

PROSPECTUS SUPPLEMENT NO. 10

Ensysce™ biosciences

This prospectus supplement amends and supplements the prospectus dated November 4, 2021, as supplemented or amended from time to time (the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (No. 333-260478). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our Quarterly Report on Form 10-Q, filed with the U.S. Securities and Exchange Commission on August 11, 2022 (the “Quarterly Report”). Accordingly, we have attached the Quarterly Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the issuance by us and the resale by the selling security holders named in the Prospectus (the “Selling Securityholders”) of up to an aggregate of 15,083,475 shares of our common stock, par value \$0.0001 per share (“common stock”), which consists of (i) up to 14,000,000 shares of common stock that are issuable to certain of the Selling Securityholders that are party to the Securities Purchase Agreement, dated September 24, 2021 (the “Securities Purchase Agreement”) upon the conversion of \$15,900,000.00 aggregate principal amount of our secured convertible 6% original issue discount promissory notes (the “Investor Notes”), plus accrued and unpaid interest thereon, based upon a conversion price of \$5.87 per share; and (ii) up to 1,083,475 shares of common stock that are issuable to certain of the Selling Securityholders that are party to the Securities Purchase Agreement upon the exercise of warrants to purchase shares of our common stock that we issued to such selling stockholders in the private placement that closed in connection with the Securities Purchase Agreement (the “Investor Warrants”).

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

Our registration of the securities covered by the Prospectus and this prospectus supplement does not mean that either we or the Selling Securityholders will issue, offer or sell, as applicable, any of the securities hereby registered. The Selling Securityholders may offer, sell, or distribute all or a portion of the securities hereby registered publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any of the proceeds from such sales of our common stock by the Selling Securityholders pursuant to the Prospectus and this prospectus supplement. We will, however, receive the net proceeds of any Investor Warrants exercised for cash. We will bear all costs, expenses and fees in connection with the registration of these securities, including with regard to compliance with state securities or “blue sky” laws. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of shares of our common stock. Most of the Selling Securityholders are subject to lock-up arrangements. See “Plan of Distribution” beginning on page 123 of the Prospectus.

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

Our common stock is listed on the Nasdaq under the symbol “ENSC” and our Public Warrants are listed on the OTC Pink Open Market under the symbol “ENSCW.” On August 16, 2022, the closing sale price of our common stock as reported on Nasdaq was \$0.4813 and the closing sale price for our Public Warrants as reported on the OTC Pink Open Market was \$0.07.

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

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

Our business and investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 8 of the Prospectus and in the other documents that are incorporated by reference in the Prospectus.

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

The date of this prospectus supplement is August 19, 2022.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-38306

Ensysce Biosciences, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

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

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

92037
(Zip Code)

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

As of August 8, 2022, the registrant had 37,320,556 shares of common stock, \$0.0001 par value per share, outstanding.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "objective," "ongoing," "plan," "potential," "predict," "project," "should," "will" and "would," or the negative of these terms or other similar expressions intended to identify statements about the future. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements include, without limitation, statements about:

- the risk that our lead product candidate PF614 and PF614-MPAR™ may not be successful in limiting or impeding abuse, overdose, or misuse or providing additional safety upon commercialization;
- reliance by us on third-party contract research organizations, or CROs, for its research and development activities and clinical trials;
- the need for substantial additional funding to complete the development and commercialization of our product candidates;
- the risk that our clinical trials may fail to replicate positive results from earlier preclinical studies or clinical trials conducted by us or third parties;
- the risk that the potential product candidates that we develop may not progress through clinical development or receive required regulatory approvals within expected timelines or at all;
- the risk that clinical trials may not confirm any safety, potency, or other product characteristics described or assumed in this Quarterly Report on Form 10-Q;
- the risk that we will be unable to successfully market or gain market acceptance of its product candidates;
- the risk that our product candidates may not be beneficial to patients or successfully commercialized;

- the risk that we have overestimated the size of the target market, patients’ willingness to try new therapies, and the willingness of physicians to prescribe these therapies;
- effects of competition;
- the risk that third parties on which we depend for laboratory, clinical development, manufacturing, and other critical services will fail to perform satisfactorily;
- the risk that our business, operations, clinical development plans and timelines, and supply chain could be adversely affected by the effects of health epidemics, including the ongoing COVID-19 pandemic;
- the risk that we will be unable to obtain and maintain sufficient intellectual property protection for its investigational products or will infringe the intellectual property protection of others;
- the loss of key members of our management team;
- changes in our regulatory environment;
- our need for additional financing to fund its operations and research and development;
- the ability to attract and retain key scientific, medical, commercial, or management personnel;
- changes in our industry;
- our ability to remediate any material weaknesses or maintain effective internal controls over financial reporting;
- the risk that our common stock will be suspended from trading on Nasdaq;
- the ability to meet and maintain applicable listing standards of the Nasdaq; and
- other factors disclosed in this Quarterly Report on Form 10-Q.

The forward-looking statements contained in this Quarterly Report on Form 10-Q are based on Ensysce’s current expectations and beliefs concerning future developments and their potential effects Ensysce. There can be no assurance that future developments affecting Ensysce will be those that Ensysce has anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond Ensysce’s control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2021 and other filings with the Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should any of the assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Moreover, the occurrence of the events described in the “Risk Factors” in our Annual Report on Form 10-K may adversely affect Ensysce. Ensysce will not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

GLOSSARY

Definitions:

2021 Notes	The senior secured convertible promissory notes in the aggregate original principal amount of \$15.9 million, sold in two closings on September 24, 2021 and November 5, 2021, respectively, pursuant to the Securities Purchase Agreement entered into on September 24, 2021
2022 Notes	The senior secured convertible promissory notes in the aggregate original principal amount of \$8.48 million, sold in two closings on July 1, 2022, and August 9, 2022, respectively, pursuant to the Securities Purchase Agreement entered into on June 30, 2022
2021 Omnibus Incentive Plan	Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan
Aggregate Limit	Up to \$60 million of gross proceeds with respect to the GEM Agreement
ASC 606	Accounting Standards Codification Topic 606, <i>Revenue from Contracts with Customers</i>
ASC 740	Accounting Standards Codification Topic 740, <i>Income Taxes</i>
ASC 820	Accounting Standards Codification Topic 820, <i>Fair Value Measurements</i>
Board	Board of directors of Ensysce, or a committee thereof, as applicable
Business Combination	The merger of Merger Sub with and into Former Ensysce, with Former Ensysce continuing as the surviving entity and a wholly-owned subsidiary of LACQ, which changed its name to Ensysce Biosciences, Inc. following consummation of the Merger.
CMOs	Contract manufacturing organizations
Company	Ensysce Biosciences, Inc. and its consolidated subsidiaries
COVID-19	Novel coronavirus disease
Covistat	A clinical stage pharmaceutical company that is developing a compound utilized in the Company’s overdose protection program for the treatment of COVID-19 and 79.2%-owned subsidiary of the Company
CROs	Contract research organizations
Ensysce	Ensysce Biosciences, Inc.
Exchange Act	Securities Exchange Act of 1934
FDA	United States Food and Drug Administration
Former Ensysce	Ensysce Biosciences, Inc., a Delaware corporation, prior to the consummation of the merger with and into Merger Sub
GAAP	Generally Accepted Accounting Principles in the United States of America
GEM Agreement	Share Purchase Agreement between the Company, GEM Global, and GYBL, dated as of December 29, 2020, including a Registration Rights Agreement between the same parties and dated as of the same date
GEM Global	GEM Global Yield LLC SCS
GYBL	GEM Yield Bahamas Limited
IND	Investigational New Drug
IRB	Institutional Review Board
JOBS Act	Jumpstart Our Business Startups Act of 2012
LACQ	Leisure Acquisition Corp., a Delaware Corporation
Merger Agreement	Agreement and Plan of Merger, dated as of January 31, 2021, by and among LACQ, Merger Sub and Former Ensysce, providing for, among other things, and subject to the terms and conditions therein, a business combination between Former Ensysce and LACQ pursuant to the proposed merger of Merger Sub with and into Former Ensysce, with Former Ensysce surviving the transaction as a wholly-owned subsidiary of LACQ, which changed its name to Ensysce Biosciences, Inc. following consummation of the Merger
Merger Sub	EB Merger Sub, Inc., a Delaware corporation, a wholly-owned subsidiary of LACQ prior to the consummation of the Merger
MPAR	Multi-Pill Abuse Resistance

MPAR Grant	Research and development grant related to the development of its MPAR™ overdose prevention technology awarded to the Company by NIH through NIDA in September 2018
Nasdaq	Nasdaq Stock Market LLC
NIDA	National Institute of Drug Abuse
NIH	National Institutes of Health
ODU Grant	Research and development grant related to the development of its TAAP/MPAR™ abuse deterrent technology for Opioid Use Disorder awarded to the Company by NIH/NIDA in September 2019
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933
SPA	Securities Purchase Agreement, dated as of September 24, 2021, by and between Ensysce and the institutional investors party thereto
TAAP	Trypsin Activated Abuse Protection

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

ENSYSCE BIOSCIENCES, INC.
CONSOLIDATED BALANCE SHEETS

	June 30, 2022	December 31, 2021
	(Unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 3,734,646	\$ 12,264,736
Unbilled receivable	276,631	441,721
Right-of-use asset	10,251	24,721
Prepaid expenses and other current assets	3,173,246	2,931,415
Total current assets	7,194,774	15,662,593
Property and equipment, net	-	-
Deferred financing costs	82,819	-
Other assets	671,423	754,756
Total assets	\$ 7,949,016	\$ 16,417,349
Liabilities and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 3,048,037	\$ 301,104
Accrued expenses and other liabilities	2,670,591	3,407,533
Lease liability	10,313	24,874
Notes payable and accrued interest (\$2,519,539 and \$12,358,886 at fair value at June 30, 2022 and December 31, 2021, respectively)	2,519,539	12,748,155
Total current liabilities	8,248,480	16,481,666
Long-term liabilities:		
Notes payable, net of current portion	137,317	4,440,951
Other long-term liabilities	360,797	3,652,790
Total liabilities	\$ 8,746,594	\$ 24,575,407
Commitments and contingencies (Note 6)		

Stockholders' deficit

Preferred stock, \$0.0001 par value, 1,500,000 shares authorized, no shares issued and outstanding at June 30, 2022 (unaudited) and December 31, 2021	-	-
Common stock, \$0.0001 par value, 150,000,000 shares authorized; 35,550,034 and 24,662,904 shares issued at June 30, 2022 (unaudited) and December 31, 2021, respectively; 35,530,279 and 24,643,149 shares outstanding at June 30, 2022 (unaudited) and December 31, 2021, respectively	3,553	2,464
Additional paid-in capital	95,016,354	77,964,860
Accumulated deficit	(95,511,543)	(85,845,567)
Total Ensysce Biosciences, Inc. stockholders' deficit	(491,636)	(7,878,243)
Noncontrolling interests in stockholders' deficit	(305,942)	(279,815)
Total stockholders' deficit	(797,578)	(8,158,058)
Total liabilities and stockholders' deficit	\$ 7,949,016	\$ 16,417,349

The accompanying notes are an integral part of these consolidated financial statements.

1

ENSYSCE BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	<u>(Unaudited)</u>	<u>(Unaudited)</u>	<u>(Unaudited)</u>	<u>(Unaudited)</u>
Federal grants	\$ 207,471	\$ 444,516	\$ 810,569	\$ 695,091
Operating expenses:				
Research and development	5,311,298	463,219	8,451,394	787,595
General and administrative	1,951,356	393,914	4,217,161	884,386
Total operating expenses	7,262,654	857,133	12,668,555	1,671,981
Loss from operations	(7,055,183)	(412,617)	(11,857,986)	(976,890)
Other income (expense):				
Change in fair value of derivative liabilities	-	712,899	-	673,314
Change in fair value of convertible notes	(88,763)	-	2,678,415	-
Change in fair value of liability classified warrants	148,393	-	2,942,791	-
Loss on debt conversions	(892,636)	-	(2,595,278)	-
Interest expense	(37,781)	(910,327)	(52,802)	(1,258,161)
Other income and expense, net	2,850	(347,566)	10,816	(347,566)
Total other income (expense), net	(867,937)	(544,994)	2,983,942	(932,413)
Net loss	\$ (7,923,120)	\$ (957,611)	\$ (8,874,044)	\$ (1,909,303)
Net loss attributable to noncontrolling interests	(26,309)	(22,067)	(26,127)	(26,028)
Deemed dividend related to warrants down round provision	102,479	-	818,059	-
Net loss attributable to common stockholders	\$ (7,999,290)	\$ (935,544)	\$ (9,665,976)	\$ (1,883,275)
Net loss per share:				
Net loss per share attributable to common stockholders, basic and diluted	\$ (0.24)	\$ (0.06)	\$ (0.32)	\$ (0.12)
Weighted average common shares outstanding, basic and diluted	33,988,783	16,053,550	30,656,712	15,943,867

The accompanying notes are an integral part of these consolidated financial statements.

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ENSYSCE BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)
(Unaudited)

	<u>Stockholders' Equity (Deficit)</u>					
	<u>Common Stock</u>		<u>Additional</u>			
	<u>Number of Shares</u>	<u>Amount</u>	<u>Paid-In Capital</u>	<u>Accumulated Deficit</u>	<u>Noncontrolling interests</u>	
					<u>Total</u>	
Balance on March 31, 2021	16,053,550	\$ 1,605	\$ 49,822,991	\$ (56,906,447)	\$ (221,586)	\$ (7,303,437)
Stock-based compensation	-	-	36,373	-	-	36,373
Settlement of convertible notes	1,357,968	136	5,696,567	-	-	5,696,703
Issuance of common stock for business combinations, net of transaction costs	6,844,268	684	7,694,580	-	-	7,695,264
Net loss	-	-	-	(935,544)	(22,067)	(957,611)
Balance on June 30, 2021	24,255,786	\$ 2,425	\$ 63,250,511	\$ (57,841,991)	\$ (243,653)	\$ 5,167,292
Balance on March 31, 2022	29,949,032	\$ 2,995	\$ 88,900,164	\$ (87,512,253)	\$ (279,633)	\$ 1,111,273
Conversion of convertible notes	5,481,247	548	5,718,141	-	-	5,718,689
Stock-based compensation	-	-	295,580	-	-	295,580
Settlement of restricted stock units	100,000	10	(10)	-	-	-
Deemed dividend related to warrants down round provision	-	-	102,479	(102,479)	-	-
Net loss	-	-	-	(7,896,811)	(26,309)	(7,923,120)
Balance on June 30, 2022	35,530,279	\$ 3,553	\$ 95,016,354	\$ (95,511,543)	\$ (305,942)	\$ (797,578)

ENSYSCE BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)
(Unaudited)

	Common Stock		Stockholders' Equity (Deficit)			Total
	Number of Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Noncontrolling interests	
Balance on December 31, 2020	239,465,160	\$ 5,987	\$ 49,511,927	\$ (55,958,716)	\$ (217,625)	\$ (6,658,427)
Retroactive application of recapitalization	(223,696,435)	(4,410)	4,410	-	-	-
Balance on December 31, 2020, effect of reverse recapitalization	15,768,725	1,577	49,516,337	(55,958,716)	(217,625)	(6,658,427)
Exercise of stock options	284,825	28	262,834	-	-	262,862
Settlement of convertible notes	1,357,968	136	5,696,567	-	-	5,696,703
Issuance of common stock for business combination, net of transaction costs	6,844,268	684	7,694,580	-	-	7,695,264
Stock-based compensation	-	-	80,193	-	-	80,193
Net loss	-	-	-	(1,883,275)	(26,028)	(1,909,303)
Balance on June 30, 2021	24,255,786	\$ 2,425	\$ 63,250,511	\$ (57,841,991)	\$ (243,653)	\$ 5,167,292
Balance on December 31, 2021	24,643,149	\$ 2,464	\$ 77,964,860	\$ (85,845,567)	\$ (279,815)	\$ (8,158,058)
Consultant compensation	50,000	5	54,245	-	-	54,250
Conversions of convertible notes	10,189,772	1,019	13,793,013	-	-	13,794,032
Settlement of restricted stock units	647,358	65	(65)	-	-	-
Stock-based compensation	-	-	2,386,242	-	-	2,386,242
Deemed dividend related to warrants down round provision	-	-	818,059	(818,059)	-	-
Net loss	-	-	-	(8,847,917)	(26,127)	(8,874,044)
Balance on June 30, 2022	35,530,279	\$ 3,553	\$ 95,016,354	\$ (95,511,543)	\$ (305,942)	\$ (797,578)

The accompanying notes are an integral part of these consolidated financial statements.

ENSYSCE BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (8,874,044)	\$ (1,909,303)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	-	101
Gain on sale of asset	(4,500)	-
Accrued interest	28,677	312,197
Accretion of discounts on promissory notes	-	945,969
Change in fair value of embedded derivative	-	(673,314)
Change in fair value of liability classified warrants	(2,942,791)	-
Change in fair value of convertible notes	(2,678,415)	347,566
Stock-based compensation	698,013	80,193
Lease cost	(91)	(1,177)
Loss on debt conversions	2,595,278	-
Changes in operating assets and liabilities:		
Unbilled receivable	165,090	(75,354)
Prepaid expenses and other assets	(158,499)	103,245
Accounts payable	2,746,933	347,420
Accrued expenses and other liabilities	546,841	(127,004)
Net cash used in operating activities	<u>(7,877,508)</u>	<u>(649,461)</u>
Cash flows from investing activities:		
Proceeds from sale of asset	4,500	-
Net cash provided by investing activities	<u>4,500</u>	<u>-</u>
Cash flows from financing activities:		
Proceeds from issuance of promissory notes	-	50,000
Proceeds from issuance of promissory notes to related parties	-	350,000
Proceeds from exercise of stock options	-	262,862
Repayments of convertible notes	(265,812)	-
Proceeds from issuance of common stock for business combination	-	7,804,167
Repayment of financed insurance premiums	(391,270)	-
Net cash (used in) provided by financing activities	<u>(657,082)</u>	<u>8,467,029</u>
Increase (decrease) in cash and cash equivalents	(8,530,090)	7,817,568
Cash and cash equivalents beginning of period	12,264,736	194,214
Cash and cash equivalents end of period	3,734,646	8,011,782

Supplemental cash flow information:

Income tax payments	1,600	1,600
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Supplemental disclosure of non-cash investing and financing activities:

Transaction costs for business combination included in accounts payable offset against additional paid-in capital	-	1,200,412
Deferred transaction costs for convertible notes	82,819	-
Stock-based compensation	1,742,479	-
Conversions of convertible notes into common stock	11,198,754	5,696,703
Net assets acquired in business combination	-	1,068,950
Deemed dividend related to warrants down round provision	818,059	-

The accompanying notes are an integral part of these consolidated financial statements.

ENSYSCE BIOSCIENCES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1 – ORGANIZATION AND PRINCIPAL ACTIVITIES

Ensysce Biosciences, Inc. (“Ensysce”), along with its subsidiary, Covistat Inc. (“Covistat”) and its wholly-owned subsidiaries EBI Operating, Inc. and EBI OpCo, Inc. (collectively, the “Company”), is a clinical-stage biotech company using its two novel proprietary technology platforms to develop safer prescription drugs. The primary focus of the Company is developing abuse and overdose resistant pain drugs, with a clinical stage program for the abuse resistant, TAAP (Trypsin Activated Abuse Protection) opioid product candidate, PF614. In addition, the Company is developing its MPARTM (Multi-Pill Abuse Resistance) technology for overdose protection which will be applied to the PF614 program. The Company has also commenced development work applying its TAAP and MPARTM technology to a methadone prodrug for use in the treatment of Opioid Use Disorder (OUD).

On January 31, 2021, Leisure Acquisition Corp., a Delaware corporation (“LACQ”), entered into an Agreement and Plan of Merger (as amended, the “Merger Agreement”) with Ensysce Biosciences, Inc., a Delaware corporation (“Former Ensysce”), and EB Merger Sub, Inc., a Delaware corporation and wholly-owned, direct subsidiary of LACQ (“Merger Sub”). Pursuant to the Merger Agreement, on June 30, 2021 (the “Closing Date”), Merger Sub was merged with and into Former Ensysce, with Former Ensysce surviving the merger (“Merger” and, together with the other transactions contemplated by the Merger Agreement, the “Business Combination”). In connection with the closing of the Business Combination on the Closing Date (the “Closing”), Former Ensysce became a wholly-owned subsidiary of LACQ and the stockholders of Former Ensysce, as of immediately prior to the effective time of the Merger, received shares of LACQ and hold a portion of the shares of Common Stock, par value \$0.0001 per share (the “Common Stock”), of LACQ.

On the Closing Date, at the effective time of the Merger, LACQ changed its name from “Leisure Acquisition Corp.” to “Ensysce Biosciences, Inc.” Unless the context otherwise requires, “we,” “us,” “our” and the “Company” refer to Ensysce and the combined company and its subsidiaries following the Closing. Unless the context otherwise requires, references to “LACQ” refer to Leisure Acquisition Corp., a Delaware corporation, prior to the Closing.

In connection with the Business Combination, outstanding shares of common stock of Former Ensysce (including shares resulting from the conversion of Former Ensysce’s convertible debt prior to Closing) were converted into the right to receive shares of Ensysce at an exchange ratio of 0.06585. Immediately following the Business Combination, stockholders of Former Ensysce owned approximately 71.8% of the outstanding common stock of the combined company. In addition, Former Ensysce’s existing options and warrants were exchanged for equivalent securities in Ensysce on their existing terms (with standard adjustments to exercise price and underlying shares, consistent with the foregoing exchange ratio). As of July 2, 2021, Ensysce’s shares of common stock are traded on the Nasdaq Capital Market (“Nasdaq”) under the new ticker symbol “ENSC”.

In June 2020, the Company commenced an initiative to develop a therapeutic for the treatment of certain coronavirus infections through the formation of a separate entity, Covistat, Inc., a Delaware corporation. Pursuant to the articles of incorporation, Covistat was authorized to issue 1,000,000 shares of common stock, \$0.001 par value per share, and 100,000 shares of preferred stock, \$0.001 par value per share. Ensysce is a 79.2% stockholder in Covistat, with 19.8% and 1.0% of the shares held by certain key personnel of the Company and an unrelated party, respectively. Covistat’s emphasis is now on developing one or more compounds utilized in Ensysce’s overdose protection program for the treatment of respiratory diseases.

To date, the Company’s financial condition and operations have not been significantly impacted by the ongoing COVID-19 pandemic. However, the Company cannot at this time predict the specific extent, duration, or full impact that the ongoing COVID-19 pandemic will have on our financial condition and operations, including ongoing and planned clinical trials and other operations required to support those clinical trials and research and development activities to advance our pipeline. No impairments were recorded as of the balance sheet date as no triggering events or changes in circumstances; however, due to significant uncertainty surrounding the situation, management’s judgment regarding this could change in the future. In addition, while the Company’s results of operations, cash flows and financial condition could be negatively impacted, the extent of the impact cannot be reasonably estimated at this time.

The Company currently operates in one business segment, which is pharmaceuticals. The Company is not organized by market and is managed and operated as one business. A single management team reports to the chief operating decision maker, the Chief Executive Officer.

NOTE 2 - BASIS OF PRESENTATION

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and pursuant to the rules and regulations of the United States Securities Exchange Commission (“SEC”). The consolidated financial statements include the accounts of Ensysce Biosciences, Inc. and its subsidiaries. All intercompany balances and transactions have been eliminated in the consolidation.

In the opinion of management, all adjustments considered necessary for a fair presentation have been included in the consolidated financial statements. Operating results for the three and six months ended June 30, 2022, are not necessarily indicative of the results that may be expected for the year ending December 31, 2022. The interim unaudited consolidated financial statements have been prepared under the presumption that users of the interim financial information have either read or have access to the audited consolidated financial statements for the fiscal year ended December 31, 2021, which may be found in the Company’s Form 10-K filed with the SEC on March 31, 2022.

Business Combination

The Business Combination was accounted for as a reverse recapitalization in accordance with U.S. GAAP. Under this method of accounting, LACQ was identified as the acquired company for financial reporting purposes, primarily because the stockholders of Former Ensysce control the majority of the voting power of the combined company, Former Ensysce’s board of directors comprise a majority of the governing body of the combined company, and Former Ensysce’s senior management comprise the leadership of the combined company. Accordingly, for accounting purposes, the transaction was treated as the equivalent of Former Ensysce issuing shares for the net assets of LACQ, accompanied by a recapitalization. The net assets of LACQ, primarily consisting of cash of \$7.8 million and prepaid expenses of \$1.1 million, were recorded at historical cost

with no goodwill or other intangible assets recorded. The shares and net loss per share prior to the reverse recapitalization have been retroactively restated to reflect the exchange ratio of 0.06585. The financial statements reflect the historical operations of Ensysce.

Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern, which contemplates, among other things, the realization of assets and satisfaction of liabilities in the normal course of business.

The Company has not generated any product revenue and had an accumulated deficit of \$95.5 million at June 30, 2022. There is no assurance that profitable operations will ever be achieved, and, if achieved, could be sustained on a continuing basis. Product development activities, clinical and pre-clinical testing, and commercialization of the Company's product candidates are necessary to develop the Company's products and will require significant additional financing. There can be no assurance the Company will be able to obtain such funds. These matters, among others, raise substantial doubt about the Company's ability to continue as a going concern.

In December 2020, the Company executed a share subscription facility with an investment group (the "GEM agreement"). Under the agreement, the investor agreed to provide the Company with a share subscription facility of up to \$60.0 million for a 36-month term following the public listing of the Company's common stock. The Company will control the timing and maximum amount of drawdown under this facility and has no minimum drawdown obligation. The investor will pay, in cash, a per-share amount equal to 90% of the average daily closing price of the Company's stock during the 30 consecutive trading days prior to the issuance of a draw notice, which shall not exceed 400% of the average trading volume for the 30 trading days immediately preceding the draw down date. On June 30, 2021, the Company consummated the Business Combination with LACQ, resulting in the Company's shares becoming publicly listed on Nasdaq on July 2, 2021. Concurrent with the public listing of the Company's shares, the Company issued to the investor 1,106,108 warrants with a five-year term to purchase common stock of Ensysce at an exercise price of \$10.01 per share (Note 8). The Company must pay a commitment fee to the investor of \$1.2 million with \$800,000 due on the first anniversary of the public listing date and \$400,000 due on the 18-month anniversary of the public listing date. The commitment fee can be paid from the proceeds of a draw against the facility or in freely tradable common stock of the Company (Note 11).

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In September 2021, the Company entered into a \$15.9 million convertible note financing agreement with institutional investors (the "2021 Notes") (See Note 7 for additional information). In July and August 2022, the Company received funding under a \$8.48 million convertible note financing agreement with the same institutional investors (the "2022 Notes") (See Note 11 for additional information). The agreements limit the Company's ability to execute certain debt and equity financings, including its existing \$60.0 million share subscription facility, while the convertible notes are outstanding. Without the availability of proceeds through the share subscription facility, existing cash resources are not sufficient to fund current planned operations. While the Company believes in the viability of its strategy to ultimately realize revenues and in its ability to raise additional funds, management cannot be certain that additional funding will be available on acceptable terms, or at all. The Company's ability to continue as a going concern is dependent upon its ability to obtain adequate financing and achieve profitable operations. As a result, these plans do not alleviate substantial doubt about the Company's ability to continue as a going concern for a period of 12 months following the date these consolidated financial statements were issued.

The consolidated financial statements do not include any adjustments that might be necessary should the Company be unable to continue as a going concern.

NOTE 3 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates and Assumptions

Preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and disclosed in the accompanying notes. Actual results may differ from those estimates and such differences may be material to the consolidated financial statements. The more significant estimates and assumptions by management include, but are not limited to, the expense recognition for certain research and development services, the valuation allowance of deferred tax assets resulting from net operating losses, warrants, options to purchase the Company's common stock, and the notes payable.

Cash and Cash Equivalents

For purposes of the consolidated balance sheets and consolidated statements of cash flows, the Company considers all highly liquid instruments with maturity of three months or less at the time of issuance to be cash equivalents.

Concentrations of credit risk and off-balance sheet risk

Cash and cash equivalents are financial instruments that are potentially subject to concentrations of credit risk. The Company's cash and cash equivalents are deposited in accounts at large financial institutions, and amounts may exceed federally insured limits. The Company believes it is not exposed to significant credit risk due to the financial strength of the depository institutions in which the cash and cash equivalents are held. The Company has no financial instruments with off-balance sheet risk of loss.

Property and Equipment

Property and equipment include office and laboratory equipment that is recorded at cost and depreciated using the straight-line method over the estimated useful lives of five to six years. No depreciation expense was recognized for the three and six months ended June 30, 2022. Depreciation expense of \$0 and \$101 was recognized for the three and six months ended June 30, 2021. Depreciation expense is classified in general and administrative expense in the accompanying consolidated statements of operations.

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Property and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets might not be recoverable. Conditions that would necessitate an impairment assessment include a significant decline in the observable market value of an asset, a significant change in the extent or manner in which an asset is used, or a significant adverse change that would indicate that the carrying amount of an asset or group of assets is not recoverable. For long-lived assets to be held and used, the Company will recognize an impairment loss only if the carrying amount is not recoverable through its undiscounted cash flows and measure any impairment loss based on the difference between the carrying amount and estimated fair value. There were no such losses for the three and six months ended June 30, 2022 and 2021.

Derivative Financial Instruments

The Company does not use derivative instruments to hedge exposures to interest rate, market, or foreign currency risks. The Company evaluates all of its financial instruments, including notes payable, to determine whether such instruments are derivatives or contain features that qualify as embedded derivatives. Embedded derivatives must be separately measured from the host contract if all the requirements for bifurcation are met. The assessment of the conditions surrounding the bifurcation of embedded derivatives depends on the nature of the host contract and the features of the derivatives. Bifurcated embedded derivatives are recognized at fair value, with changes in fair value recognized in the consolidated statement of operations each period. Bifurcated embedded derivatives are classified with the related host contract in the Company's consolidated balance sheet.

Fair Value Measurement

ASC 820, *Fair Value Measurements*, (“ASC 820”) provides guidance on the development and disclosure of fair value measurements. Pursuant to ASC 820, fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

The accounting guidance classifies fair value measurements in one of the following three categories for disclosure purposes:

- Level 1: Quoted prices in active markets for identical assets or liabilities.
- Level 2: Inputs other than Level 1 prices for similar assets or liabilities that are directly or indirectly observable in the marketplace.
- Level 3: Unobservable inputs which are supported by little, or no market activity and values determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The Company evaluates assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level at which to classify them for each reporting period. This determination requires significant judgments to be made by the Company.

As of June 30, 2022 and December 31, 2021, the recorded values of cash and cash equivalents, prepaid expenses, accounts payable, and accrued expenses and other liabilities approximate their fair values due to the short-term nature of these items.

2021 Notes

In 2021 the Company issued convertible notes with a face value of \$15.9 million. The Company elected the fair value option to account for the convertible notes as it believes the fair value option provides users of the financial statements with greater ability to estimate the outcome of future events as facts and circumstances change, particularly with respect to changes in the fair value of the common stock underlying the conversion option and redemption feature. The fair value estimate of the 2021 Notes was based on a discounted cash flow model and a Monte Carlo model, which represent Level 3 measurements. Significant assumptions include the discount rate used in the discounted cash flow model and the expected premium for conversion used in the Monte Carlo model. Changes in the fair value of the notes are recognized in other income (expense) for each reporting period. Refer to Note 7 for details of the terms and conditions of the 2021 Notes.

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Warrants

In 2021 the Company issued liability classified warrants in connection with the issuance of the 2021 Notes. The warrants were liability classified due to certain cash settlement features and included in “Other long-term liabilities” on the consolidated balance sheets. The Company uses a Black Scholes model to estimate the fair value of the warrants. Changes in the fair value of the warrants are recognized in other income (expense) for each reporting period. Refer to Note 8.

The following tables present assets and liabilities measured and recorded at fair value on the Company’s consolidated balance sheet as of June 30, 2022 and December 31, 2021.

	June 30, 2022			
	Total	Level 1	Level 2	Level 3
Fair value of convertible note	\$ 2,656,856	\$ -	\$ -	\$ 2,656,856
Liability classified warrants	360,797			360,797
Total	\$ 3,017,653	\$ -	\$ -	\$ 3,017,653

	December 31, 2021			
	Total	Level 1	Level 2	Level 3
Fair value of convertible note	\$ 16,799,837	\$ -	\$ -	\$ 16,799,837
Liability classified warrants	3,303,588			3,303,588
Total	\$ 20,103,425	\$ -	\$ -	\$ 20,103,425

The following table summarizes the change in fair value of the Company’s Level 3 assets and liabilities:

	Total	Convertible note	Liability classified warrants
Fair value, December 31, 2021	\$ 20,103,425	\$ 16,799,837	\$ 3,303,588
Conversions	(11,464,566)	(11,464,566)	-
Change in fair value	(5,621,206)	(2,678,415)	(2,942,791)
Fair value, June 30, 2022	\$ 3,017,653	\$ 2,656,856	\$ 360,797

Federal Grants

In September 2018, the National Institutes of Health (“NIH”) through the National Institute on Drug Abuse awarded the Company a research and development grant related to the development of its MPAR™ overdose prevention technology (the “MPAR Grant”). The total approved budget for the initial two-year period was approximately \$4 million (\$3.2 million and \$2.2 million in years 1 and 2 respectively) of which the Company must contribute \$1.1 million in the first year of the grant. In August 2019, the grant was amended such that the approved budget for the two-year period decreased to approximately \$5.1 million (\$2.1 million and \$3.0 million in years 1 and 2, respectively). In June 2021, the Company received a Notice of Award for an additional \$2.8 million of funding in year 3 under the MPAR Grant beginning July 1, 2021. In June 2022, the Company received a Notice of Award for an additional \$2.8 million of funding in year 4 under the MPAR Grant from July 1, 2022 through June 30, 2023. This brings total funding under this grant to approximately \$10.7 million.

In September 2019, the NIH/National Institute on Drug Abuse awarded the Company a research and development grant related to the development of its TAA/MPAR™ abuse deterrent technology for Opioid Use Disorder (“OUD”) (the “OUD Grant”). The total approved budget was approximately \$5.4 million and the current grant period ends in August 2023.

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The Company recognizes revenue when costs related to the grants are incurred. The Company believes this policy is consistent with the overarching premise in Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* (“ASC 606”), applied by analogy, to ensure that it recognizes revenues to reflect the transfer of

promised goods or services to customers in an amount that reflects the consideration to which it expects to be entitled in exchange for those goods or services, even though there is no “exchange” as defined in ASC 606. The Company believes the recognition of revenue as costs are incurred and amounts become due is analogous to the concept of transfer of control of a service over time under ASC 606.

The revenue recognized under the MPAR Grant and OUD Grant was as follows:

	Three Months Ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
MPAR	\$ -	\$ 53,386	\$ 504,471	\$ 127,112
OUD	207,471	391,130	306,098	567,979
Total	\$ 207,471	\$ 444,516	\$ 810,569	\$ 695,091

Amounts requested or eligible to be requested through the NIH payment management system, but for which cash has not been received, are presented as an unbilled receivable on the Company’s consolidated balance sheet. As all amounts are expected to be remitted timely, no valuation allowances are recorded.

Immaterial Correction of an Error

In August 2022, the Company concluded that due to an error in the measurement of the unbilled receivable and the associated grant revenue as of December 31, 2021, and March 31, 2022, the June 30, 2022, balance sheet would be adjusted. The change resulted in a decrease in the balance of the unbilled receivable of \$214,308 and a corresponding increase in general and administrative expense presented in the consolidated statement of operations.

The Company, in consultation with the Audit Committee of the Board of Directors, evaluated the effect of these adjustments on the Company’s consolidated financial statements under ASC 250, Accounting Changes and Error Corrections and Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements and determined it was not necessary to recall its previously issued consolidated financial statements as the errors did not materially misstate any previously issued consolidated financial statements and the correction of the error in the current fiscal year is also not material. The Company looked at both quantitative and qualitative characteristics of the required corrections in making the determination.

Research and Development Costs

The Company’s research and development expenses consist primarily of third-party research and development expenses, consulting expenses, animal and clinical studies, and any allocable direct overhead, including facilities and depreciation costs, as well as salaries, payroll taxes, and employee benefits for those individuals directly involved in ongoing research and development efforts. Research and development expenses are charged to expense as incurred. Payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel costs associated with the Company’s executive, finance, human resources, compliance, and other administrative personnel, as well as accounting and legal professional services fees.

Stock-based Compensation

The Company expenses stock-based compensation over the requisite service period based on the estimated grant-date fair value of the awards using a graded amortization approach. The Company accounts for forfeitures as they occur.

The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model. The assumptions used in calculating the fair value of stock-based awards represent management’s best estimates and involve inherent uncertainties and the application of management’s judgment. For the three and six months ended June 30, 2022 and 2021, stock-based compensation costs are recorded in general and administrative expenses and research and development expenses in the consolidated statements of operations.

From time to time equity classified awards may be modified. On the modification date, the Company estimates the fair value of the awards immediately before and immediately after modification. The incremental increase in fair value is recognized as expense immediately to the extent the underlying equity awards are vested and over the same remaining amortization schedule as the unvested underlying equity awards.

Income Taxes

Income taxes are recorded in accordance with ASC 740, *Income Taxes* (“ASC 740”), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the consolidated financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. The Company recognizes any interest and penalties accrued related to unrecognized tax benefits as income tax expense.

Earnings per Share

The basic earnings per share is calculated by dividing the Company’s net income or loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. The diluted earnings per share is calculated by dividing the Company’s net earnings attributable to common stockholders by the diluted weighted average number of common shares outstanding during the period, determined using the treasury stock method and the average stock price during the period. A reconciliation of the numerators and denominators of the basic and diluted earnings per share calculations follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Numerator:				
Net loss attributable to common stockholders	\$ (7,999,290)	\$ (935,544)	\$ (9,665,976)	\$ (1,883,275)
Denominator:				
Weighted average shares outstanding, basic and diluted	33,988,783	16,053,550	30,656,712	15,943,867

Net loss per share attributable to common stockholders, basic and diluted	\$	(0.24)	\$	(0.06)	\$	(0.32)	\$	(0.12)
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The following weighted average shares have been excluded from the calculations of diluted weighted average common shares outstanding because they would have been anti-dilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Stock options	6,885,282	4,444,068	6,341,204	4,553,751
Warrants	21,090,873	19,755	21,090,873	19,755
Total	27,976,155	4,463,823	27,432,077	4,573,506

Recently Issued Accounting Pronouncements

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (“ASU 2019-12”), which simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new guidance also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The guidance is effective for fiscal years beginning after December 31, 2021 and interim periods within that year. On January 1, 2022, the Company adopted ASU 2019-12 and the adoption did not have a significant impact on the consolidated financial statements.

In August 2020, the FASB issued ASU No. 2020-06, Debt – Debt with Conversion and Other Options (Topic 470) to address issues identified as a result of the complexity with applying GAAP for certain financial instruments with characteristics of liabilities and equity. The FASB decided to reduce the number of accounting models for convertible debt instruments and convertible preferred stock, resulting in fewer embedded conversion features being separately recognized from the host contract as compared with current GAAP. Certain types of convertible instruments will continue to be subject to separation models: (a) those with embedded conversion features that are not clearly and closely related to the host contract, that meet the definition of a derivative, and that do not qualify for a scope exception from derivative accounting and (b) convertible debt instruments issued with substantial premiums for which the premiums are recorded as paid-in capital. For convertible instruments, the contracts primarily affected are those with beneficial conversions or cash conversion features as the accounting models for those specific features have been removed. For contracts in an entity’s own equity, the contracts primarily affected are freestanding instruments and embedded features that are accounted for as derivatives due to a failure to meet the settlement conditions of the derivatives scope exceptions. The FASB simplified the settlement assessment by removing the requirements to (a) consider whether the contract would be settled in registered shares, (b) to consider whether collateral is required to be posted, and (c) assess shareholder rights. The FASB also decided to enhance information transparency by making targeted improvements to the disclosures for convertible instruments and earnings-per-share guidance. ASU 2020-06 is effective for fiscal years beginning after December 15, 2023 and early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. Entities must adopt the guidance as of the beginning of its annual fiscal year and a modified retrospective or fully retrospective transition approach is permitted. The Company is evaluating the impact of ASU 2020-06 on the consolidated financial statements.

In May 2021, the FASB issued ASU No. 2021-04, Issuer’s Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options (A Consensus of the FASB Emerging Issues Task Force (the “EITF”)) – to clarify and reduce diversity in an issuer’s accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The guidance in the ASU requires the issuer to treat a modification of an equity-classified warrant that does not cause the warrant to become liability-classified as an exchange of the original warrant for a new warrant. This guidance applies whether the modification is structured as an amendment to the terms and conditions of the warrant or as termination of the original warrant and issuance of a new warrant. Under the amendments, an issuer should measure the effect of a modification as the difference between the fair value of the modified warrant and the fair value of that warrant immediately before modification. The EITF concluded that the recognition of the modification depends on the nature of the transaction in which a warrant is modified. If there is more than one element in a transaction (for example, if the modification involves both a debt modification and an equity issuance), then the guidance requires the issuer to allocate the effect of the option modification to each element. On January 1, 2022, the Company adopted ASU 2021-04 and the adoption did not have a significant impact on the consolidated financial statements.

NOTE 4 – PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consisted of the following:

	June 30, 2022	December 31, 2021
Prepaid research and development	\$ 2,359,986	\$ 2,124,008
Prepaid insurance	681,851	733,234
Other prepaid expenses	131,409	74,173
Total prepaid expenses and other current assets	\$ 3,173,246	\$ 2,931,415

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NOTE 5 – ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities consisted of the following:

	June 30, 2022	December 31, 2021
Share subscription facility commitment fees	\$ 1,200,000	\$ 800,000
Accrued research and development	747,645	388,997
Bonus accrual	302,519	610,000
Professional fees	242,050	138,086
Accrued scientific advisory board fees	60,032	60,032
Consultant stock compensation expenses	-	1,342,479
Other accrued liabilities	118,345	67,939
Total accrued expenses and other liabilities	\$ 2,670,591	\$ 3,407,533

Other long-term liabilities consisted of the following:

	June 30, 2022	December 31, 2021
Share subscription facility commitment fees	\$ -	\$ 349,202

Liability classified warrants		360,797	3,303,588
Total other long-term liabilities		<u>\$ 360,797</u>	<u>\$ 3,652,790</u>

NOTE 6 – COMMITMENTS AND CONTINGENCIES

Purchase Commitments

As of June 30, 2022, the Company's commitments included an estimated \$18.6 million related to the Company's open purchase orders and contractual obligations that occurred in the ordinary course of business, including commitments with contract research organizations for multi-year pre-clinical and clinical research studies. Although open purchase orders are considered enforceable and legally binding, the terms generally allow the Company the option to cancel, reschedule, and adjust its requirements based on its business needs prior to the delivery of goods or the performance of services.

Litigation

As of June 30, 2022 and December 31, 2021, there were no pending legal proceedings against the Company that are expected to have a material adverse effect on cash flows, financial condition or results of operations. From time to time, the Company could become involved in disputes and various litigation matters that arise in the normal course of business. These may include disputes and lawsuits related to intellectual property, licensing, contract law and employee relations matters. Periodically, the Company reviews the status of significant matters, if any exist, and assesses its potential financial exposure. If the potential loss from any claim or legal claim is considered probable and the amount can be estimated, the Company accrues a liability for the estimated loss. Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based on the best information available at the time. As additional information becomes available, the Company reassesses the potential liability related to pending claims and litigation.

Lease

In August 2020, the Company entered into an agreement to lease office space. The lease commencement date was October 1, 2020 and was subsequently amended to extend the term of the lease through October 31, 2022 with no option to renew. The amendment resulted in a modification of the lease under ASC 842 and the Company remeasured the lease liability as of the amendment date.

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As of June 30, 2022, the future lease payments totaled \$10,506.

The Company recognized total rent expense of \$7,834 and \$15,667 in the three and six months ended June 30, 2022, and \$7,062 and \$14,123 in the three and six months ended June 30, 2021.

Compensation Subject to Shareholder Approval

In July 2021, the Company engaged two consultants to perform certain public and investor relations services in consideration for warrants to purchase 500,000 shares of common stock with a five-year term and an exercise price of \$6.28 each, 50,000 shares of common stock each, and 200,000 restricted stock units each. The restricted stock units vest over one year with 50% of the vesting contingent upon certain market conditions. These equity awards were contingent upon shareholder approval of an amended and restated 2021 Omnibus Plan at a special shareholder meeting in January 2022, whereby the warrants were replaced by non-qualified stock options with similar terms. As the original terms of the awards did not satisfy the grant date criteria for an equity award, as of December 31, 2021, the Company recorded a liability \$1,342,479 to reflect the estimated value of services received during the period. On February 14, 2022, the equity awards were granted, and the Company reclassified the outstanding liability to stockholders' equity. During the six months ended June 30, 2022, the Company recorded an additional \$125,222 (\$38,014 related to the three-month period ended June 30, 2022) of consultant compensation to general and administrative expense as a result of the vesting schedule of the restricted stock units.

NOTE 7 – NOTES PAYABLE

The following table provides a summary of the Company's outstanding debt as of June 30, 2022:

	Principal balance	Accrued interest	Fair value adjustment	Net debt balance
2021 convertible notes	\$ 2,651,074	\$ 34,984	\$ (29,202)	\$ 2,656,856
Total	<u>\$ 2,651,074</u>	<u>\$ 34,984</u>	<u>\$ (29,202)</u>	<u>\$ 2,656,856</u>

The following table provides a summary of the Company's outstanding debt as of December 31, 2021:

	Principal balance	Accrued interest	Unamortized debt discount	Net debt balance
2021 Notes	\$ 13,647,341	\$ 159,435	\$ 2,993,061	\$ 16,799,837
Finance Insurance	385,187	4,082	-	389,269
Total	<u>\$ 14,032,528</u>	<u>\$ 163,517</u>	<u>\$ 2,993,061</u>	<u>\$ 17,189,106</u>

The interest expense recognized for notes payable (excluding the 2021 Notes) was as follows:

	Three months ended		Six months ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Stated interest accrual	\$ -	\$ 117,817	\$ 2,004	\$ 227,197
Debt discount amortization	-	771,556	-	945,969
Total	<u>\$ -</u>	<u>\$ 889,373</u>	<u>\$ 2,004</u>	<u>\$ 1,173,166</u>

2021 Notes

On September 24, 2021, the Company entered into an agreement with institutional investors to issue the 2021 Notes. The agreement provides for two closings: the first closing for \$5.3 million (resulting in net proceeds of \$4.6 million) which closed on September 24, 2021 (the "First Closing"). The second closing for \$10.6 million (resulting in net proceeds of \$9.4 million) which closed on November 5, 2021 (the "Second Closing").

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The proceeds of the 2021 Notes shall be used for working capital purposes subject to certain customary restrictions and secured by the Company's rights to its patents and licenses. The Company may not issue any additional debt or equity without the prior written consent of the holders.

The 2021 Notes mature on June 23, 2023 for the First Closing, and August 4, 2023 for the Second Closing. The notes bear interest at a rate of 5% per annum, in addition to an original issue discount of 6%. The interest may be settled in cash or shares at the option of the Company and is payable together with monthly redemptions of the outstanding principal amount of the debt.

The Company elected to apply the fair value option to the measurement of the 2021 Notes. The total initial fair value of the debt at issuance was \$5.9 million. The Company recorded total issuance costs of \$1.9 million representing investment banking and legal fees of \$1.0 million and original issue discounts of \$0.9 million. After multiple conversions since issuance, the Company remeasured the fair value as of June 30, 2022 and recognized a loss of \$88,763 due to changes in effective interest rates for the three-month period then ended and a gain of \$2,678,415 for the six-month period ended June 30, 2022 primarily to reductions in the Company's stock price. The June 30, 2022 fair value measurement includes the assumption of accrued interest and interest expense (at the stated rate plus an 8% cash settlement premium) and thus a separate amount is not reflected on the consolidated statements of operations. If presented separately, the amount of interest expense after consideration of the conversions would be \$71,637 and \$194,856 for the three- and six-month periods ended June 30, 2022, respectively.

The 2021 Notes may be converted into the Company's common stock at the option of the holder in whole or in part at the conversion price of \$5.87, subject to a beneficial ownership limitation of 4.99% (subject to adjustment). The Company must reserve sufficient shares of authorized common stock to effect the conversion of the 2021 Notes and payment of interest. The shares were registered for public resale under a registration statement.

At the Company's option, the Company may redeem some or all of the then-outstanding principal amount of the 2021 Notes for cash in an amount equal to 100% of the principal to be redeemed, plus accrued but unpaid interest, plus all other amounts due with respect to the 2021 Notes.

Beginning January 1, 2022 for the First Closing, and February 1, 2022 for the Second Closing, and the first of each subsequent month, terminating upon the full redemption of the 2021 Notes (each a "Monthly Redemption Date"), the Company shall redeem the Monthly Redemption Amount (defined below), payable in cash or shares. The number of shares to be settled shall be based on a conversion price equal to the lesser of (a) \$5.87 and (b) 92% of the average of the three lowest volume-weighted average prices ("VWAP") during the 10 consecutive trading days prior to the applicable Monthly Redemption Date. The Company may not pay the Monthly Redemption Amount in shares unless the applicable conversion price is greater than or equal to \$0.78 and the Company has been in compliance with customary requirements under the agreement, unless waived in writing by the holder. If the applicable conversion price is less than \$0.78 at the time of the Monthly Redemption Date the Company will be required to fund the difference in cash. During the period ended June 30, 2022, the Company paid \$265,812 to fund such differences in cash (reducing the outstanding principal balance of the 2021 Notes).

The Monthly Redemption Amount is defined as 1/18th of the original principal amount, plus accrued but unpaid interest, plus any other amounts due to the holder with respect to the 2021 Notes. If the Company elects to settle such redemptions in shares, the Monthly Redemption Amount is calculated based on 92% of the average of the lowest three VWAPs in the ten trading days prior to the Monthly Redemption Date. If the Company elects to settle redemptions in cash, the Monthly Redemption Amount shall include an 8% premium of the Monthly Redemption Amount.

If, at any time while the 2021 Notes are outstanding, the Company carries out one or more capital raises in excess of \$5.0 million, the holder has the right to require the Company to use up to 20% of the gross proceeds of such transaction to redeem all or a portion of the convertible notes for an amount in cash equal to the cash Mandatory Redemption Amount (i.e., 108% of outstanding principal and unpaid interest).

The following table provides a summary of the Company's 2021 note conversions during the six-month period ending June 30, 2022:

	Shares	Conversion Price	Redemption Value
January 3, 2022	535,249	\$ 2.83	\$ 1,517,054
February 1, 2022	1,354,423	\$ 1.58	2,145,135
March 1, 2022	2,818,853	\$ 0.96	2,710,511
April 1, 2022	1,962,010	\$ 0.99	1,957,878
May 1, 2022	2,549,910	\$ 0.94	2,406,713
June 1, 2022	969,327	\$ 0.46	461,463
Total	10,189,772		\$ 11,198,754

During the three and six months ended June 30, 2022, the company recognized \$0.9 million and \$2.6 million of loss on debt conversions related to the monthly conversions, resulting from the difference between the conversion price and the average of the high and low stock price on the date of conversion. Such loss is reported under other income (expense), net in the consolidated statements of operations.

Financed insurance premiums

During year ended December 31, 2021, the Company financed its directors' and officers' liability insurance in the amount of \$867,300, of which the note was paid in full as of June 30, 2022. The Company expensed \$0 and \$2,004 of interest for the three and six months ended June 30, 2022, respectively.

NOTE 8 - STOCKHOLDERS' EQUITY

In June 2021, in connection with the Business Combination, the Company amended and restated its Certificate of Incorporation to authorize 150,000,000 shares of common stock and 1,500,000 shares of preferred stock, both with par value equal to \$0.0001. As of June 30, 2022 and December 31, 2021, there were no shares of preferred stock issued and outstanding.

Common Stock

On June 30, 2021, in connection with the Closing, the following common stock activity occurred:

- 16,053,550 shares of common stock were issued to holders of Former Ensysce common stock.
- 6,219,268 shares of common stock outstanding were assumed by the Company.
- 1,357,968 shares of common stock were issued in settlement of \$5.8 million of convertible debt.
- 19,755 shares of restricted common stock were issued in exchange for previously outstanding warrants to purchase Former Ensysce common stock.
- 500,000 shares of common stock were issued in settlement of a termination agreement with a strategic advisor dated January 2021.

- 125,000 shares of common stock were issued in settlement of deferred underwriting costs.

Warrants

On June 30, 2022, outstanding warrants to purchase shares of common stock are as follows:

Reference	Shares Underlying Outstanding Warrants	Exercise Price	Description	Classification
(a)	18,901,290	\$ 10.00 - 11.50	LACQ warrants	Equity
(b)	1,106,108	\$ 0.46	Share subscription facility	Equity
(c)	361,158	\$ 7.63	Convertible note	Liability
(d)	722,317	\$ 7.63	Convertible note	Liability
	<u>21,090,873</u>			

a) On June 30, 2021, as a result of the closing of the business combination, the Company assumed a total of 18,901,290 warrants previously issued by LACQ. The warrants provide holders the right to purchase common stock at a strike price of between \$10.00 and \$11.50 per share and expire June 30, 2026, five years following the completion of the Business Combination. A total of 10,000,000 of the outstanding warrants are public warrants which trade on the OTC Pink Open Market under the ticker symbol ENSCW. The remaining 8,901,290 warrants are private warrants with restrictions on transfer and which have the right to a cashless exercise at the option of the holder.

On August 3, 2021, the Company entered into an agreement with an existing warrant holder to reduce the exercise price of 500,000 warrants issued on June 30, 2021 from \$11.50 to \$10.00, resulting in an incremental increase in their fair value of \$6,591, recognized in general and administrative expense.

b) On July 2, 2021, upon public listing of the Company's shares, the Company issued 1,106,108 warrants to purchase common stock pursuant to the share subscription facility. The warrants have a three-year life and an exercise price of \$10.01 per share. The grant date fair value of the warrants, based on the \$14.49 stock price on the date of issuance, was \$11.6 million, and was recognized in general and administrative expense due to the uncertainty of future issuance of shares under the share subscription facility.

On December 28, 2021, January 3, 2022, February 1, 2022, March 1, 2022, May 1, 2022, and June 1, 2022 the exercise price of the warrants adjusted to \$4.50 per share, \$2.83 per share, \$1.58 per share, \$0.96 per share, \$0.94 per share, and \$0.46 per share, respectively, as required by a down round adjustment feature of the warrant, due to common stock issued at a price below the then current exercise price. The difference in fair value of the existing warrant prior to the adjustment and the value of the warrant after (utilizing a "Black-Scholes model") is reflected on the consolidated statement of operations as a "deemed dividend."

c) On September 24, 2021, the Company issued 361,158 warrants in connection with the issuance of the convertible notes. The warrants were immediately exercisable with an exercise price of \$7.63 (subject to downward revision protection in the event the Company makes certain issuances of common stock at prices below the conversion price) and expire on September 23, 2026.

d) On November 5, 2021, the Company issued 722,317 warrants in connection with the issuance of the 2021 Notes. The warrants were immediately exercisable with an exercise price of \$7.63 (subject to downward revision protection in the event the Company makes certain issuances of common stock at prices below the conversion price) and expire on November 4, 2026.

The fair value of each warrant issued has been determined using the Black-Scholes option-pricing model. The material assumptions used in the Black-Scholes model in estimating the fair value of the warrants issued for the periods presented were as follows:

	(a) LACQ warrants (grant date varies)	(b) Share subscription facility (grant date 7/2/21)	(b) Share subscription facility (remeasurement date varies)	(c) Liability classified warrants (grant date 9/24/2021)	(c) Liability classified warrants (remeasured at 6/30/22)	(d) Liability classified warrants (grant date 11/5/2021)	(d) Liability classified warrants (remeasured at 6/30/22)
Stock price	\$ 14.49	\$ 14.49	\$ 0.57-4.29	\$ 4.49	\$ 0.87	\$ 2.25	\$ 0.87
Exercise price	\$ 10.00 - 11.50	\$ 10.01	\$ 0.46-2.83	\$ 7.63	\$ 7.63	\$ 7.63	\$ 7.63
Expected term (years)	3.00	3.00	2.08-2.49	5.00	4.25	5.00	4.35
Volatility	110.0%	110.0%	108.17%-117.22%	94.1%	103.6%	94.1%	103.0%
Risk free rate	0.5%	0.5%	1.04%-2.93%	1.0%	3.0%	1.0%	3.0%

NOTE 9 - STOCK-BASED COMPENSATION

In 2016, Former Ensycce adopted the Ensycce Biosciences, Inc. 2016 Stock Incentive Plan (the "2016 Plan"). The 2016 Plan, as amended, allowed for the issuance of non-statutory stock options, incentive stock options and other equity awards to Former Ensycce's employees, directors, and consultants.

In March 2019, Former Ensycce adopted the 2019 Directors Plan, which was amended in August 2020. The 2019 Directors Plan, as amended, allowed for the issuance of shares of Former Ensycce's common stock pursuant to the grant of non-statutory stock options.

In addition to the 2016 Plan and the 2019 Directors Plan, the Company has two legacy equity incentive plans (the "Legacy Plans"). No additional equity awards may be made under the Legacy Plans and the outstanding options will expire if unexercised by certain dates through August 2024.

In connection with the Business Combination, the Company assumed the 2021 Omnibus Incentive Plan (the "2021 Omnibus Plan"), which was approved by LACQ's board and subsequently LACQ's stockholders at a special stockholder meeting on June 28, 2021. The 2021 Omnibus Plan provides for the conversion with existing terms of the 4,444,068 options outstanding under Former Ensycce stock plans and reserves for issuance an additional 1,000,000 shares for future awards under the 2021 Omnibus Plan. On January 26,

2022, the 2021 Omnibus Plan was amended and restated to include an additional 3,000,000 shares available for future grant and to provide for future annual increases. No further awards may be made under the Former Ensysce stock plans.

The Company recognized within general and administrative expense stock-based compensation expense of \$228,823 and \$602,767 for the three and six months ended June 30, 2022, and \$36,373 and \$80,193 for the three and six months ended June 30, 2021. During the three and six months ended June 30, 2022, the Company recognized stock-based compensation expense of \$66,756 and \$95,246 within research and development. During the three and six months ended June 30, 2021, there was no stock-based compensation allocated to research and development.

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Option Activity

During the six months ended June 30, 2022, the Company granted stock options to purchase an aggregate of 2,291,000 shares of common stock to employees, consultants and members of the board of directors. The options vest over periods between 0 and 4 years and have an exercise price of between \$0.43 and \$6.28 per share. There were no stock option grants in 2021.

The following table summarizes the Company's stock option activity during the six months ended June 30, 2022:

	Options	Weighted average		Intrinsic value
		Exercise price	Remaining contractual life	
Outstanding at December 31, 2021	4,444,068	\$ 2.40	6.00	\$ 10,207,306
Granted	2,291,000	3.86	7.63	46,515
Exercised	-	-	-	-
Expired / Forfeited	-	-	-	-
Outstanding at June 30, 2022	6,735,068	2.90	6.91	46,515
Exercisable at June 30, 2022	5,619,542	3.11	6.37	-
Vested and expected to vest	6,735,068	2.90	6.91	46,515

Option Valuation

The fair value of each stock option granted has been determined using the Black-Scholes option-pricing model. The material assumptions used in the Black-Scholes model in estimating the fair value of the options granted for the periods presented were as follows (there were no grants issued in 2021):

	Six Months Ended June 30, 2022
Stock price	\$ 0.43 - \$1.70
Exercise price	\$ 0.43 - \$6.28
Expected stock price volatility	76.61 - 95.87%
Expected term (years)	5.19 - 10.00
Risk-free interest rate	1.52% - 3.14%
Expected dividend yield	0%

- *Expected stock-price volatility.* The expected volatility is derived from the historical volatilities of publicly traded companies within the Company's industry that the Company considers to be comparable to the Company's business over a period approximately equal to the expected term.
- *Expected term.* The expected term represents the period that the stock-based awards are expected to be outstanding. The Company's historical share option exercise experience does not provide a reasonable basis upon which to estimate an expected term due to a lack of sufficient data. Therefore, the Company estimates the expected term for employees by using the simplified method provided by the Securities and Exchange Commission. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the options.
- *Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the expected term.
- *Expected dividend yield.* The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on the Company's common stock.

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The weighted-average grant date fair value of options granted during the six months ended June 30, 2022 was \$0.96. There were no options granted during the six months ended June 30, 2021.

As of June 30, 2022, the Company had an aggregate of \$819,956 of unrecognized share-based compensation cost, which is expected to be recognized over the weighted average period of 1.7 years.

Restricted Stock Units

During the six months ended June 30, 2022, the Company granted 927,358 restricted stock unit ("RSU") awards (weighted average fair value of \$1.04), issued 647,358 shares of common stock for vested RSU awards (weighted average fair value of \$1.29) and cancelled 150,000 RSU awards. The remaining 130,000 awards (weighted average fair value of \$0.99) outstanding are subject to time-based and market vesting conditions and are scheduled to vest by December 2023. The estimated fair value of each of the Company's was determined on the date of grant based on the closing price of the Company's common stock on the previous trading date.

Shares Reserved for Future Issuance

The following shares of common stock are reserved for future issuance:

	June 30, 2022
Awards outstanding under the 2021 Omnibus Incentive Plan	6,865,068
Awards available for future grant under 2021 Omnibus Incentive Plan	931,642
Warrants outstanding	21,090,873
Total shares of common stock reserved for future issuance	28,887,583

NOTE 10 - RELATED PARTIES

The Company paid cash compensation during the three and six months ended June 30, 2021 of \$0,752 and \$40,314, respectively, to the Chief Executive Officer through a separate operating company with which the Chief Executive Officer is affiliated. There were no such payments in the three and six months ended June 30, 2022.

NOTE 11 - SUBSEQUENT EVENTS

In the third quarter of 2022, the Company issued 2,797,621 shares of common stock as a result of conversions of \$1.1 million of the 2021 Notes.

In July 2022, the Company settled \$0.8 million of the share subscription facility commitment fees (described in Note 2) through payment of 921,935 shares of common stock in accordance with the GEM agreement.

In July 2022, the Company financed its directors' and officers' liability insurance in the amount of \$0.4 million to satisfy the outstanding liability recorded in accounts payable as of June 30, 2022.

2022 Notes

On June 30, 2022, the Company entered into an \$8.0 million convertible financing agreement with institutional investors. The agreement provides for two closings, each for notes payable of \$4.24 million (resulting in gross cash proceeds of \$4.0 million). Funds were received for the first closing on July 1, 2022 and for the second closing on August 9, 2022.

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The 2022 Notes are convertible into Common Stock, at a per share conversion price equal to \$0.5450, a 10% premium to the average price of the Common Stock for the three trading days prior to the first closing. Under the Notes, commencing on September 29, 2022 and continuing monthly on the first day of each month beginning November 2, 2022, the Company is obligated to redeem one fifteenth (1/15th) of the original principal amount under the applicable Note, plus accrued but unpaid interest. The Company may elect to pay all or part of the redemption amount in cash with a premium of eight percent or in conversion shares of Common Stock based on a conversion price equal to the lesser of (i) the conversion price and (ii) 92% of the average of the three lowest VWAPs (as defined) during the ten consecutive trading days ending on the trading day that is immediately prior to the applicable redemption date, but in no event may the Company pay the redemption amount in conversion shares of Common Stock unless the conversion price is at least equal to \$0.1003 and certain equity conditions are satisfied.

In connection with each of the first and second closings of the 2022 Notes the Company also issued warrants to purchase 4,667,890 shares of the Company's common stock. The warrants have an exercise price of \$0.7085, a 30% premium to the conversion price and are exercisable for five years following issuance of the 2022 Notes. The issuance of these warrants will require the Company to reduce the conversion price of the 2021 Notes and the exercise price of the outstanding warrants associated with the 2021 Notes to \$0.78.

The proceeds of the 2022 Notes will be used for working capital purposes subject to certain customary restrictions and are secured by the Company's rights to its patents and licenses. The Company is restricted from issuing certain additional debt or equity without the prior written consent of the holders for certain specified periods set forth in the 2022 Notes.

The 2022 Notes mature on December 29, 2023 and February 7, 2024, for the first and second closings, respectively. The notes bear interest at a rate of 6% per annum, in addition to an original issue discount of 6%. The interest may be settled in cash or shares at the option of the Company and is payable together with monthly redemptions of the outstanding principal amount of the debt.

At the second closing of the 2022 Notes, the parties agreed to modify the conversion price of the remaining 2021 Notes from \$0.78 to \$0.35 until October 1, 2022, with any remaining balance payable in cash on October 10, 2022.

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis provide information which our management believes is relevant to an assessment and understanding of our consolidated results of operations and financial condition. You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and notes thereto included elsewhere in this report. In addition to historical financial information, this discussion contains forward-looking statements based upon our current expectations that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Item 1A. Risk Factors."

References in the following discussion to "we", "us", "our" and the "Company" refer to Ensysce Biosciences, Inc. and its consolidated subsidiaries following the Closing of the Business Combination. Unless the context otherwise requires, references to "LACQ" refer to Leisure Acquisition Corp., a Delaware corporation, prior to the Closing.

Overview

Ensysce Biosciences, Inc. is a clinical stage pharmaceutical company seeking to develop innovative solutions for severe pain relief while reducing the fear of and the potential for addiction, opioid misuse, abuse and overdose. We have also incorporated a 79.2%-owned subsidiary, Covistat, a clinical stage pharmaceutical company that is developing a compound utilized in Ensysce's overdose protection program for the treatment of respiratory diseases. Our lead product candidate, PF614, is an extended release TAAP prodrug of oxycodone. TAAP modification of prescription drugs removes the ability to crush, chew or manipulate and inject to achieve the medication more quickly than by swallowing. MPAR™ adds a layer of overdose protection to each TAAP product.

Since inception in 2003, we have devoted substantially all our efforts and financial resources to organizing and staffing our company, business planning, raising capital, discovering product candidates and securing related intellectual property rights and conducting research and development activities for our product candidates. We do not have any products approved for sale and we have not generated any revenue from product sales. We may never be able to develop or commercialize a marketable product.

Our lead product candidate, PF614, is in Phase 1b clinical development, PF614-MPAR™ is in Phase 1 clinical development and nafamostat is proceeding towards Phase 2 clinical development. Our other product candidates and research initiatives are in preclinical or earlier stages of development. Our ability to generate revenue from product sales sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our product candidates. We have not yet successfully completed any pivotal clinical trials, nor have we obtained any regulatory approvals, manufactured a commercial-scale drug, or conducted sales and marketing activities.

We have incurred significant operating losses since inception. As of June 30, 2022, we had an accumulated deficit of \$95.5 million. We expect to continue to incur net losses for the foreseeable future, and we expect our clinical development expenses, and general and administrative expenses to continue to increase. We expect that our expenses and capital requirements will increase substantially in connection with our ongoing development activities, particularly if and as we:

- continue preclinical studies and continue existing and initiate new clinical trials for PF614, PF614-MPAR™ and nafamostat, our lead product candidates being tested for chronic pain and infectious disease;
- advance the development of our product candidate pipeline of other product candidates, including through business development efforts to invest in or in-license other technologies or product candidates;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, medical, scientific and other technical personnel to support our clinical operations;

- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- undertake any pre-commercialization activities to establish sales, marketing and distribution capabilities for any product candidates for which we may receive regulatory approval;
- expand our infrastructure and facilities to accommodate our growing employee base; and
- add operational, financial and management information systems and personnel, including personnel to support our research and development programs, any future commercialization efforts and our transition to operating as a public company.

We expect to incur additional costs associated with operating as a public company, including significant legal, accounting, insurance, investor relations and other expenses that we did not incur as a private company.

We require substantial additional funding to support our continuing operations and pursue our growth strategy. Until we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of private and public equity offerings, debt financings or other capital sources, which may include collaborations with other companies or other strategic transactions. To the extent that we raise additional capital through the sale of private or public equity or convertible debt securities, existing ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our equity holders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations or other strategic transactions with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or drug candidates, or grant licenses on terms that may not be favorable to us. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as and when needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions.

Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

COVID-19 pandemic Business Update

In March 2020, the World Health Organization declared COVID-19 a global pandemic. To date, our financial condition and operations have not been significantly impacted by the ongoing COVID-19 pandemic. However, we cannot at this time predict the specific extent, duration, or full impact that the ongoing COVID-19 pandemic will have on our financial condition and operations, including ongoing and planned clinical trials and other operations required to support those clinical trials and research and development activities to advance our pipeline.

We are continuing to evaluate the impact of the ongoing COVID-19 pandemic on our business and continue to take proactive measures to protect the health and safety of our employees, as well as to maintain business continuity. We believe that the current measures we have implemented with respect to the ongoing COVID-19 pandemic are appropriate, reflecting both regulatory and public health guidance, to maintain business continuity. We will continue to closely monitor and seek to comply with guidance from governmental authorities and adjust our activities as appropriate.

Business Combination Transaction

On January 31, 2021, LACQ executed a definitive merger agreement among it, Merger Sub and Former Ensysce, providing for, among other things, and subject to terms and conditions therein, the business combination between LACQ and Former Ensysce pursuant to the merger of Merger Sub with and into Former Ensysce, with Former Ensysce continuing as the surviving entity and as a wholly-owned subsidiary of LACQ (the “Business Combination”). On June 30, 2021, the Business Combination was consummated. In connection with the Business Combination, the stockholders of Former Ensysce exchanged their interests for shares of the combined company’s common stock at an exchange ratio of 0.06585. Immediately following the Business Combination, the stockholders of Former Ensysce owned approximately 71.8% of the outstanding common stock of the combined company. Former Ensysce’s existing equity incentive plans were terminated; awards issued under the existing equity incentive plans were exchanged for awards issued under the Company’s 2021 Omnibus Incentive Plan, a new equity incentive plan that we and the stockholders adopted in connection with the Business Combination. We received net proceeds of approximately \$7.8 million at the closing of the Business Combination and we continue to operate under our management team, led by our Chief Executive Officer Lynn Kirkpatrick. On July 2, 2021, the combined company’s common stock began trading on Nasdaq under the ticker symbol “ENSC”.

Components of Ensysce’s Operating Results

Revenue

We have generated limited revenue since our inception and we do not expect to generate any revenue from the sale of products in the near future, if at all. If our development efforts are successful and we commercialize our products, or if we enter into collaboration or license agreements with third parties, we may generate revenue in the future from product sales, as well as upfront, milestone and royalty payments from such collaboration or license agreements, or a combination thereof.

We have received funding under federal grants from the National Institutes of Health (“NIH”) through the National Institute on Drug Abuse (“NIDA”). In September 2018, we were awarded a research and development grant related to the development of our MPAR™ overdose prevention technology (the “MPAR Grant”). In September 2019, we were awarded a second research and development grant related to the development of our TAAP/MPAR™ abuse deterrent technology for Opioid Use Disorder (“OUD”) (the “OUD Grant”). Grant funds are awarded annually through a Notice of Award which contains certain terms and conditions including, but not limited to, complying with the grant program legislation, regulation and policy requirements, complying with conditions on expenditures of funds with respect to other applicable statutory requirements such as the federal appropriations acts, periodic reporting requirements, and budget requirements.

Operating Expenses

Research and development expenses

Research and development expenses consist primarily of costs incurred for research activities, including drug discovery efforts and the development of our product candidates. We expense research and development costs as incurred, which include:

- expenses incurred to conduct the necessary preclinical studies and clinical trials required to obtain regulatory approval;
- expenses incurred under agreements with contract research organizations (“CROs”) that are primarily engaged in the oversight and conduct of our drug discovery efforts and preclinical studies, clinical trials and contract manufacturing organizations (“CMOs”) that are primarily engaged to provide preclinical and clinical drug substance and product for our research and development programs;

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- other costs related to acquiring and manufacturing materials in connection with our drug discovery efforts and preclinical studies and clinical trial materials, including manufacturing validation batches, as well as investigative sites and consultants that conduct our clinical trials, preclinical studies and other scientific development services;
- payments made in cash or equity securities under third-party licensing, acquisition and option agreements;
- employee-related expenses, including salaries and benefits, travel and stock-based compensation expense for employees engaged in research and development functions;
- costs related to compliance with regulatory requirements; and
- allocated facilities-related costs, depreciation and other expenses, which include rent and utilities.

We recognize external development costs as incurred. Any advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. Such amounts are expensed as the related goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered or the services rendered. We estimate and accrue for the value of goods and services received from CROs and other third parties each reporting period based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs.

We do not track our research and development expenses on a program-by-program basis. Our direct external research and development expenses consist primarily of external costs, such as fees paid to outside consultants, CROs, CMOs and research laboratories in connection with our preclinical development, process development, manufacturing and clinical development activities. We do not allocate employee costs, costs associated with our discovery efforts, laboratory supplies, and facilities, including depreciation or other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to conduct our research and development as well as for managing our preclinical development, process development, manufacturing and clinical development activities. These employees work across multiple programs and, therefore, we do not track our costs by program and cannot state precisely the total costs incurred for each of our clinical and preclinical programs on a project-by-project basis.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. As a result, we expect that our research and development expenses will increase substantially over the next several years as we continue our existing, and commence additional, planned clinical trials for PF614, PF614-MPAR™ and nafamostat, as well as conduct other preclinical and clinical development, including submitting regulatory filings for our other product candidates. We also expect our discovery research efforts and our related personnel costs to increase and, as a result, we expect our research and development expenses, including costs associated with stock-based compensation, to increase above historical levels. In addition, we may incur additional expenses related to milestone and royalty payments payable to third parties with whom we may enter into license, acquisition and option agreements to acquire the rights to future product candidates.

At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates or when, if ever, material net cash inflows may commence from any of our product candidates. The successful development and commercialization of our product candidates are highly uncertain. This uncertainty is due to the numerous risks and uncertainties associated with product development and commercialization, including the uncertainty of the following:

- the scope, progress, outcome and costs of our preclinical development activities, clinical trials and other research and development activities;

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- establishing an appropriate safety and efficacy profile with investigational new drug (“IND”) enabling studies;
- successful patient enrollment in and the initiation and completion of clinical trials;
- the timing, receipt and terms of any marketing approvals from applicable regulatory authorities including the FDA and non-U.S. regulators;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- establishing clinical and commercial manufacturing capabilities or making arrangements with third-party manufacturers in order to ensure that we or our third-party manufacturers are able to make product successfully;
- development and timely delivery of clinical-grade and commercial-grade drug formulations that can be used in our clinical trials and for commercial launch;
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
- significant and changing government regulation;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with others; and
- maintaining a continued acceptable safety profile of our product candidates following approval, if any, of our product candidates.

Any changes in the outcome of any of these variables with respect to the development of our product candidates in preclinical and clinical development could mean a significant change in the costs and timing associated with the development of these product candidates. For example, if the FDA or another regulatory authority were to delay our planned start of clinical trials or require us to conduct clinical trials or other testing beyond those that we currently expect or if we experience significant delays in enrollment in any of our planned clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development of that product candidate.

General and administrative expenses

General and administrative expenses consist primarily of employee-related expenses, including salaries and related benefits, travel and stock-based compensation for personnel in executive, business development, finance, human resources, legal, information technology, and administrative functions. General and administrative expenses also include direct and allocated facility-related costs as well as insurance costs and professional fees for legal, patent, consulting, investor and public relations, accounting and audit services. We expense general and administrative costs as incurred.

We anticipate that our general and administrative expenses, excluding non-cash expenses to recognize the fair value of warrants, will increase in the future as we increase our headcount to support the continued development of our product candidates. We also anticipate that we will continue to incur significant accounting, audit, legal, regulatory, compliance and director and officer insurance costs as well as investor and public relations expenses as a public company. Additionally, if and when we believe a regulatory approval of a product candidate appears likely, we anticipate an increase in payroll and other employee-related expenses as a result of our preparation for commercial operations, especially as it relates to the sales and marketing of that product candidate.

Other income (expense)

Change in fair value of derivative liabilities

Between 2018 and 2021, we entered into a series of notes that were determined to have embedded derivative instruments in the form of a contingent put option. The notes were recognized at the value of proceeds received after allocating issuance proceeds to the bifurcated contingent put option. The notes were subsequently measured at amortized cost using the effective interest method to accrete interest over their term to bring the notes' initial carrying value to their principal balance at maturity. The bifurcated put option was initially measured at fair value and subsequently measured at fair value with changes in fair value recognized as a component of other expenses in the consolidated statements of operations.

Change in fair value of convertible notes

We elected the fair value option to account for the 2021 Notes as we believe the fair value option provides users of the financial statements with greater ability to estimate the outcome of future events as facts and circumstances change, particularly with respect to changes in the fair value of the common stock underlying the conversion option. We use a discounted cash flow model and a Monte Carlo analysis to estimate the fair value of the notes, both of which rely on unobservable Level 3 inputs. Changes in the fair value of the notes are recognized through earnings for each reporting period.

Change in fair value of liability classified warrants

The warrants issued with the 2021 Notes are liability classified due to certain cash settlement features. We use a Black-Scholes option pricing model to estimate the fair value of the warrants. Changes in the fair value of the warrants are recognized through earnings for each reporting period.

Loss on debt conversions

When conversions on the 2021 Notes occur, we calculate the difference between the conversion price and the average of the high and low stock price on the date of conversion. The resulting difference is either a loss if the conversion price was below the average of the high and low stock price on the date of conversion or a gain if the conversion price was above the average of the high and low stock price on the date of conversion.

Interest expense

Interest expense consists of interest accrued on our financed directors and officers insurance as well as imputed interest on the commitment fees related to the share subscription facility.

Provision for Income Taxes

We have not recorded any significant amounts related to income tax expense, we have not recognized any reserves related to uncertain tax positions, nor have we recorded any income tax benefits for the majority of our net losses we have incurred to date or for our research and development tax credits.

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or our tax returns. Deferred tax assets and liabilities are determined based on difference between the financial statement carrying amounts and tax bases of existing assets and liabilities and for loss and credit carryforwards, which are measured using the enacted tax rates and laws in effect in the years in which the differences are expected to reverse. The realization of our deferred tax assets is dependent upon the generation of future taxable income, the amount and timing of which are uncertain. Valuation allowances are provided, if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. As of June 30, 2022, we continue to maintain a full valuation allowance against all of our deferred tax assets based on our evaluation of all available evidence.

We file income tax returns in the United States federal tax jurisdiction and state jurisdictions and may become subject to income tax audit and adjustments by related tax authorities. Our tax return period for United States federal income taxes for the tax years since 2015 remain open to examination under the statute of limitations by the Internal Revenue Service and state jurisdictions. We record reserves for potential tax payments to various tax authorities related to uncertain tax positions, if any. The nature of uncertain tax positions is subject to significant judgment by management and subject to change, which may be substantial. These reserves are based on a determination of whether and how much a tax benefit taken by us in our tax filings or whether our position is more likely than not to be realized following the resolution of any potential contingencies related to the tax benefit. We develop our assessment of uncertain tax positions, and the associated cumulative probabilities, using internal expertise and assistance from third-party experts. As additional information becomes available, estimates are revised and refined. Differences between estimates and final settlement may occur resulting in additional tax expense. Potential interest and penalties associated with such uncertain tax positions is recorded as a component of our provision for income taxes. To date, no amounts are being presented as an uncertain tax position.

Results of Operations

Comparison of the three months ended June 30, 2022 and 2021:

	Three Months Ended June 30,		Change
	2022	2021	
Federal grants	\$ 207,471	\$ 444,516	\$ (237,045)
Operating expenses:			
Research and development	5,311,298	463,219	4,848,079
General and administrative	1,951,356	393,914	1,557,442
Total operating expenses	<u>7,262,654</u>	<u>857,133</u>	<u>6,405,521</u>
Loss from operations	(7,055,183)	(412,617)	(6,642,566)
Other income (expense):			
Change in fair value of derivative liabilities	-	712,899	(712,899)
Change in fair value of convertible notes	(88,763)	-	(88,763)
Change in fair value of liability classified warrants	148,393	-	148,393
Loss on debt conversions	(892,636)	-	(892,636)
Interest expense	(37,781)	(910,327)	872,546
Other income and expense, net	2,850	(347,566)	350,416
Total other income (expense), net	<u>(867,937)</u>	<u>(544,994)</u>	<u>(322,943)</u>
Net loss	\$ (7,923,120)	\$ (957,611)	\$ (6,965,509)
Net loss attributable to noncontrolling interests	(26,309)	(22,067)	(4,242)
Deemed dividend related to warrants down round provision	102,479	-	102,479
Net loss attributable to common stockholders	\$ (7,999,290)	\$ (935,544)	\$ (7,063,746)

Federal grant funding

Funding from federal grants for the three months ended June 30, 2022 and 2021 totaled \$0.2 million and \$0.4 million, respectively, representing a decrease of \$0.2 million. Differences are due to the timing of research activities eligible for funding as well as the grant period. We expect funding from federal grants to generally increase in the future due to the timing of preclinical and clinical development activities under the grants.

Research and development expenses

Research and development expenses for the three months ended June 30, 2022 and 2021 were \$5.3 million and \$0.5 million, respectively, representing an increase of \$4.8 million. The increase was primarily the result of increased external research and development costs related to clinical and pre-clinical programs for PF-614 and PF614-MPAR™. We do not currently track expenses on a program-by-program basis. We expect future research and development expenses to approximate current levels.

General and administrative expenses

General and administrative expenses for the three months ended June 30, 2022 and 2021 were \$2.0 million and \$0.4 million, respectively, representing an increase of \$1.6 million. The increase was primarily a result of increased expenses related to operating as a public company, including legal and accounting fees and director and officer insurance expenses. We expect future general and administrative expenses to approximate current levels.

Other income and expense

Changes in the fair value of derivative liabilities during the three months ended June 30, 2021 resulted from the decreased likelihood of realization of the embedded derivative instrument in convertible notes payable, resulting in a gain of \$0.7 million during the three months ended June 30, 2021. All outstanding liabilities were settled in connection with the conversion of outstanding note payables on June 30, 2021.

Changes in fair value of convertible notes and liability classified warrants for the 2022 period relate to the 2021 Notes. Loss on debt conversions is driven by the difference between the conversion price of the 2021 Notes and the average of the high and low stock price on the date of conversion. There was no corresponding activity in the 2021 period.

Interest expense decreased \$0.9 million in the 2022 period due to the conversion of outstanding convertible notes on June 30, 2021 and because interest expense associated with the 2021 Notes is reflected in the fair value adjustments instead of separately presented as interest expense.

Comparison of the six months ended June 30, 2022 and 2021

The following table summarizes our results of operations for the six months ended June 30, 2022 and 2021:

	Six Months Ended June 30,		Change
	2022	2021	
Federal grants	\$ 810,569	\$ 695,091	\$ 115,478
Operating expenses:			
Research and development	8,451,394	787,595	7,663,799
General and administrative	4,217,161	884,386	3,332,775
Total operating expenses	<u>12,668,555</u>	<u>1,671,981</u>	<u>10,996,574</u>
Loss from operations	(11,857,986)	(976,890)	(10,881,096)
Other income (expense):			
Change in fair value of derivative liabilities	-	673,314	(673,314)
Change in fair value of convertible notes	2,678,415	-	2,678,415
Change in fair value of liability classified warrants	2,942,791	-	2,942,791
Loss on debt conversions	(2,595,278)	-	(2,595,278)
Interest expense	(52,802)	(1,258,161)	1,205,359
Other income and expense, net	10,816	(347,566)	358,382
Total other income (expense), net	<u>2,983,942</u>	<u>(932,413)</u>	<u>3,916,355</u>
Net loss	\$ (8,874,044)	\$ (1,909,303)	\$ (6,964,741)
Net loss attributable to noncontrolling interests	(26,127)	(26,028)	(99)
Deemed dividend related to warrants down round provision	818,059	-	818,059

Federal grant funding

Funding from federal grants for the months ended June 30, 2022 and 2021 totaled \$0.8 million and \$0.7 million, respectively, representing an increase of \$0.1 million. Differences are due to the timing of research activities eligible for funding as well as the grant period. We expect funding from federal grants to generally increase in the future due to the timing of preclinical and clinical development activities under the grants.

Research and development expenses

Research and development expenses for the six months ended June 30, 2022 and 2021 were \$8.4 million and \$0.8 million, respectively, representing an increase of \$7.6 million. The increase was primarily the result of increased external research and development costs related to clinical programs for PF-614 and preclinical programs for PF614-MPARTM. We do not currently track expenses on a program-by-program basis. We expect future research and development expenses to approximate current levels.

General and administrative expenses

General and administrative expenses for the six months ended June 30, 2022 and 2021 were \$4.2 million and \$0.9 million, respectively, representing an increase of \$3.3 million. The increase was primarily a result of increased expenses related to operating as a public company, including legal and accounting fees and director and officer insurance expenses. We expect future general and administrative expenses to approximate current levels.

Other income and expense

Changes in the fair value of derivative liabilities during the six months ended June 30, 2021 resulted from the decreased likelihood of realization of the embedded derivative instrument in convertible notes payable, resulting in a gain of \$0.7 million during the six months ended June 30, 2021. All outstanding liabilities were settled in connection with the conversion of outstanding note payables on June 30, 2021.

Changes in fair value of convertible notes and liability classified warrants for the 2022 period relate to the 2021 Notes. Loss on debt conversions is driven by the difference between the conversion price of the 2021 Notes and the average of the high and low stock price on the date of conversion. There was no corresponding activity in the 2021 period.

Interest expense decreased \$1.2 million in the 2022 period due to the conversion of outstanding convertible notes on June 30, 2021 and because interest expense associated with the 2021 Notes is reflected in the fair value adjustments instead of separately presented as interest expense.

Liquidity and capital resources*Sources of liquidity and capital*

As of June 30, 2022, we had \$3.7 million of cash and cash equivalents. Since inception, we have generated limited revenues and have incurred significant operating losses and negative cash flows from our operations, and we anticipate that we will continue to incur losses for at least the foreseeable future. We have not yet commercialized any of our product candidates and we do not expect to generate revenue from sales of any product candidates for several years, if at all. As of June 30, 2022, we had an accumulated deficit of \$95.5 million.

We have funded our operations to date primarily with proceeds from the sale of common equity, funding under federal research grants and borrowings under promissory notes. To fund future operations, we will likely need to raise additional capital. The amount and timing of future funding requirements will depend on many factors, including the timing and results of our ongoing research and development efforts and related general and administrative support. We anticipate that we will continue to fund our operations through public or private equity or debt financings or other sources which may include potential collaboration agreements. We cannot make assurances that anticipated additional financing will be available to us on favorable terms, if at all.

Current remaining funding under two approved federal research grants totals \$6.3 million, covering the period through August 31, 2023. Pursuant to the terms and conditions of the two grants, we are required to submit progress reports to NIDA on an annual basis and a final research performance progress report within 120 days of the performance period end date. Additionally, the grants limit the use of funds to activities that are clearly severable and independent from activities that involve human subjects until the receipt by NIDA of (i) Institutional Review Board (“IRB”) approval, (ii) federal-wide assurance from the Office for Human Research Protections, (iii) a Data and Safety Monitoring Plan, (iv) certification that all key personnel have completed education on the protection of human subjects and (v) a Clinical Trials Dissemination Plan. We must also comply with the data sharing policies of NIDA and the NIH Public Access Policy, that require submission of final peer-reviewed journal manuscripts that arise from the use of grants to PubMed Central immediately upon acceptance for publication.

Neither grant has to be repaid. To receive the remaining funding for each respective study covered by a grant, we must meet certain milestones. We have met the required milestones under the MPAR Grant. The remaining milestone under the OUD Grant is identification of a R-methadone-TAAP clinical candidate that meet the specified criteria.

Inventions arising from the research projects funded with the grants are required to be reported to NIDA, per the Bayh-Dole Act (the Patent and Trademark Law Amendments Act), that permits us to retain ownership of the inventions, while also giving NIDA the license to practice the subject invention. In turn, we are expected to file for patent protection and to ensure commercialization upon licensing for the benefit of public health.

Pursuant to the GEM Agreement, we are entitled to draw down up to \$60.0 million of gross proceeds (“Aggregate Limit”) from GEM Global in exchange for shares of our common stock, subject to meeting the terms and conditions of the GEM Agreement. This share subscription facility is available for a period of 36 months from the closing date of the Merger. A draw down is subject to limitations on the amount that is drawn under the facility and must comply with certain conditions precedent including the listing of our shares on a principal market (which includes Nasdaq), having the necessary number of shares that are issuable pursuant to the draw down registered under an effective registration statement, and other notice and timing requirements. Upon our valid exercise of a draw down, pursuant to delivery of a notice and in accordance with other conditions, GEM Global is required to pay, in cash, a per-share amount equal to 90% of the average closing bid price of the shares of our common stock recorded by Nasdaq during the 30 consecutive trading days commencing on the first trading day that is designated on the draw down notice. In no event may our draw down requests exceed 400% (“Draw Down Limit”) of the average daily trading volume for the 30 trading days immediately preceding the date we deliver the draw down notice. Our ability to utilize this share subscription facility is restricted while the 2021 Notes are outstanding.

Upon the public listing of the Company’s shares following the closing of the Merger, GEM Global became entitled to a commitment fee in the form of cash or freely tradeable shares of our common stock in an amount equal to 2% of the Aggregate Limit or \$1.2 million to be paid in two tranches. The commitment fee for the first tranche, which is equal to 67% of the commitment fee, or \$800,000, was paid through issuance of 921,235 shares of common stock in July 2022. The commitment fee for the second tranche, which is equal to the remaining 33% of the commitment fee, or \$400,000, becomes payable in January 2023.

Additionally, we issued a warrant with a 36-month term at the closing of the Merger granting GEM Global the right to purchase 1,106,108 shares of our common stock (an amount equal to 4% of the total number of our common stock outstanding as of the closing date of the Merger (subject to adjustments described below), calculated on a fully diluted basis), at a strike price per share equal to \$10.01, which was the closing bid price for such common stock on the first day of trading on Nasdaq. The strike price was reduced to \$0.46 per share at June 30, 2022 because of a pricing adjustment per the GEM Agreement. The warrant can be exercised on a cashless basis in part or in whole at any time during the term. Any failure by us to timely transfer the shares under the warrant pursuant to GEM Global's exercise will entitle GEM Global to compensation in addition to other remedies. The number of shares underlying the warrant as well as the strike price is subject to adjustments for recapitalizations, reorganizations, change of control, stock split, stock dividend, reverse stock splits, and issuances of additional common shares at a price per share less than the exercise price.

The GEM Agreement contains certain negative covenants restricting us from securing a share subscription line similar to the financing provided under the GEM Agreement and requiring prompt notice of events constituting an alternate transaction. An "alternate transaction" includes an issuance of common stock at a price less than the then current market price, an "at-the-market" offering of securities, and an issuance of options, warrants, or similar rights of subscription or the issuance of convertible equity or debt securities. See "*Risks Related to Our Business, Financial Condition and Capital Requirements*" for additional information.

Finally, pursuant to the terms of the GEM Agreement, we are required to indemnify GEM Global for any losses it incurs as a result of a breach by us or of our representations and warranties and covenants under the GEM Agreement or for any misstatement or omission of a material fact in a registration statement registering those shares pursuant to the GEM Agreement. Also, GEM Global is entitled to be reimbursed for legal or other costs or expenses reasonably incurred in investigating, preparing, or defending against any such loss.

On September 24, 2021, we entered the SPA for an aggregate financing of \$15.0 million with institutional investors. The Company issued to the investors (i) 2021 Notes in the aggregate principal amount of \$15.9 million for an aggregate purchase price of \$15.0 million and (ii) warrants to purchase 1,083,475 shares of the Company's common stock in the aggregate at an exercise price of \$7.63 per share.

On June 30, 2022, we entered a second SPA for an aggregate financing of \$8.0 million with institutional investors. The Company issued to the investors (i) 2022 Notes in the aggregate principal amount of \$8.48 million for an aggregate purchase price of \$8.0 million and (ii) warrants to purchase 9,335,780 shares of the Company's common stock in the aggregate at an exercise price of \$0.7085 per share. The first funding of \$4.0 million occurred on July 1, 2022 and the second funding of \$4.0 million occurred on August 9, 2022.

Cash flows

The following table summarizes our cash flows for each of the periods presented:

	Six Months Ended June 30,	
	2022	2021
Net cash used in operating activities	\$ (7,877,508)	\$ (649,461)
Net cash provided by investing activities	4,500	-
Net cash provided by (used in) financing activities	(657,082)	8,467,029
Net increase (decrease) in cash and cash equivalents	<u>\$ (8,530,090)</u>	<u>\$ 7,817,568</u>

Operating activities

During the six months ended June 30, 2022 and 2021, we used cash in operating activities of \$7.9 million and \$0.6 million, respectively. The increase primarily resulted from the clinical advancement of our product candidates, the timing of vendor invoicing and payments, and increased costs related to operating as a public company.

Investing activities

During the six months ended June 30, 2022, net cash provided by investing activities was \$4,500 from the sale of certain property and equipment.

Financing activities

During the six months ended June 30, 2022, net cash used in financing activities was \$0.7 million, primarily consisting of repayment of financed insurance premiums and cash redemption payment of convertible notes. During the six months ended June 30, 2021, net cash provided by financing activities was \$8.5 million, primarily consisting of proceeds from issuance of common stock related to the Business Combination.

Funding requirements

Our primary use of cash is to fund operating expenses, primarily related to our research and development activities. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses and prepaid expenses.

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials of our product candidates. In addition, upon the completion of the Business Combination, we have incurred, and will continue to incur, additional costs associated with operating as a public company, including significant legal, accounting, insurance, investor relations and other expenses that we did not incur as a private company. The timing and amount of our operating expenditures will depend largely on our ability to:

- advance preclinical development of our early-stage programs and clinical trials of our product candidates;
- manufacture, or have manufactured on our behalf, preclinical and clinical drug material and develop processes for late stage and commercial manufacturing;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing, medical affairs and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval and intend to commercialize on our own;
- hire additional clinical, quality control and scientific personnel;

- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company;
- obtain, maintain, expand and protect our intellectual property portfolio;
- manage the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights, including enforcing and defending intellectual property related claims; and
- manage the costs of operating as a public company.

Going concern

We have generated limited revenues and have incurred significant operating losses since our inception and, as of June 30, 2022, had an accumulated deficit of \$95.5 million. We expect to continue to incur significant and increasing expenses and operating losses for the foreseeable future.

Following the completion of the Business Combination and public listing of our common stock on Nasdaq, we had access to up to \$60.0 million from a share subscription facility entered into in December 2020. The 2021 Notes and 2022 Notes limit our ability to execute certain debt and equity financings, including its existing \$60.0 million share subscription facility, while the 2021 Notes and 2022 Notes are outstanding. Without the availability of proceeds through the share subscription facility, existing cash resources are not sufficient to allow us to fund current planned operations through the next 12 months following the filing of this Quarterly Report on Form 10-Q, which raises substantial doubt about the Company's ability to continue as a going concern.

Working capital

Because of the numerous risks and uncertainties associated with research, development and commercialization of biologic product candidates, we are unable to estimate the exact amount of our working capital requirements. Our future funding requirements will depend on and could increase significantly as a result of many factors, including:

- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical and clinical trials;

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- the costs, timing and outcome of regulatory review of our product candidates;
- the costs, timing and ability to manufacture our product candidates to supply our clinical and preclinical development efforts and our clinical trials;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- the costs of manufacturing commercial-grade product and necessary inventory to support commercial launch;
- the ability to receive additional non-dilutive funding, including grants from organizations and foundations;
- the revenue, if any, received from commercial sale of our products, should any of our product candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, obtaining, maintaining, expanding and enforcing our intellectual property rights and defending intellectual property-related claims;
- our ability to establish and maintain collaborations on favorable terms, if at all; and
- the extent to which we acquire or in-license other product candidates and technologies.

Critical accounting policies and significant judgments and estimates

Our consolidated financial statements are prepared in accordance with GAAP. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, costs and expenses. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 3 to our unaudited interim consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Accrued research and development expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when it has not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of the estimates with the service providers and makes adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- vendors, including research laboratories, in connection with preclinical development activities;
- CROs and investigative sites in connection with preclinical studies and clinical trials; and
- CMOs in connection with drug substance and drug product formulation of preclinical studies and clinical trial materials.

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We base our expenses related to preclinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with

multiple research institutions and CROs that supply, conduct and manage preclinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or the prepaid expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period.

Stock-based compensation

We measure all stock-based awards granted to employees, directors and non-employees based on their fair value on the date of the grant and recognize the corresponding compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award. Forfeitures are accounted for as they occur. We grant stock options and restricted stock awards that are subject to either service or performance-based vesting conditions. Compensation expense related to awards to employees and non-employees with performance-based vesting conditions is recognized based on the grant date fair value over the requisite service period using the accelerated attribution method to the extent achievement of the performance condition is probable. We estimate the probability that certain performance criteria will be met and do not recognize compensation expense until it is probable that the performance-based vesting condition will be achieved.

We classify stock-based compensation expense in our statements of operations in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

We estimate the fair value of each stock option grant using the Black-Scholes option-pricing model, which uses as inputs the fair value of our common stock and assumptions we make for the volatility of our common stock, the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield.

Fair value of liabilities

We elected the fair value option to account for the convertible notes as we believe the fair value option provides users of the financial statements with greater ability to estimate the outcome of future events as facts and circumstances change, particularly with respect to changes in the fair value of the common stock underlying the conversion option. We use a Monte Carlo simulation model to estimate the fair value of the 2021 Notes, which relies on unobservable Level 3 inputs. Changes in the fair value of the notes are recognized through earnings for each reporting period.

Off-balance sheet arrangements

We do not have during the periods presented, and do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

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Recently issued accounting pronouncements

A description of recently issued accounting pronouncements that may potentially impact Ensycse's financial position and results of operations is disclosed in Note 3 to our consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Emerging growth company and smaller reporting company status

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act (the "JOBS Act"), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. We may take advantage of these exemptions until we are no longer an emerging growth company under Section 107 of the JOBS Act, which provides that an emerging growth company can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. We have elected to avail ourselves of the extended transition period and, therefore, while we are an emerging growth company we are not subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies, unless we choose to early adopt a new or revised accounting standard.

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our common stock held by non-affiliates exceeds \$250 million as of the prior June 30, or (ii) our annual revenues exceeded \$100 million during such completed fiscal year and the market value of our common stock held by non-affiliates exceeds \$700 million as of the prior June 30.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

Our cash and cash equivalents as of June 30, 2022 consisted of cash and a money market fund account. Because of the short-term nature of our money market fund, a sudden change in market interest rates would not be expected to have a material impact on our financial position or results of operations.

Inflation Risk

We do not believe that inflation and changing prices had a significant impact on our results of operations for any periods presented herein.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934 as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) as of June 30, 2022. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were not effective as of June 30, 2022 due to the material weaknesses in our internal controls over financial reporting described below. Notwithstanding these material weaknesses, management has concluded that our financial statements included in this Quarterly Report on Form 10-Q are fairly stated in all material respects in accordance with GAAP for each of the periods presented therein.

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Material Weaknesses and Remediation Plan

In connection with the preparation of our consolidated financial statements for the years ended December 31, 2021 and 2020, and our unaudited interim consolidated financial statements for the three and six months ended June 30, 2022 and 2021, we concluded that there were material weaknesses in our internal controls over financial reporting. A material weakness is a significant deficiency, or a combination of significant deficiencies, in internal controls over financial reporting such that it is reasonably possible that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses identified are insufficient internal controls because of inadequate technical accounting expertise and inappropriate level of supervision and review due to the limited number of accounting personnel.

We are continuing to take steps to remediate the material weaknesses in our internal controls over financial reporting, including hiring a Chief Financial Officer in February 2021. Further, we plan to enhance our processes to identify and appropriately apply applicable accounting requirements to better evaluate and understand the nuances of the complex accounting standards that apply to our financial statements. Our plans at this time include providing enhanced access to accounting literature, research materials and documents and increased communication among our personnel and third-party professionals with whom we consult regarding complex accounting applications. The elements of our remediation plan can only be accomplished over time, and we can offer no assurance that these initiatives will ultimately have the intended effects.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we could become involved in disputes and various litigation matters that arise in the normal course of business. These may include disputes and lawsuits related to intellectual property, licensing, contract law and employee relations matters. Periodically, we review the status of significant matters, if any exist, and assesses its potential financial exposure. If the potential loss from any claim or legal claim is considered probable and the amount can be estimated, we accrue a liability for the estimated loss. Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation.

Item 1A. Risk Factors.

While we attempt to identify, manage and mitigate risks and uncertainties associated with our business to the extent practical, under the circumstances, some level of risk and uncertainty will always be present. Part I, Item 1A. Risk Factors of our 2021 Annual Report on Form 10-K includes a detailed discussion of our risk factors. Those risks and uncertainties have the potential to materially affect our financial condition and results of operations. There have been no material changes in our risk factors from those previously disclosed in Part I, Item 1A, of our 2021 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

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Item 5. Other Information

None.

Item 6. Exhibits.

The following exhibits are filed as part of this report:

Exhibit Number	Description
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly

authorized.

ENSYSCE BIOSCIENCES, INC.

Date: August 11, 2022

/s/ David Humphrey
David Humphrey
Chief Financial Officer, Secretary and Treasurer

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Exhibit 31.1

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Lynn Kirkpatrick, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ensysce Biosciences, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 11, 2022

/s/ Lynn Kirkpatrick
Name: Lynn Kirkpatrick
Title: Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, David Humphrey, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ensysce Biosciences, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

- a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 11, 2022

/s/ David Humphrey

Name: David Humphrey
Title: Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Ensysce Biosciences, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lynn Kirkpatrick, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: August 11, 2022

/s/ Lynn Kirkpatrick

Lynn Kirkpatrick
Chief Executive Officer
(Principal Executive Officer)

This certification accompanies the Report and shall not be deemed "filed" by the Company with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Ensysce Biosciences, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Humphrey, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Dated: August 11, 2022

/s/ David Humphrey

David Humphrey
Chief Financial Officer
(Principal Financial Officer)

This certification accompanies the Report and shall not be deemed "filed" by the Company with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.

