same value of shares of common stock being delivered upon such exercise immediately following the Reverse Stock Split as was the case immediately preceding the Reverse Stock Split. However, to comply with certain regulations under the Internal Revenue Code of 1986, as amended (the "Code"), the per share exercise price or per share base price of each outstanding option or outstanding restricted stock unit would be rounded up to the nearest whole cent and the number of shares of common stock that could be acquired upon the exercise of each option or restricted stock unit, as applicable, would be rounded down to the nearest whole share. The number of shares reserved for issuance pursuant to outstanding options, restricted stock awards and restricted stock unit awards and, if approved by our stockholders, the unissued aggregate share reserve under our Amended and Restated 2021 Omnibus Incentive Plan will be reduced proportionately based upon the reverse stock split ratio. Finally, no holder of any outstanding option or outstanding restricted stock unit would be entitled to receive payment for any fractional share.

Effect of the Reverse Stock Split on Outstanding Warrants

Based upon the Reverse Stock Split Ratio, the Reverse Stock Split will require that proportionate adjustments be made to the number of shares of common stock issuable upon exercise of the Company's outstanding warrants such that the number of outstanding warrants/shares of common stock exercisable for those warrants would be proportionally reduced and the exercise price by which the Company's outstanding warrants may be exercised for common stock would be proportionally increased so that the aggregate exercise price of the warrants is unchanged.

Accounting Matters

The proposed amendment to the Certificate of Incorporation will not affect the par value of our common stock. As a result, at the effective time of the Reverse Stock Split, the stated capital on our balance sheet attributable to the common stock will be reduced in the same proportion as the Reverse Stock Split Ratio, and the additional paid-in capital account will be credited with the amount by which the stated capital is reduced. The per share net income or loss and net book value of the common stock will be reclassified for prior periods to conform to the post-reverse stock split presentation.

Pro Forma Capitalization of Common Stock

The table below summarizes our pro forma capitalization of our common stock, as of October 2, 2024, before and after giving effect to a hypothetical Reverse Stock Split of one-for-ten (1-for-10), one-for-twenty (1-for-20), one-for-thirty (1-for-30) and one-for-forty (1-for-40). The Reverse Stock Split alone would have no effect on our authorized capital stock. For purposes of the figures below, share numbers have been rounded down to the nearest whole share.

	Prior to				
	Reverse Stock				
	Split	1-for-10	1-for-20	1-for-30	1-for-40
Authorized Shares of Common Stock	250,000,000	250,000,000	250,000,000	250,000,000	250,000,000
Shares of Common Stock Issued and Outstanding	13,870,510	1,387,051	693,525	462,350	346,762
Shares of Common Stock Reserved for Future Issuance for					
Abeyance Shares	5,703,504	570,350	281,175	190,116	142,587
Shares of Common Stock Reserved for Future Issuance upon					
the Exercise of Warrants	33,266,761	3,326,676	1,663,338	1,108,892	831,669
Shares of Common Stock Reserved for Future Issuance under					
Amended and Restated 2021 Omnibus Incentive Plan	583,426	58,342	29,171	19,447	14,585
Shares of Common Stock Available for Future Issuance	196,575,799	244,657,581	247,328,791	248,219,195	248,664,397
	12	2			

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following discussion is a summary of the material U.S. federal income tax consequences of the proposed Reverse Stock Split to U.S. Holders (as defined below) of common stock. This discussion is based on the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the IRS, in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of common stock. Ensysce has not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Stock Split.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of common stock that, for U.S. federal income tax purposes, is or is treated as:

- an individual who is a citizen or resident of the United States;
- a corporation (or any other entity or arrangement treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

• a trust that (1) is subject to the primary supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code) or (2) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person for U.S. federal income tax purposes.

This discussion is limited to U.S. Holders who hold their common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to the particular circumstances of a U.S. Holder, including the impact of the alternative minimum tax or the Medicare contribution tax on net investment income or the application of the constructive sale provisions of the Code, the "qualified small business stock" provisions of Section 1202 of the Code, the "Section 1244 stock" provisions of Section 1244 of the Code, or special rules relevant to tax-qualified retirement plans. In addition, it does not address consequences relevant to holders that are subject to special rules, including, without limitation:

- persons who are not U.S. Holders;
- U.S. Holders whose functional currency is not the U.S. dollar;
- persons holding Ensysce common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies and other financial institutions;
- real estate investment trusts or regulated investment companies;
- brokers, dealers or traders in securities;
- tax-exempt organizations or governmental organizations; and
- persons who actually or constructively own 10% or more of Ensysce voting stock.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships (and other entities treated as partnerships for U.S. federal income tax purposes) holding common stock and the partners in such entities should consult their tax advisors regarding the U.S. federal income tax consequences of the proposed Reverse Stock Split to them.

13

In addition, the following discussion does not address the U.S. federal estate and gift tax laws or any applicable state, local or non-U.S. tax law consequences of the proposed Reverse Stock Split. Furthermore, the following discussion does not address any tax consequences of transactions effected before, after or at the same time as the proposed Reverse Stock Split, whether they are in connection with the proposed Reverse Stock Split.

HOLDERS OF OUR COMMON STOCK SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PROPOSED REVERSE STOCK SPLIT ARISING UNDER OTHER U.S. FEDERAL TAX LAWS (INCLUDING ESTATE AND GIFT TAX LAWS), UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Tax Consequences of the Reverse Stock Split

The proposed Reverse Stock Split is expected to constitute a "recapitalization" for U.S. federal income tax purposes pursuant to Section 368(a)(1)(E) of the Code. As a result, a U.S. Holder generally should not recognize gain or loss upon the proposed Reverse Stock Split. A U.S. Holder's aggregate adjusted tax basis in the shares of common stock received pursuant to the proposed Reverse Stock Split should equal the aggregate adjusted tax basis of the shares of the common stock surrendered (excluding any portion of such basis that is allocated to any fractional share of common stock), and such U.S. Holder's holding period in the shares of common stock received should include the holding period in the shares of common stock surrendered. U.S. Treasury Regulations provide detailed rules for allocating the tax basis and holding period of the shares of common stock surrendered to the shares of common stock received in a recapitalization pursuant to the proposed Reverse Stock Split. U.S. Holders of shares of common stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

As noted above, we will not issue fractional shares in connection with the Reverse Stock Split. Instead, stockholders who otherwise would be entitled to receive fractional shares will be automatically entitled to receive an additional fraction of a share of common stock to round up to the next whole post-split share. The U.S. federal income tax treatment of the receipt of such a fractional share in a reverse stock split is not clear. It is possible that the receipt of such an additional fraction of a share of common stock may be treated as a distribution taxable as a dividend or as an amount received in exchange for common stock. We intend to treat the issuance of such an additional fraction of a share of common stock in the Reverse Stock Split as a non-recognition event, but there can be no assurance that the Internal Revenue Service or a court would not successfully assert otherwise.

Required Vote of Stockholders

A quorum being present, this proposal must receive a "For" vote from the holders of a majority of the shares of common stock properly casting votes for or against this proposal at the Annual Meeting in person (including virtually) or by proxy. Abstentions will have no effect on the proposal. Broker non-votes will have no effect on the proposal.

Recommendation of our Board

OUR BOARD RECOMMENDS THAT OUR STOCKHOLDERS VOTE "FOR" THE PROPOSAL TO APPROVE AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO AUTHORIZE THE COMPANY'S BOARD OF DIRECTORS TO COMBINE OUTSTANDING SHARES OF THE COMPANY'S COMMON STOCK INTO A LESSER NUMBER OF OUTSTANDING SHARES BY A RATIO OF NOT LESS THAN ONE-FOR-TEN AND NOT MORE THAN ONE-FOR-FORTY, WITH THE EXACT RATIO TO BE SET WITHIN THIS RANGE BY THE BOARD IN ITS SOLE DISCRETION, IN THE FORM ATTACHED AS ANNEX A TO THIS PROXY STATEMENT.

14

PROPOSAL 3

ELECTION OF DIRECTORS

Background and Overview

Our business and affairs are managed under the direction of the Board. Our Board consists of eight directors, which are divided into three classes (Class I, II and III) with Class I and III each consisting of three directors and Class II consisting of two directors.

Unless otherwise specified in the proxy, the shares voted pursuant thereto will be cast for each Class III director set forth below. If, for any reason, at the time of election any of the nominees named should decline or be unable to accept his or her nomination or election, it is intended that such proxy will be voted for a substitute nominee, who would be recommended by our Board. Our Board, however, has no reason to believe that any of the nominees will be unable to serve as a director.

The following persons are our directors and executive officers:

Name	Age*	Position
Executive Officers		
Lynn Kirkpatrick, Ph.D.	67	President, Chief Executive Officer and Class III Director
Geoffrey Birkett	61	Chief Commercial Officer
David Humphrey	55	Chief Financial Officer, Secretary and Treasurer
Jeffrey Millard, Ph.D.	48	Chief Operating Officer (consultant)
Linda Pestano, Ph.D.	55	Chief Development Officer
William Schmidt, Ph.D.	73	Chief Medical Officer
Directors**		
Andrew Benton, J.D.	71	Class I Director
William Chang	67	Class I Director
Bob Gower, Ph.D.	86	Class II Director and Chairman of the Board
Adam S. Levin, M.D.	45	Class III Director
Steve R. Martin	62	Class III Director
Lee Rauch	70	Class I Director
Curtis Rosebraugh, M.D., MPH	66	Class II Director

^{*}Ages presented as of December 31, 2023

The following biographical information is furnished as to each nominee for election as a director and each of our directors and executive officers.

Nominees for Election to the Board of Directors for a Three-Year Term Expiring at the 2027 Annual Meeting

Dr. Lynn Kirkpatrick, Ph.D. has served as our Chief Executive Officer since January 2009. Dr. Kirkpatrick has spent over 30 years in drug discovery and development, has initiated the clinical development of four novel drug candidates and now strives to bring highly novel and safe pain therapies to commercialization. She received a Doctor of Philosophy ("Ph.D.") degree in Medicinal and Biomedicinal Chemistry at the University of Saskatchewan, completed a Post-Doctoral Fellowship at the Yale University School of Medicine, and became a tenured full professor in the Department of Chemistry at the University of Regina. She co-founded ProIX Pharmaceuticals, Corp. ("ProIX") an oncology discovery company, becoming Chief Executive Officer and successfully bringing three small molecules from discovery into clinical development, two of these her own discoveries from academia. ProIX was acquired by Biomira Inc., and Dr. Kirkpatrick became the Chief Scientific Officer of the merged company to focus on the development of oncology products and vaccines. In 2009, she co-founded PHusis Therapeutics, developing targeted small molecule precision medicines for oncology. At the same time, she became our Chief Executive Officer. Dr. Kirkpatrick has published extensively in the area of targeted drug discovery, abuse deterrent pain products and holds numerous patents for novel drugs and modalities. We believe Dr. Kirkpatrick is qualified to serve on our Board because of her extensive executive experience in our industry and her service as our Chief Executive Officer.

15

Adam S. Levin, MD joined the Board in June 2021 and is the Vice Chair of Clinical Operations for the Department of Orthopaedic Surgery at Johns Hopkins University, where he has been on faculty since 2014. He is an Associate Professor of Orthopaedic Surgery and Associate Professor of Oncology, researching treatments related to musculoskeletal oncology, while also maintaining an active clinical practice. Dr. Levin holds the Virginia M. Percy and William Algernon Percy Chair in Orthopaedic Surgery at Johns Hopkins University. He serves in additional leadership roles related to billing, coding, and practice management for the Musculoskeletal Tumor Society, the American Academy of Orthopaedic Surgeons, and the American Medical Association. Prior to joining Johns Hopkins University, Dr. Levin was an Assistant Professor of Orthopaedic Surgery at the Zucker School of Medicine at Hofstra University in New York between 2012 and 2014. From 2010 to 2012, he was a fellow of musculoskeletal oncology and Clinical Instructor at Memorial Sloan-Kettering Cancer Center, following his residency training at the North Shore/LIJ Health System (now Northwell Health) from 2005 to 2010. He has been a member of leadership fellows programs through the North Shore/LIJ Physician High Potential Program, the American Academy of Orthopaedic Surgeons, and the American Orthopaedic Association. Dr. Levin has also continued to serve as Associate Editor for CME for the Journal of Bone and Joint Surgery since 2016, and is on the Steering Committee for the Musculoskeletal Tumor Registry. Dr. Levin served as a subject-matter consultant to our predecessor, LACQ, during their initial review of our preclinical and Phase I clinical trial results. Dr. Levin holds a B.S. in Biology with a concentration in Animal Physiology from Cornell University, an M.D. from New York Medical College, and is currently studying at the Johns Hopkins University Carey School of Business for an M.B.A. with a specialization in Healthcare Management, Innovation, and Technology. W

Steve R. Martin has served as a member of our Board since August 2020. Mr. Martin was formerly Senior Vice President and Chief Financial Officer of Armata Pharmaceuticals, Inc., a clinical development stage biotechnology company listed on New York Stock Exchange, from January 2016 until his retirement from the position on June 30, 2022. Previously, Mr. Martin served as Senior Vice President and Chief Financial Officer of Applied Proteomics, Inc., a molecular diagnostics company, from December 2014 to August 2015. From June 2011 to December 2014, Mr. Martin served as Senior Vice President and Chief Financial Officer of Apricus Biosciences, Inc. ("Apricus"), a publicly traded pharmaceutical company, and served as the Interim Chief Executive Officer of Apricus from November 2012 through March 2013. From 2008 to January 2011, Mr. Martin served as Senior Vice President and Chief Financial Officer of BakBone Software ("BakBone"), a publicly traded software company. During his final 10 months with BakBone until the company's acquisition in January 2011, Mr. Martin also served as BakBone's Interim Chief Executive Officer. From 2005 to 2007, Mr. Martin served as Chief Financial Officer of Stratagene Corporation, a publicly traded research products and clinical diagnostics company. Mr. Martin's previous experience also includes serving as Controller with Gen-Probe Incorporated, a publicly traded molecular diagnostics company, as well as 10 years with Deloitte & Touche LLP, a public accounting firm. Mr. Martin holds a Bachelor in Science in Accounting from San Diego State University and is a certified public accountant (inactive). We believe that Mr. Martin's expertise in biopharmaceutical industry and accounting expertise qualifies him to serve on our Board.

Members of the Board of Directors Continuing in Office for a Term Expiring at the 2025 Annual Meeting of Stockholders

Andrew Benton, J.D. has served as a member of our Board since December 2, 2019. Mr. Benton was the President, Chief Executive Officer and Trustee of Pepperdine University from June 2000 to July 2019. Mr. Benton was the former chairman of both the American Council of Education, the major coordinating body for all of the nation's higher education institutions, and the National Association of Independent Colleges and Universities. Mr. Benton is also past chair of the Association of Independent California Colleges and Universities and a member of the American Bar Association, the Council for Higher Education Accreditation, the President's Cabinet of the West Coast Conference, the Association of Presidents of Independent Colleges and Universities, and the Los Angeles World Affairs Council. Mr. Benton holds an undergraduate degree in American studies from Oklahoma Christian University and a J.D. from Oklahoma University. We believe that Mr. Benton's experience governing academic and other institutions qualifies him to serve on our Board.

believe that Mr. Chang's extensive business experience and expertise in corporate governance qualifies him to serve on our Board.

Lee Rauch has served on our Board since February 2022. She is an experienced Chief Executive Officer and Strategy Advisor, has served both public and private companies. During her near 40-year career, Ms. Rauch successful built companies ranging in focus from pre-clinical research to advanced clinical development, took the lead in mergers and acquisitions and used her experience to secure financing for public and private biotech companies. Among her many leadership roles, Ms. Rauch, was notably a founding member of McKinsey & Co.'s International Pharmaceutical Practice and the Executive Chairman of Springboard Enterprises Health Innovation Hub. Most recently, Ms. Rauch, served as President and CEO of Viridian Therapeutics, Inc. Ms. Rauch received a B.S. in Chemistry from Arizona State University and an M.B.A. in Finance from the University of Chicago. We believe that Ms. Rauch's biopharmaceutical industry experience and expertise qualifies her to serve on our Board.

Members of the Board of Directors Continuing in Office for a Term Expiring at the 2026 Annual Meeting of Stockholders

Bob Gower, Ph.D. has served as our Chairman since 2008. Dr. Gower was Chief Executive Officer of Lyondell Petrochemical from 1985 through his retirement at the end of 1996. In 1997, he acquired businesses from Howell Corporation that became Specified Fuels and Chemicals. Dr. Gower sold Specified in 2000 and, with Dr. Richard Smalley, founded Carbon Nanotechnologies, Inc. ("CNI") that same year to develop production capabilities and applications for single wall carbon nanotubes. CNI was acquired by Unidym in 2007. Dr. Gower founded Ensysce in 2008 with the focus of using single wall carbon nanotubes in therapeutic areas. Ensysce subsequently merged with Signature Therapeutics, Inc. and changed its focus to developing safe opioid pain drugs. He has served on the Board of Directors of several public companies, including Kirby Corporation, OmNova and Keystone. He also has been and continues to be involved with several not for profit organizations and has especially focused on Communities In Schools Houston, a leading dropout prevention and mental health program, and on Southern Illinois University with focus on the chemistry department. Dr. Gower received his B.S. from SIU and his Ph.D. from the University of Minnesota. We believe that Mr. Gower's previous board and industry experience qualifies him to serve on our Board.

Curtis Rosebraugh, M.D., MPH has served on our Board since 2021. He is a member of Griebel and Rosebraugh Consulting LLC since May 2018, where he is a regulatory consultant for small molecule and biological drug development. Prior to forming a consulting firm, he was employed by the Food and Drug Administration since 2000, holding the position of Director of the Office of Drug Evaluation II ("ODEII") within the Center for Drug Evaluation and Research ("CDER") from 2007 until his retirement in 2018, with supervisory responsibility for the evaluation of all drug products within 3 divisions: the Division of Pulmonary, Allergy and Rheumatology Products, the Division of Metabolism and Endocrinology Products and the Division of Anesthesia, Analgesia, and Addiction Products. In this position, he has overseen the development and approval of over 50 new drugs, was responsible for the planning of over 100 advisory committee meetings, led ODE II through several controversial safety issues and has received many honors and awards. Dr. Rosebraugh has been involved in the development of abuse deterrent opioid formulations and has also been involved in the development of the biosimilar program as well as many other CDER initiatives. Dr. Rosebraugh received his undergraduate degree in pharmacy in 1981, his Medical Degree in 1986 and completed a residency in Internal Medicine in 1989, all at the University of Kansas. He completed a Masters of Public Health at Johns Hopkins School of Public Health in 1999 and a Clinical Pharmacology Fellowship at Georgetown University in 2000. We believe that Dr. Rosebraugh's regulatory experience in the biopharmaceutical industry qualifies him to serve on our Board.

17

Executive Officers who are not directors

Geoffrey Birkett has served as our Chief Commercial Officer since October 2018. He has over 30 years of experience in the Pharmaceutical and Biotechnology area. He started his career as a biochemist at the Royal Victoria Infirmary in Newcastle-upon-Tyne, England. He then moved into the pharmaceutical industry, where he focused on pain/addiction and neuroscience throughout his career. He has developed and launched several groundbreaking therapies, including Nicorette (POM) and (OTC), Lexapro and several other psychiatry agents with Lundbeck. Mr. Birkett assisted on the launch of Prozac and Humatrope (human growth hormone) with Eli Lilly. He assisted in moving Seroquel from Phase 2 to global market leader with multi-billion dollar sales and he also participated in the launch of Zomig for migraines, which became a European market leader. He worked for most of his pharmaceutical career at AstraZeneca plc in both the United Kingdom and the United States, where he held many roles including overseeing the global oncology division. When the AstraZeneca merger took place, Mr. Birkett ran the merger process outside the United States across all markets, and ran a corporate change program to streamline research and development involving 67,000 staff. Since leaving AstraZeneca, Mr. Birkett has held multiple roles in biotech companies as seroior officer or as a consultant. He is co-founder of a novel drug delivery company and has consulted for IPSOS, a large global research and consulting firm. He also served as president for North America/Canada of INDIVIOR, a large company producing addiction treatment drugs. Mr. Birkett joined us in 2018 and is focused on building a world class commercial team. Mr. Birkett attended Henley Business College in London and INSEAD Business School in France where he studied general management and a global leadership.

David Humphrey has served as our Chief Financial Officer since February 2021. Prior to joining the Company, Mr. Humphrey was most recently Chief Financial Officer of Senomyx, Inc. ("Senomyx"), a publicly held biotechnology company focused on taste science. In his previous employment, he guided public company financial reporting, including Forms 10-K, 10-Q, 8-K, S-3, S-8, proxy statements and SOX internal controls compliance, and acted as primary liaison with the audit committee and external auditors. Mr. Humphrey advised Senomyx's board of directors, as part of core executive management team, in a \$75 million acquisition by Firmenich SA, a private Swiss multinational flavor and fragrance company. Previously, he held finance and accounting leadership positions and consulted at numerous life sciences companies, including ActivX Biosciences, Aurora Biosciences and Gensia. Mr. Humphrey started his career as an accountant at Price Waterhouse. He holds a Bachelor of Science with Honors in Accountancy from the University of Illinois at Urbana-Champaign and is a Certified Public Accountant (inactive) in California.

Jeffrey Millard, Ph.D. has served as our Chief Operating Officer since January 2019. Dr. Millard has both academic and industrial experience in chemistry and pharmaceutical sciences covering all aspects of chemistry, manufacturing, and controls, or CMC. He has been involved in both start-up biotech as well as small and mid-sized public biopharmaceutical companies. Dr. Millard has been directly responsible for research and development activities and writing of more than seven IND submissions and Investigational Medicinal Product Dossiers, or IMPDs. He has directed the CMC efforts from discovery and in-licensing through commercial launch activities. His experience covers the application programming interface, or API, lifecycle (from synthetic route scouting, process chemistry, analytical chemistry development and validation, cGMP production and release of API, to QbD and process validation), and drug product development through manufacture. Dr. Millard received a Bachelor of Arts from Rice University and a Ph.D. in Pharmaceutical Sciences from the University of Arizona.

Linda Pestano, Ph.D. joined Ensysce in October 2021, as Chief Development Officer. Dr. Pestano has worked throughout her career to guide the development of novel therapeutics to improve patient outcomes and quality of life. She has 20 years of experience developing vaccines, drugs and novel biologics for a diverse range of indications. She has been instrumental in guiding new therapies, including small molecules, nucleic acids, and biologicals through development into clinical trials. Dr. Pestano's expertise spans lead development, pre-clinical and translational studies, and interacting with multiple regulatory agencies. Dr. Pestano received her PhD from Tufts University and undertook a Post-Doctoral Fellowship with Dana Farber Cancer Institute at the Harvard Medical School in Boston.

William K. Schmidt, Ph.D., has served as our Chief Medical Officer since January 2016. He is also the Head of NorthStar Consulting, the Parliamentarian and a former president of the Eastern Pain Association, the largest regional affiliate of the American Pain Society. He has over 25 years of pharmaceutical industry experience with a special emphasis on the discovery and development of novel analgesic and narcotic antagonist drugs. He was previously Vice President of Clinical Development for CrystalGenomics (Seoul, South Korea) and its United States subsidiary, CG Pharmaceuticals (Emeryville, CA); Senior Vice President of Development at Limerick BioPharma; Vice President, Clinical Research, for Renovis, Inc.; and Vice President, Scientific Affairs and acting Vice President, Clinical Research and Development, at Adolor Corporation, Dr. Schmidt was a key member of the team leading to the clinical development, NDA filing, and FDA approval of Entereg® (alvimopan), a peripherally acting opioid antagonist. Currently Dr. Schmidt serves as an expert on pain medicine pharmaceutical development with pharmaceutical and biotech companies throughout North America, Europe, Asia, Latin America, and Australia. Dr. Schmidt received a Bachelor of Arts degree from the University of California Berkeley and his Ph.D. University of California-San Francisco.

There are no family relationships among any of our directors or executive officers.

Required Vote of Stockholders

A nominee for director shall be elected to the Board of Directors if the votes properly cast "FOR" such nominee's election exceed the votes properly cast "AGAINST" such nominee' election (with "ABSTENTIONS" and broker non-votes not counted as votes cast either "FOR" or "AGAINST" any director's election).

Recommendation of our Board

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" EACH OF THE DIRECTOR NOMINEES.

CORPORATE GOVERNANCE

Board of Directors

Composition of the Board

Our business and affairs are managed under the direction of the Board. Our Board consists of eight directors, which are divided into three classes (Class I, II and III) with Class I and III each consisting of three directors and Class II consisting of two directors.

Director Independence

Nasdaq listing rules require that a majority of the board of directors of a company listed on Nasdaq be composed of "independent directors," which is defined generally as a person other than an officer or employee of the company or its subsidiaries or any other individual having a relationship that, in the opinion of the company's board of directors, would interfere with the director's exercise of independent judgment in carrying out the responsibilities of a director. Based on information provided by each director concerning his or her background, employment and affiliations, including family relationships, the Board determined that each of Bob Gower, William Chang, Andrew Benton, Steve R. Martin, Adam S. Levin, Lee Rauch and Curtis Rosebraugh is an independent director under the Nasdaq listing rules and Rule 10A-3 of the Exchange Act. In making these determinations, the Board considered the current and prior relationships that each non-employee director has and will have with us and all other facts and circumstances that the Board deems relevant in determining independence, including the beneficial ownership of our common stock by each non-employee director (and related entities) and the transactions involving them described in the section entitled "Certain Relationships and Related Party Transactions."

Board Committees

The standing committees of our Board consist of an audit committee, a compensation committee and a nominating and corporate governance committee. Our Board may from time to time establish other committees. Each of the committees reports to the Board.

Our president and chief executive officer and other executive officers regularly report to the non-executive directors and the audit, the compensation and the nominating and corporate governance committees to ensure effective and efficient oversight of our activities and to assist in proper risk management and the ongoing evaluation of management controls.

19

Audit Committee

We have an audit committee consisting of Steve R. Martin, who serves as the chairperson, Bob Gower and Andrew Benton.

Each member of the audit committee qualifies as an independent director under the Nasdaq corporate governance standards and the independence requirements of Rule 10A-3 of the Exchange Act. Our Board has determined that Steve R. Martin qualifies as an "audit committee financial expert" as such term is defined in Item 407(d)(5) of Regulation S-K and possesses financial sophistication, as defined under the rules of Nasdaq.

The purpose of the audit committee is to prepare the audit committee report required by the SEC to be included in our proxy statement and to assist our Board in overseeing and monitoring (1) the quality and integrity of our financial statements, (2) our compliance with legal and regulatory requirements, (3) our independent registered public accounting firm's qualifications and independence, (4) the performance of our internal audit function and (5) the performance of our independent registered public accounting firm

Our Board adopted a written charter for the audit committee, which is available on our website.

Compensation Committee

We have a compensation committee consisting of Adam Levin, who serves as the chairperson, Bob Gower, William Chang, and Lee Rauch.

The purpose of the compensation committee is to assist our Board in discharging its responsibilities relating to (1) setting our compensation program and compensation of our executive officers and directors, (2) monitoring our incentive and equity-based compensation plans and (3) preparing the compensation committee report, if required to be included in our proxy statement under the rules and regulations of the SEC.

Our Board adopted a written charter for the compensation committee, which is available on our website.

Nominating and Corporate Governance Committee

We have a nominating and corporate governance committee, consisting of Lee Rauch, who serves as chairperson, Bob Gower, Steve R. Martin and Curtis Rosebraugh.

The purpose of our nominating and corporate governance committee is to assist our Board in discharging its responsibilities relating to (1) identifying individuals qualified to become new Board members, consistent with criteria approved by the Board, (2) reviewing the qualifications of incumbent directors to determine whether to recommend them for reelection and selecting, or recommending that the Board select, the director nominees for the next annual meeting of stockholders, (3) identifying Board members qualified to fill vacancies on any Board committee and recommending that the Board appoint the identified member or members to the applicable committee, (4) reviewing and recommending to the Board corporate governance principles applicable to us, (5) overseeing the evaluation of the Board and management and (6) handling such other matters that are specifically delegated to the committee by the Board from time to time.

Our Board adopted a written charter for the nominating and corporate governance committee, which is available on our website.

Role of Board in Risk Oversight

The Board has extensive involvement in the oversight of risk management related to us and our business and accomplishes this oversight through the regular reporting to the Board by the audit committee. The audit committee represents the Board by periodically reviewing our accounting, reporting and financial practices, including the integrity of our financial statements, the surveillance of administrative and financial controls and our compliance with legal and regulatory requirements. Through its regular meetings with management, including the finance, legal, internal audit and information technology functions, the audit committee reviews and discuss all significant areas of our business and summarize for the Board all areas of risk and the appropriate mitigating factors. In addition, our Board receives periodic detailed operating performance reviews from management.

20

Our Board has adopted a policy providing for the recovery of erroneously awarded incentive-based compensation received by our executive officers during an applicable recovery period (the "Clawback Policy"). Under the Clawback Policy, in the event that financial results upon which any compensation that is granted, earned or vested based wholly or in part upon the attainment of a financial reporting measure becomes the subject of a financial restatement that is required because of material non-compliance with financial reporting requirements, the Compensation Committee will conduct a review of awards covered by the Clawback Policy and recoup any erroneously awarded incentive-based compensation to ensure that the ultimate award reflects the financial results as restated. The Clawback Policy covers any erroneously awarded incentive-based compensation during the last completed three fiscal years immediately preceding the date on which we are required to prepare an accounting restatement.

Meetings and Attendance

During the year ended December 31, 2023 there were six meetings of the Board, four meetings of the Audit Committee, two meetings of the Compensation Committee, and no meetings of the Nominating and Corporate Governance Committee. Each of our directors attended at least 75% of the aggregate meetings of the Board and the committees of the Board on which they served during the period they served in 2023. All members of the Board are encouraged to attend our annual meetings of stockholders. All our directors attended our annual meeting of stockholders in 2023.

Board Leadership Structure

Our current Board leadership structure separates the positions of Chief Executive Officer and Chairperson of the Board, although we do not have a corporate policy requiring that structure. The Board believes that this separation is appropriate for the Company at this time because it allows for a division of responsibilities and a sharing of ideas between individuals having different perspectives. Our Chief Executive Officer, who is also a member of our Board, is primarily responsible for our operations and strategic direction, while our Board Chairperson, who is an independent member of the Board, is primarily focused on matters pertaining to corporate governance, including management oversight and strategic guidance. The Board believes that this is the most appropriate structure at this time but will make future determinations regarding whether to separate the roles of Chair and Chief Executive Officer based on then-current circumstances.

Corporate Governance Guidelines

Our Board has adopted corporate governance guidelines which describe the principles and practices that our Board will follow in carrying out its responsibilities. These guidelines cover a number of areas including the role, responsibilities, size and composition of the Board, director selection criteria, independence of directors, selection of Chairperson of the Board and Chief Executive Officer, director compensation, change in present job responsibility, director orientation and continuing education, lead director, term limits, Board meetings, Board committees, expectations of directors, management succession planning, evaluation of Board performance, Board compensation, and executive sessions. A copy of our corporate governance guidelines is available on our investor relations website.

Board Evaluations

Our Board is responsible for reviewing the effectiveness of the committees and reviewing our succession plans for Chief Executive Officer and other key positions.

21

Board Diversity Matrix

Total Number of Directors: 8

	Female	Male	Non-Binary	Did Not Disclose
Gender Identity				
Directors	2	6	-	-
Demographic Background				
African American or Black	-	-	-	-
Alaskan Native or Native American	-	-	-	-
Asian	-	1	-	-
Hispanic or Latinx	-	-	-	-
Native Hawaiian or Pacific Islander	-	-	-	-
White	2	5	-	-
Two or More Races or Ethnicities	-	-	-	-
LGBTQ+	-	-	-	-
Did Not Disclose Demographic Background	-	-	-	-

Code of Ethics

We adopted a code of business conduct that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer, which is available on our website and as an exhibit to our Annual Report on Form 10-K. Our code of business conduct is a "code of ethics," as defined in Item 406(b) of Regulation S-K. We will make any legally required disclosures regarding amendments to, or waivers of, provisions of our code of ethics on our website. Our code of business conduct prohibits our directors, officers or employees who have access to material, non-public information from using that information for securities trading purposes or for any purpose unrelated to our business.

Communications with our Board

Our Board has not determined that a written process for communications with the Board is necessary given the volume of communications that are received. The Board will consider stockholder questions and comments to be important and endeavor to respond promptly and appropriately, even though the Board may not respond to all stockholder inquiries directly.

ADOPT AND APPROVE AN AMENDMENT TO OUR BYLAWS TO DECREASE THE NUMBER OF SHARES OF COMMON STOCK NEEDED TO ESTABLISH A QUORUM FOR MEETINGS OF STOCKHOLDERS

Approval of stockholders is being sought for the Bylaws Proposal, which if approved, would amend our Amended and Restated Bylaws (the "Bylaws") for the purpose of reducing the quorum required for our stockholder meetings (the "Bylaws Amendment"). The Board has determined that the Bylaws Amendment is in the Company's and our stockholders' best interests. More specifically, the Bylaws Amendment would reduce the quorum for stockholder meetings from a majority of the outstanding voting securities of the Company (the "Current Quorum") to one-third (33 1/3%) of the outstanding voting securities of the Company (the "Proposed Quorum"). The Board has adopted and declared advisable the Bylaws Amendment, which amendment is necessary in order to implement the Proposed Quorum, subject to stockholder approval.

The text of the proposed Bylaws Amendment is included as Annex B to this Proxy Statement.

General

A quorum is the minimum number of stockholders that must be present in person or by proxy at a stockholder meeting in order for that meeting to be validly held. It is a requirement under Delaware law that a company specify its quorum for its stockholder meetings by defining the proportion of the voting power that constitutes a quorum in its articles of incorporation or bylaws.

Our Bylaws provide that the Current Quorum for a meeting of the Company's stockholders is a majority of the combined voting power of the Company's capital stock issued and outstanding and entitled to vote at a meeting, present in person or represented by proxy.

22

Under Delaware law and Nasdaq Stock Market Rules the minimum quorum requirement is 33 1/3%. Our Current Quorum is above the minimum quorum requirement under Delaware law and Nasdaq.

We may have difficulties reaching our Current Quorum for our stockholder meetings in a timely manner. If we do not achieve our Current Quorum by the originally scheduled meeting dates, then we would have to adjourn the meeting for some period to allow us to solicit further proxies from our stockholders in order to reach the Current Quorum and validly hold the meeting of stockholders. At the March 2023 Special Meeting, we did not submit one proposal to stockholders because of a lack of a quorum. In December 2023, we were unable to hold a special meeting for which we had solicited proxies because we could not obtain a quorum on either of two meeting dates.

Reasons for the Bylaws Amendment

As a result of the above, the Board believes that a reduction in the quorum for any future stockholder meetings from the Current Quorum to the Proposed Quorum, and the Bylaws Amendment to make this change, is in the best interests of the Company and its stockholders, because the adoption of the Proposed Quorum by making the Bylaws Amendment:

- will reduce the risk of our failing to achieve the required quorum for any stockholder meetings, which failure would require us to adjourn such meetings and therefore cause us to incur additional costs, such as additional virtual meeting host costs and possibly hiring proxy solicitors, and suffer disruptions to our business; and
- is high enough to ensure that a broad range of stockholders are present at a stockholder meeting in person or by proxy.

Accordingly, the Board has adopted and declared advisable the Bylaws Amendment, subject to stockholder approval. The text of the proposed Bylaws Amendment is included as <u>Annex B</u> to this Proxy Statement.

Vote Required

A quorum being present, approval of the Bylaws Proposal requires the affirmative vote of the holders of at least fifty percent (50%) of the voting power of the outstanding shares of our common stock. This is the vote required in our Certificate of Incorporation to alter, amend or repeal the Bylaws. Abstentions and broker non-votes will have the same effect as votes "AGAINST" this Proposal.

The Board of Directors recommends a vote "FOR" the approval of the amendment to the Bylaws to reduce the quorum requirement for stockholder meetings from a majority of the outstanding voting securities of the Company to one-third (33 1/3%) of the outstanding voting securities of the Company.

PROPOSAL 5

RATIFY APPOINTMENT OF INDEPENDENT REGISTERED ACCOUNTING FIRM

Overview

On April 10, 2023, the Audit Committee of our Board appointed Moss Adams LLP ("Moss Adams") as our independent registered public accounting firm to audit our consolidated financial statements for the fiscal year ending December 31, 2023. During fiscal year 2022, Mayer Hoffman McCann P.C. ("Mayer Hoffman") served as our independent registered public accounting firm and reported on our consolidated financial statements for that year. Mayer Hoffman had been our independent auditor between 2017 and our dismissal of that firm on April 10, 2023. After its engagement to audit the fiscal year ending December 31, 2023, Moss Adams was also engaged to re-audit our consolidated financial statements for the year ended December 31, 2022.

23

The Audit Committee intends to periodically consider whether to rotate our independent auditor in order to assure continuing auditor independence. The Board and the members of the Audit Committee believe that the retention of Moss Adams as the Company's independent auditor for the fiscal year ending December 31, 2024 is in the best interests of the Company and its stockholders. Although ratification by stockholders of the selection of Moss Adams is not required by our Bylaws, and the Audit Committee may rotate our independent auditor even if such ratification is obtained, the Board believes that submitting this matter to a vote is a good corporate practice. In the event of a negative vote on ratification, the Audit Committee will consider whether to select another independent auditor.

We expect that representatives of Moss Adams will attend the Annual Meeting and will have the opportunity to make a statement if they so desire and to respond to appropriate questions.

Required Vote of Stockholders

Approval of this proposal requires the affirmative vote of a majority of the shares of our Common Stock present in person (including virtually) or by proxy at the Annual Meeting and entitled to vote thereon as of the Record Date. You may vote "FOR," "AGAINST" or "ABSTAIN" from voting on this proposal. For purposes of determining whether this proposal has passed, abstentions will have no effect on the proposal. Broker non-votes will have no effect on the proposal.

OUR BOARD RECOMMENDS THAT OUR STOCKHOLDERS VOTE "FOR" RATIFICATION OF THE APPOINTMENT OF MOSS ADAMS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2024.

AUDIT AND OTHER FEES

On April 10, 2023, the Audit Committee of our Board appointed Moss Adams as our independent registered public accounting firm to audit our consolidated financial statements for the fiscal year ending December 31, 2023. During fiscal year 2022, Mayer Hoffman served as our independent auditor and reported on our consolidated financial statements for that year. Mayer Hoffman had been our independent auditor between 2017 and our dismissal of that firm on April 10, 2023.

The following table sets forth the aggregate fees incurred for our independent registered accounting firm for the fiscal years ended December 31, 2023 and 2022. These fees are categorized as audit fees, audit-related fees, tax fees, and all other fees. The nature of the services provided in each category is described below the table.

	2023	2022
Audit Fees	\$ 472,200	\$ 670,372
Audit-Related Fees	76,125	-
Tax Fees	-	-
All Other Fees	-	-
Total	\$ 548,325	\$ 670,372

Audit fees. Consist of fees incurred for professional services rendered for the audit of the consolidated financial statements and review of the quarterly interim consolidated financial statements. These fees also include the review of registration statements and the delivery of consents in connection with registration statements. The amount for fiscal year 2023 includes \$89,250 for the audit of the year ended December 31, 2022, completed in conjunction with the audit of the year ended December 31, 2023. Amounts for fiscal year 2023 reflect services performed by Moss Adams and amounts for fiscal year 2022 reflect services performed by Mayer Hoffman.

Audit-related fees. Consist of fees incurred for professional services rendered for the compliance audit in accordance with the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards related to funding under federal government grants.

Tax fees. There were no fees billed for tax fees for the fiscal years ended December 31, 2023 and 2022.

2.4

All other fees. There were no fees billed for professional services rendered for other compliance purposes for the fiscal years ended December 31, 2023 and 2022.

All audit-related and other non-audit services were pre-approved by the Audit Committee, which concluded that the provision of such services was compatible with the maintenance of the respective firm's independence in the conduct of its auditing functions.

AUDIT COMMITTEE REPORT

The Audit Committee has reviewed and discussed the audited financial statements of the Company for the year ended December 31, 2023, with management and Moss Adams, the Company's independent registered public accounting firm. In addition, the Audit Committee has discussed with Moss Adams the matters required to be discussed under Public Company Accounting Oversight Board ("PCAOB") Auditing Standard No. 1301, Communications with Audit Committees (AS 1301). The Sarbanes-Oxley Act of 2002 ("SOX") requires certifications by the Company's chief executive officer and chief financial officer in certain of the Company's filings with the Securities and Exchange Commission ("SEC"). The Audit Committee discussed the review of the Company's reporting and internal controls undertaken in connection with these certifications with the Company's management and Moss Adams. The Audit Committee also reviewed and discussed with the Company's management and Moss Adams the Company's evaluation of internal control over financial reporting in accordance with Section 404 of SOX. The Audit Committee has further periodically reviewed such other matters as it deemed appropriate, including other provisions of SOX and rules adopted or proposed to be adopted by the SEC and Nasdaq.

The Audit Committee also has received the written communications from Moss Adams regarding the auditor's independence pursuant to the applicable requirements of the PCAOB Ethics and Independence Rule 3526, and it has reviewed, evaluated and discussed the written disclosures with Moss Adams and its independence from the Company. The Audit Committee also has discussed with the Company's management and Moss Adams such other matters and received such assurances from them as it deemed appropriate.

Based on the foregoing review and discussions and relying thereon, the Audit Committee recommended to the Company's Board of Directors the inclusion of the Company's audited financial statements for the year ended December 31, 2023, in the Company's Annual Report on Form 10-K for such year filed with the SEC.

THE AUDIT COMMITTEE

Steve R. Martin, Chairperson Bob Gower Andrew Benton

This report is not deemed to be incorporated by reference in any filing by the Company under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates this report by reference.

EXECUTIVE & DIRECTOR COMPENSATION

This section discusses the material components of the executive compensation program for our named executive officers. Our named executive officers, consisting of our principal executive officer and the next two most highly compensated executive officers, for the year ended December 31, 2023, were:

- Lynn Kirkpatrick, Ph.D., Chief Executive Officer;
- David Humphrey, Chief Financial Officer; and
- Geoff Birkett, Chief Commercial Officer.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt in the future may differ materially from the currently planned programs summarized in this discussion.

Summary Compensation Table

The following table sets forth information concerning the compensation earned by our NEOs in respect of our fiscal years ended December 31, 2023 and December 31, 2022.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock and Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$) ⁽²⁾	Total (\$)
Dr. Lynn Kirkpatrick, PhD.							
Chief Executive Officer	2023	404,875	-	93,800	-	9,900	508,575
	2022	392,500	-	214,914	-	15,195	622,609
Dave Humphrey							
Chief Financial Officer	2023	338,250	-	93,800	-	9,900	441,950
	2022	328,333	-	438,562	-	13,722	780,617
Geoff Birkett							
Chief Commercial Officer	2023	312,625	-	70,350	-	9,379	392,354
	2022	304,167	-	53,664	-	9,125	366,956

- (1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the restricted stock awards and stock option awards granted. This amount has been computed in accordance with Financial Accounting Standards Board ("FASB"), Accounting Standards Codification ("ASC") Topic 718. This amount does not reflect the actual economic value that will be realized by a named executive officer upon the vesting of the stock awards or stock options, the exercise of the stock options, or the sale of the common stock underlying such awards.
- (2) Amounts shown represent 401(k) matching contributions.

Narrative Disclosure to Summary Compensation Table

Elements of Compensation in 2023

The compensation of our NEOs generally consists of base salary, annual cash bonus opportunities and long-term incentive compensation in the form of equity awards, as described below.

Base Salary

The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role, responsibilities, and contributions. Base salaries were initially set at the time each NEO commenced employment with us, are reviewed annually and may be increased based on the individual performance of the NEO, company performance, any change in the executive's position within our business, the scope of the executive's responsibilities and any changes thereto. Effective July 1, 2023, the NEO's annual base salary rates were \$414,750 for Dr. Kirkpatrick, \$346,500 for Mr. Humphrey and \$320,250 for Mr. Birkett. A five percent (5%) cost of living increase was approved for executive officers, effective March 1, 2024.

Annual Performance-Based Bonuses

Each of our NEOs' performance-based cash bonus opportunity is expressed as a percentage of base salary that can be achieved at a target level by meeting predetermined Company performance objectives established by the Board or the Compensation Committee. The annual bonus for Dr. Kirkpatrick is targeted at 50% of her base salary, and Mr. Humphrey and Mr. Birkett's annual bonuses are targeted at 30% of their respective base salary. There are no amounts accrued for bonuses as of December 31, 2023.

26

Long-Term Equity Incentives

In 2021, the Company maintained the Ensysce Biosciences, Inc. 2021 Omnibus Incentive Plan to provide equity-based incentive awards, designed to align our interests and the interests of our stockholders with those of our employees and consultants, including our NEOs. On January 26, 2022, our stockholders approved the 2021 Amended and Restated Plan. All grants effectuated under predecessor equity plans were converted to grants outstanding under the 2021 Amended and Restated Plan was amended to increase the number of awards that may be granted from 31,296 to 617,092.

Employment Agreements with our NEOs

Dr. Lynn Kirkpatrick, Ph.D.

In September 2021, we entered into an employment offer letter with Dr. Kirkpatrick. The offer letter provides for Dr. Kirkpatrick's at-will employment as our Chief Executive Officer and sets forth her annual base salary of \$380,000. Additionally, the letter provides for her initial target annual bonus opportunity of up to 50% of base salary. The offer letter also indicates that Dr. Kirkpatrick is eligible to be granted certain stock awards under our equity incentive plan.

Dr. Kirkpatrick's offer letter provides for severance benefits upon a termination of her employment by the Company without "cause", or upon her resignation for "good reason", in an amount equal to twelve (12) months of her then current base salary (ignoring any decrease in base salary that forms the basis for good reason); provided, however, that the payment of such benefits is subject to Dr. Kirkpatrick's continued compliance with her obligations under her "At-Will, Confidential Information and Assignment of Inventions Agreement" and her execution of a general release of claims. Additionally, if such termination without cause or for good reason occurs within the one (1) month prior to, or during the twelve (12) month period immediately following a change in control, then all outstanding equity awards subject to time-based vesting will become fully vested on the later of Dr. Kirkpatrick's termination date and the change in control. Cause and good reason are as defined in Dr. Kirkpatrick's offer letter.

Dave Humphrey

In February 2021, we entered into an employment offer letter with Mr. Humphrey. The offer letter provided for Mr. Humphrey's at-will employment as our Chief Financial Officer at an initial annual base salary of \$320,000. Additionally, the letter provided for his initial target annual bonus opportunity of up to 30% of base salary. The offer letter also indicates that Mr. Humphrey is eligible to be granted certain stock awards under our equity incentive plan.

Mr. Humphrey's offer letter provides for severance benefits upon a termination of his employment by the Company without "cause", or upon his resignation for "good reason", in an amount equal to six (6) months of his then current base salary (ignoring any decrease in base salary that forms the basis for good reason); provided, however, that the payment of such benefits is subject to Mr. Humphrey's continued compliance with his obligations under his "Confidential Information and Assignment Agreement" and his

execution of a general release of claims. Additionally, if such termination without cause or for good reason occurs within the one (1) month prior to, or during the twelve (12) month period immediately following a change in control, then all outstanding equity awards subject to time-based vesting will become fully vested on the later of Mr. Humphrey's termination date and the change in control. Cause and good reason are as defined in Mr. Humphrey's offer letter.

Geoff Birkett

In July 2021, we entered into an employment offer letter with Mr. Birkett. The offer letter provides for Mr. Birkett's at-will employment as our Chief Commercial Officer and sets forth his annual base salary of \$300,000. Additionally, the letter provides for his initial target annual bonus opportunity of up to 30% of base salary. The offer letter also indicates that Mr. Birkett is eligible to be granted certain stock awards under our equity incentive plan.

Mr. Birkett's offer letter provides for severance benefits upon a termination of his employment by the Company without "cause", or upon his resignation for "good reason", in an amount equal to three (3) months of his then current base salary (ignoring any decrease in base salary that forms the basis for good reason); provided, however, that the payment of such benefits is subject to Mr. Birkett's continued compliance with his obligations under his "Confidential Information and Assignment Agreement" and his execution of a general release of claims. Additionally, if such termination without cause or for good reason occurs within the one (1) month prior to, or the twelve (12) month period immediately following a change in control, then all outstanding equity awards subject to time-based vesting will become fully vested on the later of Mr. Birkett's termination date and the change in control. Cause and good reason are as defined in the offer letter.

27

At-Will, Confidential Information and Assignment of Inventions Agreement

In connection with each respective offer letter, Dr. Kirkpatrick, Mr. Birkett and Mr. Humphrey entered into an "At-Will, Confidential Information and Assignment of Inventions Agreement" (the "Confidentiality Agreement"). The Confidentiality Agreements include customary prohibitions against solicitation of our customers and employees, both during employment and for two (2) years following any cessation of employment. The Confidentiality Agreements also include standard provisions relating to the Company's intellectual property rights and prohibit the executive from disclosing confidential information. The Confidentiality Agreements are incorporated by reference into the offer letters and payment of any severance benefits under each executive's offer letter is conditioned on continued compliance with his or her Confidentiality Agreement.

Other Benefits

We currently provide welfare benefits that are available to all of our employees, including our NEOs, including health, dental, vision and group life insurance.

Effective January 1, 2022, we put into place the Ensysce Biosciences, Inc. 401(k) Plan" (the "401(k) Plan"). The 401(k) Plan provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis and under which we are permitted to make safe harbor employer contributions. Employees' pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) Plan is intended to be qualified under Section 401(a) of the Code, with the related trust intended to be tax exempt under Section 501(a) of the Code. Under the 401(k) Plan, we make employer contributions to all employees, regardless of an employee's contributions (or lack thereof), in an amount equal to 3% of the employee's eligible compensation.

We do not maintain any defined benefit pension plans or nonqualified deferred compensation plans.

Outstanding Equity Awards at Fiscal Year-End

The following table provides information regarding outstanding equity awards held by our NEOs as of December 31, 2023.

		Option	Awards			Stock A	Awards
Name	Date	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares of Stock That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Vested (\$)
Dr. Lynn Kirkpatrick, PhD.	1/15/2016	1,097	0	765.60	1/15/2026		
	1/4/2017	1,920	0	439.20	1/4/2027	-	-
	2/5/2018	3,406	0	403.20	2/5/2028	-	-
	3/1/2019	2,743	0	621.60	2/28/2029	-	-
	3/15/2019	27	0	621.60	3/14/2029	-	-
	2/17/2022	381	452	336.00	2/17/2032	-	-
	10/25/2023	100,000	0	1.18	10/25/2033	-	-
Dave Humphrey	2/4/2022	811	334	751.20	2/4/2032	-	-
	2/17/2022	152	181	336.00	2/17/2032	-	-
	10/25/2023	100,000	0	1.18	10/25/2033	-	-
Geoff Birkett	10/1/2018	82	0	621.60	9/30/2028	-	-
	3/1/2019	1,371	0	621.60	2/28/2029	-	-
	2/17/2022	95	113	336.00	2/17/2032	-	-
	10/25/2023	75,000	0	1.18	10/25/2033	-	-
		28					

Pay Versus Performance

In August 2022, the SEC adopted additional disclosure requirements regarding the relationship between a registrant's executive compensation and its financial performance. SEC rules in Item 402(v) of Regulation S-K require certain adjustments be made to the Summary Compensation Table totals to determine Compensation Actually Paid as reported in the Pay Versus Performance Table. Compensation Actually Paid does not necessarily represent cash and/or equity value earned by or paid to the applicable named executive officer without restriction, but rather is a valuation calculated under applicable SEC rules. For further information concerning our executive compensation program and our pay-for-performance philosophy, refer to the preceding compensation discussion.

The following table sets forth specified executive compensation and financial performance measures for our two most recently completed fiscal years, as required under transitional guidance for Smaller Reporting Companies provided by the SEC. We have not paid dividends and do not sponsor any pension arrangements; thus, no adjustments are made for these items.

Year	Summary Compensation Table Total for PEO (1)			Compensation Actually Paid to PEO (2)		Average Summary Compensation Table Total for Non-PEO NEOs ⁽³⁾		Average Compensation Actually Paid to Non-PEO NEOs ⁽⁴⁾		of Initial Fixed Investment ed on Total nolder Return (5)	Net l	Income (Loss)
2023	<u> </u>	508.575	2	507,187	\$	417.152	\$	416.177	2	0.09	(\$	10,626,011)
2022	\$	622,609	\$	152,787	\$	573,787	\$	372,469	\$	0.80	(\$	25,085,496)

- (1) For fiscal years 2023 and 2022, the principal executive officer ("PEO") was our Chief Executive Officer, Dr. Lynn Kirkpatrick.
- (2) The amounts disclosed reflect the following adjustments to the amounts reported in the Summary Compensation Table for the PEO:

			Fair V	/alue as of	Chan	ge in Fair									
			Yea	r End of	Value	of Awards	Fair	Value as of	Chan	ge in Fair					
			Award	ls Granted	Granted in Prior Vesting Date of Value of Aw		of Awards	Less	: Fair Value						
			in the	Year and	Yea	rs and Awards Granted in		anted in	as of	Prior Year					
	Le	ss: Grant	Outsta	anding and	Outsta	nding and	Granted and Prior Years that		Years that	End	of Awards				
	Dat	te Value of	Unve	sted as of	Unve	sted as of	Ves	ted in the	Vested in the		Vested in the Forfeited in the			Total	
Year	Equ	ity Awards	Ye	Year End		Year End		Year		Year		Year		Adjustments	
2023	\$	(93,800)	\$	_	\$	(809)	\$	93,800	\$	(579)	\$	_	\$	(1,388)	
2022	\$	(214,914)	\$	1,574	\$	-	\$	-	\$	-	\$	(256,482)	\$	(469,822)	

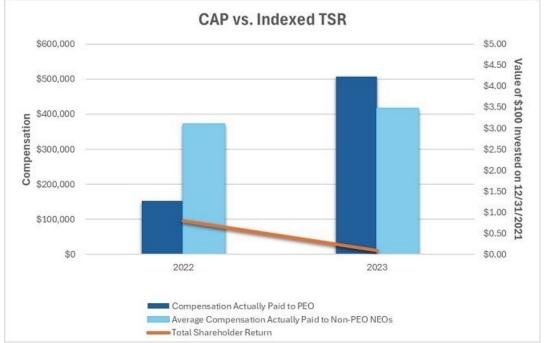
- (3) For fiscal years 2023 and 2022, the Non-PEO NEOs were Dave Humphrey and Geoff Birkett.
- (4) The amounts disclosed reflect the following adjustments to the amounts reported in the Summary Compensation Table for the Non-PEO NEOs:

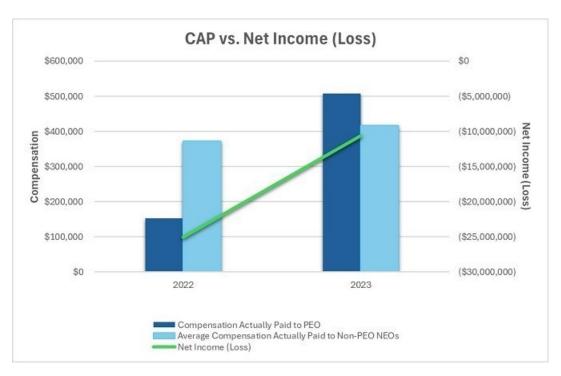
29

Year	Dat	ss: Grant e Value of ity Awards	Yes Awar in the Outst Unv	Value as of ar End of ds Granted e Year and anding and ested as of ear End	Value Granto Yea Outsta Unve	ge in Fair of Awards ed in Prior ars and nding and sted as of ar End	Vesti A Gra	Value as of ing Date of Awards anted and ted in the Year	Va A' Gra Prio that '	ge in Fair alue of wards anted in or Years Vested in e Year	of	ss: Fair Value as Prior Year End Awards Forfeited in the Year	Ad	Total justments
2023	\$	(82,075)	\$		\$	(362)	\$	82,075	\$	(613)	\$		\$	(975)
2022	\$	(246,113)	\$	997	\$		\$	43,798	\$	· -	\$	-	\$	(201,318)

(5) Total Shareholder Return is calculated as the sum of (i) the cumulative amount of dividends for the measurement period, assuming reinvestment of all dividends, if any, plus (ii) the cumulative increase or decrease in the price of our common stock each respective year, divided by the price of our common stock at the beginning of the measurement period.

Relationship Between Compensation Actually Paid and Company Total Shareholder Return ("TSR")





Director Compensation

The following table provides summary information concerning compensation paid or accrued by us to or on behalf of our non-employee directors for services rendered to us as of December 31, 2023.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)	Total (\$)
Bob Gower	25,000	22,600	47,600
William Chang	7,500	22,600	30,100
Andrew Benton	7,500	22,600	30,100
Steve Martin	15,000	17,920	32,920
Adam Levin	10,000	17,920	27,920
Lee Rauch	11,250	17,920	29,170
Curt Rosebraugh	7,500	17,920	25,420

In October 2023, each Board member was granted 20,000 restricted stock units or a stock option to purchase 20,000 shares of our common stock at an exercise price of \$1.13 per share. The awards were fully vested and have a ten (10) year term.

31

PROPOSAL 6

ADJOURNMENT OF THE ANNUAL MEETING

If at the time of the Annual Meeting, the number of shares of the Company's common stock voting in favor of one or more of the proposals set forth in this Proxy Statement is insufficient to approve one or more of those proposals, we may move to adjourn the Annual Meeting in order to allow us to continue to solicit additional proxies in favor of the proposals set forth in this Proxy Statement that require additional "FOR" votes for their approval.

The Board believes that it is in the best interests of the Company's Stockholders to have each of the proposals approved and implemented, and, therefore, enabling us to adjourn the meeting to continue to solicit proxies for one or more of the proposals is advisable. The time and place of the adjourned meeting will be announced at the time the adjournment is taken. Any adjournment of the Annual Meeting for the purpose of soliciting additional proxies will allow the Stockholders who have already sent in their proxies to revoke them at any time prior to their use at the Annual Meeting as adjourned or postponed.

The Board Recommends a Vote "FOR" the Adjournment of the Annual Meeting, if necessary or appropriate, to solicit additional proxies in favor of any or all of the other proposals set forth in this Proxy Statement and proxies that are returned will be so voted unless otherwise instructed.

Required Vote of Stockholders

A quorum being present, this proposal must receive a "For" vote from the holders of a majority of the shares of common stock properly casting votes for or against this proposal at the Annual Meeting in person (including virtually) or by proxy. Abstentions will have no effect on the proposal. Broker non-votes will have no effect on the proposal.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than the agreements and arrangements described under the section entitled "Executive & Director Compensation" and the transactions described below, since January 1, 2023, there has not been and there is not currently proposed, any transaction or series of similar transactions to which (i) we were, or will be, a participant; (ii) the amount involved exceeded, or will exceed, \$120,000 or 1% of the average of our total assets at December 31, 2022 and 2023; and (iii) in which any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

We own 79.2% of the issued and outstanding shares of EBIR, a clinical stage pharmaceutical company that is developing a compound utilized in our overdose protection program for the treatment of COVID-19. The other 20.8% is owned by two affiliates of Ensysce and Mucokinetica. Specifically, our Chief Executive Officer and Director, Dr. Lynn Kirkpatrick, owns 9.9%, our former Chief Business Officer owns 9.9% and Mucokinetica owns 1.0%. Dr. Kirkpatrick is also Chief Executive Officer of EBIR. There is no revenue sharing agreement between us and EBIR.

Convertible Notes

In an offering that closed in October and November 2023, Bob Gower, our Chairman, purchased an aggregate principal amount of notes of \$216,000 for a purchase price of \$200,000 and warrants that may be exercised for an aggregate of 443,187 shares of common stock. The per share conversion price of the notes and the per share exercise price of the warrants is \$1.5675.

Employment Relationship

Jeff Millard is an executive officer of the Company. Mr. Millard's spouse is also employed by the Company.

32

Related Party Transaction Policy

The Board previously adopted a written related person transaction policy that sets forth the following policies and procedures for the review and approval or ratification of related person transactions.

An "Immediate Family Member" means a child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law, or any person sharing the household (other than a tenant or employee).

A "Related Party" means any (a) person who is or was (since the beginning of the last fiscal year for which we have filed a Form 10-K and proxy statement, even if they do not presently serve in that role) an executive officer, director or nominee for election as a director of the Company, (b) greater than 5% beneficial owner of the Company's outstanding common stock, or (c) Immediate Family Member of any of the foregoing.

A "Related Person Transaction" is any Transaction involving the Company in which a Related Party has or will have a direct or indirect material interest, as determined by the Audit Committee.

A "Transaction" means any financial transaction, arrangement or relationship or any series of similar transactions, arrangements or relationships, including indebtedness and guarantees of indebtedness and transactions involving employment and similar relationships.

Under the policy, the following types of Transactions are deemed not to create or involve a material interest on the part of the Related Party, nor will they require approval or ratification, under the policy:

- Transactions involving the purchase or sale of products or services in the ordinary course of business, not exceeding \$50,000 or, if the Company is a "smaller reporting company" as defined under the Securities Act, if less, one percent of the average of the Company's total assets as of December 31st for the last two completed fiscal years.
- Transactions in which the Related Party's interest derives solely from his or her service as a director of another corporation or organization that is a party to the Transaction.
- Transactions in which the Related Party's interest derives solely from his or her ownership of less than 5% of the equity interest in another person (other than a general partnership interest) which is a party to the Transaction.
- Transactions in which the Related Party's interest derives solely from his or her ownership of a class of equity securities of the Company and all holders of that class of equity securities received the same benefit on a pro rata basis (e.g., dividends).
- Transactions in which the Related Party's interest derives solely from his or her service as a director, trustee or officer (or similar position) of a not-for-profit organization or charity that receives donations from the Company, which donations are made pursuant to the Company's matching program, as a result of contributions by employees, that is available on the same terms to all employees of the Company.
- Compensation arrangements of any executive officer, other than an individual who is an Immediate Family Member of a Related Party, if such arrangements have been approved or recommended to the Board for approval by the Compensation Committee.
- Director compensation arrangements, if such arrangements have been approved by the Board or the Compensation Committee of the Board.
- Transactions with a Related Party in which the rates or charges involved in the Transaction are determined by competitive bids, or the Transaction involves the rendering of services as a common or contract carrier, or public utility, at rates or charges fixed in conformity with law or governmental authority.
- Indemnity payments made to directors and executive officers in accordance with the Company's then existing certificate of incorporation, bylaws and applicable laws.
- Transactions with a Related Party involving services as a bank depositary of funds, transfer agent, registrar, trustee under a trust indenture or similar services.

33

Pursuant to its Audit Committee charter, the Audit Committee will have the responsibility to review, approve or ratify any Related Person Transactions.

VOTING AND PROXY PROCEDURES

Record Date; Voting Rights and Outstanding Shares

Only holders of record of our common stock as of the close of business on October 7, 2024 are entitled to receive notice of, and to vote at, the Annual Meeting. Each holder of common stock shall be entitled to one vote for each share held on all matters to be voted upon at the Annual Meeting. At the close of business on the Record Date, there were [13,870,510] shares of common stock outstanding.

Holders of record who hold shares of common stock directly on the Record Date must return a proxy by one of the methods described on the proxy card or attend the Annual Meeting virtually to vote on the proposals. To attend the Annual Meeting, holders of record must go to https://agm.issuerdirect.com/ensc, enter the control number

received on the proxy card or notice of the meeting and click on the "Click here to preregister for the online meeting" link at the top of the page. Holders of record will need to log back into the meeting site using the control number previously provided, immediately prior to the start of the Annual Meeting. Holders of record must register before the Annual Meeting starts.

Investors who hold shares of common stock indirectly on the Record Date ("Beneficial Holders") through a brokerage firm, bank or other financial institution (each a "Financial Institution") must obtain a legal proxy from the Financial Institution and e-mail a copy of the legal proxy to proxy@issuerdirect.com to have their shares voted in accordance with their instructions, as Financial Institutions do not have discretionary voting authority with respect to any of the proposals described in this Proxy Statement. Financial Institutions that do not receive voting instructions from Beneficial Holders will not be able to vote those shares. Beneficial owners should contact their bank, broker, or other nominee for instructions regarding obtaining a legal proxy. Beneficial owners who e-mail a valid legal proxy will be issued a meeting control number that will allow them to register to attend and participate in the Annual Meeting. Beneficial Owners that have obtained a meeting control number will receive an e-mail prior to the meeting with a link and instructions for entering the Annual Meeting. Beneficial owners should contact Issuer Direct on or before 5:00 p.m. Eastern Time on November 19, 2024, the date that is two days prior to the Annual Meeting.

A quorum of stockholders is necessary to take action at the Annual Meeting. Stockholders representing a majority of the outstanding shares of our common stock (present in person (including virtually) or represented by proxy) will constitute a quorum. We will appoint an election inspector, who may be a Company employee, for the meeting to determine whether a quorum is present and to tabulate votes cast by proxy or in person (including virtually) at the Annual Meeting. Abstentions, withheld votes and broker non-votes (which occur when a broker, bank or other nominee holding shares for a beneficial owner does not vote on a particular matter because such broker, bank or other nominee does not have discretionary authority to vote on that matter and has not received voting instructions from the beneficial owner) are counted as present for purposes of determining the presence of a quorum for the transaction of business at the Annual Meeting.

34

Votes Required for Each Proposal

To approve the proposals being considered at the Annual Meeting, the voting requirements are as follows:

		Discretionary
Proposal	Vote Required	Voting Permitted?
Proposal 1	Majority Voting on Proposal 1	No
Proposal 2	Majority Voting on Proposal 2	No
	Majority Voting on Each	
Proposal 3	Director in Proposal 3	No
Proposal 4	Majority Outstanding	No
Proposal 5	Majority Voting on Proposal 5	Yes
Additional Solicitation	Majority Voting on Proposal 6	No

"Discretionary Voting Permitted" means that brokers will have discretionary voting authority with respect to shares held in street name for their clients, even if the broker does not receive voting instructions from their client.

"Majority Outstanding" means, for Proposal 4, a majority of the voting power of the outstanding shares of our common stock entitled to vote generally in the election of directors, voting together as a single class at the Meeting and entitled to vote thereon as of the Record Date

We request that you vote your shares by proxy following the methods as instructed by the notice: over the Internet or by mail. If you choose to vote by mail, your shares will be voted in accordance with your voting instructions if the proxy card is received prior to or at the Annual Meeting. If you sign and return your proxy card but do not give voting instructions, your shares will be voted "FOR" (1) Proposal 1; (2) Proposal 2; (3) Proposal 3; (4) Proposal 4; (5) Proposal 5 and (6) Additional Solicitation Proposal.

Voting by Proxy Over the Internet

Stockholders whose shares are registered in their own names may vote by proxy by mail or over the Internet. Instructions for voting by proxy over the Internet are set forth on the notice of proxy materials. The Internet voting facilities will close after each proposal is addressed during the Annual Meeting. The notice will also provide instructions on how you can elect to receive future proxy materials electronically or in printed form by mail. If you choose to receive future proxy materials electronically, you will receive an email with instructions containing a link to future proxy materials and a link to the proxy voting site. Your election to receive proxy materials electronically or in printed form by mail will remain in effect until you terminate such election.

If your shares are held in street name, the voting instruction form sent to you by your broker, bank or other nominee should indicate whether the institution has a process for beneficial holders to provide voting instructions over the Internet or by telephone. Many banks and brokerage firms participate in a program that also permits stockholders whose shares are held in street name to direct their vote over the Internet or by telephone. If your bank or brokerage firm gives you this opportunity, the voting instructions from the bank or brokerage firm that accompany this Proxy Statement will tell you how to use the Internet or telephone to direct the vote of shares held in your account. If your voting instruction form does not include Internet or telephone information, please complete and return the voting instruction form in the self-addressed, postage-paid envelope provided by your broker. Stockholders who vote by proxy over the Internet or by telephone need not return a proxy card or voting instruction form by mail, but may incur costs, such as usage charges, from telephone companies or Internet service providers.

Revocability of Proxies

Any proxy may be revoked at any time before it is exercised by filing an instrument revoking it with the Company's secretary or by submitting a duly executed proxy bearing a later date prior to the time of the Annual Meeting. Stockholders who have voted by proxy over the Internet or by telephone or have executed and returned a proxy and who then attend the Annual Meeting virtually and desire to vote in person (including virtually) are requested to notify the Company's secretary in writing prior to the time of the Annual Meeting. We request that all such written notices of revocation to the Company be addressed to David Humphrey, Secretary, c/o Ensysce Biosciences, Inc., at the address of our principal executive offices at 7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037. Our telephone number is (858) 263-4196. Stockholders may also revoke their proxy by entering a new vote over the Internet.

34

SOLICITATION OF PROXIES

This solicitation is made on behalf of the Board of Directors. We will bear the costs of preparing, mailing, online processing and other costs of the proxy solicitation made by the Board of Directors. Certain of our officers and employees may solicit the submission of proxies authorizing the voting of shares in accordance with the recommendations of the Board of Directors. Such solicitations may be made by telephone, facsimile transmission or personal solicitation. No additional compensation will be paid to such officers, directors or regular employees for such services. We will reimburse banks, brokerage firms and other custodians, nominees and fiduciaries for reasonable out-of-pocket expenses incurred by them in sending proxy material to stockholders.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of shares of our common stock by (i) each director, (ii) each named executive officer, (iii) all directors and executive officers as a group, and (iv) each person who we know beneficially owns more than 5% of our common stock as of October 2, 2024, unless otherwise indicated below.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include shares of common stock issuable upon the exercise of stock options that are immediately exercisable or exercisable within 60 days after October 2, 2024 but excludes unvested stock options. Except as otherwise indicated, all shares reflected in the table are shares of common stock and all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of October 2, 2024. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Percentage ownership calculations for beneficial ownership for each person or entity are based on 13,870,510 shares outstanding as of October 2, 2024. Except as otherwise indicated in the table below, addresses of named beneficial owners are in care of Ensysce Biosciences, Inc., 7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037.

Beneficial Ownership Table

Name and Address of Beneficial Owners	Number of Shares	Percentage
Officers and Directors		
Dr. Lynn Kirkpatrick (1)	111,356	*
Geoff Birkett (2)	76,595	*
David Humphrey (3)	101,509	*
Linda Pestano (4)	75,642	*
Andrew Benton (5)	20,444	*
William Chang (6)	30,960	*
Bob Gower (7)	722,706	4.99%
Adam Levin (8)	20,145	*
Steve R. Martin (9)	20,419	*
Lee Rauch (10)	20,138	*
Curtis Rosebraugh (11)	20,145	*
All directors and named executive officers as a group (eleven individuals)	1,122,126	7.6%

Greater than 5% Holders

None

36

- * Indicates less than 1%.
- (1) Includes 109,765 shares subject to options and 1,591 shares owned directly.
- (2) Consists of shares subject to options.
- (3) Consists of 101,301 shares subject to options and 208 shares owned directly.
- (4) Consists of shares subject to options.
- (5) Consists of 419 shares subject to options and 20,025 shares owned directly.
- (6) Includes 145 shares subject to options, 23,126 shares owned directly by Mr. Chang and his wife and 7,689 shares owned through trusts in which Mr. Chang has sole or shared voting and dispositive power. Does not include 416 shares held by trusts for family members in which Mr. Chang does not have beneficial ownership. The business address for Mr. Chang is 520 El Camino Real, 9th Floor, San Mateo, CA 94402.
- (7) Includes 172 shares subject to options, 121,890 shares held directly, 141,933 shares that may be acquired from conversion of notes and 502,711 shares that may be acquired through the exercise of warrants, subject to exercise limits of no more than 4.99% beneficial ownership. The business address for Mr. Gower is 101 Westcott, Unit 303, Houston, Texas 77007.
- (8) Consists of shares subject to options.
- (9) Consists of shares subject to options.
- (10) Consists of shares subject to options.
- (11) Consists of shares subject to options.

OTHER MATTERS AND ADDITIONAL INFORMATION

Householding of Proxy Materials

We have adopted a procedure approved by the SEC known as "householding." This procedure allows multiple stockholders residing at the same address the convenience of receiving a single copy of our Notice, Annual Report and proxy materials, as applicable. This allows us to save money by reducing the number of documents we must print and mail and helps protect the environment as well.

Householding is available to both registered stockholders (i.e., those stockholders with certificates registered in their name) and street name holders (i.e., those stockholders who hold their shares through a brokerage).

Registered Stockholders

If you are a registered stockholder and have consented to our mailing of proxy materials and other stockholder information only to one account in your household, as identified by you, we will deliver or mail a single copy of our Annual Report and proxy materials, as applicable, for all registered stockholders residing at the same address. Your consent will be perpetual unless you revoke it, which you may do at any time by contacting our secretary at the address of our principal executive offices at 7946 Ivanhoe Avenue, Suite 201, La Jolla, CA 92037. If you revoke your consent, we will begin sending you individual copies of future mailings of these documents within 30 days after we receive your revocation notice. If you received a household mailing this year, and you would like to receive additional copies of our Annual Report and proxy materials, as applicable, please submit your request to our Corporate Secretary at the address of our principal executive offices at 7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037, who will promptly deliver the requested copy.

Registered stockholders who have not consented to householding will continue to receive copies of annual reports and proxy materials for each registered stockholder residing at the same address. As a registered stockholder, you may elect to participate in householding and receive only a single copy of annual reports or proxy materials for all registered stockholders residing at the same address by contacting our secretary as outlined above.

Street Name Holders

	Stockholders	who hold their	shares through a b	brokerage may	elect t	o participate	in householding	g or revoke	their consent	to participate i	n householding b	y contacting
their res	spective brokers	s.										

37

Stockholder Proposals to be Presented at the Next Annual Meeting

Any stockholder who meets the requirements of the proxy rules under the Exchange Act may submit proposals to the Board of Directors to be presented at the next annual meeting. Such proposals must comply with the requirements of Rule 14a-8 under the Exchange Act. If you are a stockholder and you want to include a proposal in the proxy statement for the next annual meeting in 2025, you need to provide it to Ensysce by no later than June 24, 2025. You should direct any proposals to Ensysce's secretary at our principal office, 7946 Ivanhoe Avenue, Suite 201, La Jolla, CA 92037.

Our Bylaws also provide for separate notice procedures to recommend a person for nomination as a director or to propose business to be considered by stockholders at a meeting. To be considered timely under these provisions, the stockholder's notice must be delivered to our secretary at our principal executive offices at the address set forth above (i) no later than a date (i) not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the anniversary date of the prior year's annual meeting. For the annual meeting in 2025, the stockholder's notice must be received between July 24, 2025 and August 23, 2025. However, if the date of the Company's 2025 annual meeting is more than thirty (30) days before or after the anniversary date of this year's annual meeting, such notice must be received on or before ten (10) days after the day on which the date of the 2025 annual meeting is first disclosed in a public announcement. The stockholder's notice must also contain the information specified in Section 1.2 of our Bylaws.

The Board of Directors, a designated committee thereof or the chairman of the meeting may refuse to acknowledge the introduction of any stockholder proposal if it is not made in compliance with the applicable notice provisions.

By Order of the Board of Directors of

Ensysce Biosciences, Inc.

Sincerely,

/s/ Dr. Lynn Kirkpatrick

Dr. Lynn Kirkpatrick

President and Chief Executive Officer

La Jolla, California October 22, 2024

3

Annex A

CERTIFICATE OF FOURTH AMENDMENT OF THE THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ENSYSCE BIOSCIENCES, INC.

Ensysce Biosciences, Inc., a corporation organized and existing under the General Corporation Law (the "DGCL") of the State of Delaware (the "Corporation"), DOES HEREBY CERTIFY:

FIRST. The name of the corporation is Ensysce Biosciences, Inc. The Corporation was incorporated by the filing of its original Certificate of Incorporation with the Secretary of State of Delaware on September 11, 2017 and was amended by the Certificate of Amendment, which was filed with the Secretary of State of Delaware on September 11, 2017.

SECOND. A first amended and restated certificate of incorporation was filed with the Secretary of State of Delaware on November 30, 2017. A second amended and restated certificate of incorporation was filed with the Secretary of State of Delaware on December 1, 2017 (the "Second Amended and Restated Certificate"). A first amendment to the Second Amended and Restated Certificate was filed with the Secretary of State of Delaware on December 5, 2019. A second amendment to the Second Amended and Restated Certificate was filed with the Secretary of State of Delaware on March 26, 2020. A third amendment to the Second Amended and Restated Certificate was filed with the Secretary of State of Delaware on June 29, 2020. A fourth amendment to the Second Amended and Restated Certificate was filed with the Secretary of State of Delaware on November 30, 2020. A third amended and restated certificate of incorporation was filed with the Secretary of State of Delaware on June 30, 2021 (the "Certificate"). An amendment to the Certificate was filed with the Secretary of State of Delaware on September 9, 2022. A second amendment to the Certificate was filed with the Secretary of State of Delaware on February 1, 2023 ("Certificate of Designation"). An amendment to the Certificate of Designation was filed with the Secretary of State of the State of Delaware on February 7, 2023. A third amendment to the Certificate was filed with the Secretary of State of the State of Delaware on February 7, 2023. A third amendment to the Certificate was filed with the Secretary of State of the State of Delaware on February 7, 2023. A third amendment to the Certificate was filed with the Secretary of State of the State of Delaware on February 7, 2023. A third amendment to the Certificate was filed with the Secretary of State of Delaware on March 28, 2023 (the "Certificate Amendment").

THIRD. The terms and provisions of this Certificate of Amendment have been duly adopted in accordance with Section 242 of the DGCL. The following paragraph hereby replaces the first paragraph of Article IV of the Certificate that is found in the Certificate Amendment:

"Contingent and effective as of 12:01 am on [_____] (the "Effective Time"), each [____] (_)¹ shares of the Company's Common Stock, par value \$0.0001 per share (the "Common Stock"), issued and outstanding prior to the Effective Time shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into one (1) share of Common Stock, par value \$0.0001 per share, of the Company (the "Reverse Split"). No fractional share shall be issued in connection with the foregoing combination of the shares pursuant to the Reverse Split. In lieu of the issuance of fractional shares, the Company will round up any fractional shares resulting from the Reverse Split to the nearest whole share.

FOURTH. This Certificate of Fourth Amendment of the Third Amended and Restated Certificate of Incorporation so adopted (i) shall be effective as of [____] on [____], (ii) reads in full as set forth above and (iii) is hereby incorporated into the Third Amended and Restated Certificate of Incorporation, as amended, by this reference. All other provisions of the Third Amended and Restated Certificate of Incorporation, as amended, remain in full force and effect.

IN WITNESS WHEREOF, the undersigned has caused this Certificate of Amendment to be executed by the duly authorized officer below as of this [____] day of [____],

202[_].

Ву:	
Name:	
Title:	
orty (40), which number is referred to as the "Reverse Split Factor" (it being understood risions of this Certificate of Amendment not appearing in brackets, constitute a separate ith Section 242 of the Delaware General Corporation Law).	

ENSYSCE BIOSCIENCES, INC.

Annex B

AMENDMENT TO THE AMENDED AND RESTATED BYLAWS

OF

ENSYSCE BIOSCIENCES, INC.

(as amended [______], 2024)

Section 1.5 is deleted in its entirety and replaced with the following:

Section 1.5. Quorum.

At any meeting of the stockholders, the holders of shares of capital stock of the Corporation entitled to cast $1/3^{\rm cl}$ of the total votes entitled to be cast by the holders of all outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, present in person or by proxy, shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number is required by applicable law or the Certificate of Incorporation. If a separate vote by one or more classes or series is required, the holders of shares entitled to cast $1/3^{\rm rd}$ of the total votes entitled to be cast by the holders of the shares of the class or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter. A quorum, once established, shall not be deemed to cease to exist due to the subsequent withdrawal prior to the closing of the meeting of the Corporation's voting shares that would result in less than a quorum remaining present in person or by proxy at such meeting. For the purposes of the immediately preceding sentence, an adjournment of a meeting shall not constitute the closing of such meeting.

If a quorum shall fail to attend any meeting, the chairperson of the meeting may adjourn the meeting to another place, if any, date and time. At any such adjourned meeting at which there is a quorum, any business may be transacted that might have been transacted at the meeting originally called.

B-

PROXY

ENSYSCE BIOSCIENCES, INC. 7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037

ANNUAL MEETING OF STOCKHOLDERS

November 21, 2024

YOUR VOTE IS IMPORTANT FOLD AND DETACH HERE

ENSYSCE BIOSCIENCES, INC.

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON November 21, 2024

The undersigned, revoking any previous proxies relating to these shares, hereby acknowledges receipt of the Notice and Proxy Statement, dated ________, 2024, in connection with the Annual Meeting to be held at 9:00 a.m. Pacific Time on November 21, 2024, virtually at https://www.agm.issuerdirect.com/ensc, and hereby appoints David Humphrey the attorney and proxy of the undersigned, with power of substitution to each, to vote all shares of common stock of Ensysce Biosciences, Inc. (the "Company") registered in the name provided, which the undersigned is entitled to vote at the Annual Meeting of stockholders, with all the powers the undersigned would have if personally present. Without limiting the general authorization hereby given, said proxy is instructed to vote or act as follows on the proposals set forth in the accompanying Proxy Statement.

THIS PROXY, WHEN EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED "FOR" BE VOTED "FOR" PROPOSAL 1, "FOR" PROPOSAL 2, "FOR" EACH DIRECTOR NOMINEE IN PROPOSAL 3, "FOR" PROPOSAL 4, "FOR" PROPOSAL 5 AND "FOR" THE ADDITIONAL SOLICITATION PROPOSAL.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ALL PROPOSALS.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on November 21, 2024: This notice of meeting and the accompanying proxy statement are available at https://www.iproxydirect.com/ensc.

	FOR	AGAINST	ABSTAIN
Proposal 1			
Approve, for purposes of complying with Nasdaq Listing Rule 5635(d), the full issuance and of shares of common			
stock and exercise of warrants for common stock issued by the Company to certain investors ("Proposal 1").			
	FOR	AGAINST	ABSTAIN

into a lesser number of outstanding shares, a "Reverse Stock Split," by a ratio of not more than one-for-forty, with the exact ratio to be set within this range by the Board in 2").	less than or	ne-for-ten and not			
Proposal 3			FOR	AGAINST □	ABSTAIN
To elect the three Class III directors named in our Proxy Statement (collectively, the "I office until the annual meeting of stockholders for the calendar year ended December 3 Meeting") and until their respective successors have been duly elected and qualified ("I	31, 2027 (th	ne "2027 Annual			
			FOR	AGAINST	ABSTAIN
Proposal 4 To approve an amendment to the Company's bylaws to decrease the number of shares establish a quorum for meetings of stockholders ("Proposal 4")	s of commo	n stock needed to			Ц
5			FOR	AGAINST	ABSTAIN
Proposal 5 To ratify the appointment Moss Adams LLP as our independent registered public accounding December 31, 2024 ("Proposal 5"); and	unting firm	for the fiscal year			
			FOR	AGAINST	ABSTAIN
Proposal 6 Consider and vote upon the adjournment of the Annual Meeting, if necessary or approxies in favor of any or all of the other proposals set forth in this Proxy Statement Proposal");					
	Dated:		2024		
		Stockholder's Signatu	ire		
	•	Stockholder's Signatu	ire		

Authorizing the Company's Board of Directors to combine outstanding shares of the Company's common stock

Signature should agree with name printed hereon. If stock is held in the name of more than one person, EACH joint owner should sign. Executors, administrators, trustees, guardians, and attorneys should indicate the capacity in which they sign. Attorneys should submit powers of attorney.

PLEASE SIGN, DATE AND RETURN THE PROXY IN THE ENVELOPE ENCLOSED TO ISSUER DIRECT. THIS PROXY WILL BE VOTED IN THE MANNER DIRECTED HEREIN BY THE UNDERSIGNED STOCKHOLDER. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED "FOR" PROPOSAL 1, "FOR" PROPOSAL 2, "FOR" PROPOSAL 3, "FOR" PROPOSAL 4, "FOR" PROPOSAL 5 AND "FOR" THE ADDITIONAL SOLICITATION PROPOSAL. THIS PROXY WILL REVOKE ALL PRIOR PROXIES SIGNED BY YOU.