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 March 31, 2023

to

OR

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

For the transition period from

Commission File Number: 001-41455

MAIA BIOTECHNOLOGY, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	83-1495913
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
444 West Lake Street, Suite 1700	
Chicago, IL	60606
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, including area code: (312) 416-8	592

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	MAIA	NYSE American

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 I

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. \Box

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

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Item 1. Financial Statements

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Balance Sheets

		March 31, 2023		Ľ	December 31, 2022
		((unaudited)		
ASSETS					
Current assets:					
Cash		\$	7,586,312	\$	10,950,927
Prepaid expenses and other current assets			398,874		554,321
Australia research and development incentives receivable			348,379		302,789
Total current assets			8,333,565		11,808,037
Deferred offering costs			737,688		211,203
Other assets			2,800		2,800
Total assets		\$	9,074,053	\$	12,022,040
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable		\$	1,127,412	\$	1,165,505
Accrued expenses			2,639,034		2,103,401
Total current liabilities			3,766,446		3,268,906
Long term liabilities:					
Warrant liability			224,399		245,341
Total liabilities			3,990,845		3,514,247
Commitments and contingencies (Note 5)					
Stockholders' equity (deficit)					
Preferred stock, \$0.0001 par value, 30,000,000 shares authorized at March 31, 2023 and December 31, 2022, 0 shares issued and outstanding			—		_
value, 70,000,000 shares authorized at March 31, 2023	Common stock, \$0.0001 par				
and December 31, 2022, 10,996,404 and 10,955,904 shares issued					
and outstanding at March 31, 2023 and December 31, 2022, respectively			1,100		1,096
Additional paid-in capital			53,431,530		52,729,942
Accumulated deficit			(48,324,148)		(44,207,272)
Accumulated other comprehensive loss			(25,274)		(15,973)
Total stockholders' equity			5,083,208		8,507,793
Total liabilities and stockholders' equity		\$	9,074,053	\$	12,022,040

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Statements of Operations (Unaudited)

For the Three Months Ended March 31,

	 2023		2022			
Operating expenses:						
Research and development expenses	\$ 2,195,991	\$	2,077,329			
General and administrative expenses	1,988,259		1,366,229			
Total operating expenses	 4,184,250		3,443,558			
Loss from operations	(4,184,250)		(3,443,558)			
Other (expense) income:						
Interest expense	(5,147)		_			
Interest income	336		472			
Australian research and development						
incentives	51,243		29,241			
Change in fair value of warrant liability	 20,942					
Other income, net	 67,374		29,713			
Net loss	(4,116,876)		(3,413,845)			
Deemed dividend on warrant modification	_		(450,578)			
Net loss attributable to MAIA Biotechnology, Inc. shareholders	\$ (4,116,876)	\$	(3,864,423)			
Net loss per share						
Basic and diluted	\$ (0.38)	\$	(0.50)			
Weighted average common shares outstanding Basic and diluted	 10,977,054		7,752,042			

See the accompanying notes to the unaudited condensed consolidated financial statements.

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Statements of Comprehensive Loss (Unaudited)

Three Months Ended March 31, 2023 2022 \$ (4,116,876) (3,864,423) \$ Net loss Foreign currency translation adjustment (9,301) 1,721 \$ (4,126,177) (3,862,702) Comprehensive loss \$

See the accompanying notes to the unaudited condensed consolidated financial statements.

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited)

For the Three Months Ended

March	31, 2023	
~		

	Preferred	Stock	Commo	n Stock							
	Shares	Amount	Shares	Amount	A	lditional Paid- In Capital	A	.ccumulated Deficit	cumulated other nprehensive loss	St	Total ockholders' Equity
Balance at December 31, 2022		\$	- 10,955,904	\$ 1,096	\$	52,729,942	\$	(44,207,272)	\$ (15,973)	\$	8,507,793
Issuance of restricted stock	_		- 40,500	4		164,066		—	_		164,070
Stock-based compensation expense	_			—		537,522		—	_		537,522
Foreign currency translation adjustment	_	-		_		_		—	(9,301)		(9,301)
Net loss	_			_		-		(4,116,876)	_		(4,116,876)
Balance at March 31, 2023		φ	10,996,404	\$ 1,100	\$	53,431,530	\$	(48,324,148)	\$ (25,274)	\$	5,083,208
	See the accompany	iying note	s to the unaudited	condensed c	onsoli	dated financia	l sta	tements.			

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited)

For the Three Months Ended

			March 31,					
-	Preferred Shares	Stock Amount	Common Shares	Stock Amount	Additional Paid- In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
Balance at December 31, 2021	_	\$	7,584,980	\$ 758	\$ 37,618,438	\$ (28,437,993)	s —	\$ 9,181,203
Issuance of common shares upon exercise of stock options	-	_	26,500	3	47,697	-	-	47,700
Issuance of common shares upon exercise of warrants	_	_	61,111	6	109,994	_	-	110,000
Issuance of common shares in connection with Equity Financing	_	_	263,729	27	2,373,534	_	_	2,373,561
Stock-based compensation expense	_	_	_	_	713,330	-	_	713,330
Modification of warrant in equity	-	_	-	_	450,478	-	-	_
Deemed dividend on modification of warrant	_	_	_	_	(450,478)	-	_	-
Foreign currency translation adjustment	-	_	-	_	-	-	1,721	1,721
Net loss	—	—	—	—	—	(3,413,845)	—	(3,413,845)
Balance at March 31, 2022	_	\$	7,936,320	\$ 794	\$ 40,862,993	\$ (31,851,838)	\$ 1,721	\$ 9,013,670

See the accompanying notes to the unaudited condensed consolidated financial statements.

MAIA Biotechnology, Inc. and Subsidiaries Condensed Consolidated Statements of Cash Flows (Unaudited)

Three Months Ended March 31,

		2023		2022
Cash flows from operating activities:				
Net loss, including noncontrolling interests	\$	(4,116,876)	\$	(3,413,845)
Adjustments to reconcile net loss to net cash used in operating activities:				
Stock-based compensation		537,522		713,330
Consulting expense for restricted shares issued		164,070		—
Change in fair value of warrant liability		(20,942)		—
Change in operating assets and liabilities:				
Prepaid expenses and other current assets		153,775		(134,341)
Australia research and development incentives receivable		(51,243)		—
Other assets		_		322
Accounts payable		(35,163)		(67,120)
Accrued expenses		534,693		352,874
Deferred offering costs		(526,485)		(262,093)
Deferred compensation		_		3,062
Net cash used in operating activities		(3,360,649)		(2,807,811)
Cash flows from financing activities:				
Proceeds from issuance of common stock, net of transaction				
costs		—		2,373,561
Proceeds from exercise of stock options		—		47,700
Proceeds from exercise of warrants		_		110,000
Proceeds from sale of common stock in initial public offering		_		—
Payment of initial public offering transaction costs		—		—
Payment on loan payable to officer		—		—
Net cash provided by financing activities		_		2,531,261
Net effect of foreign currency exchange on cash		(3,966)		(4,282)
Net decrease in cash		(3,364,615)		(280,832)
Cash at beginning of period		10,950,927		10,574,292
Cash at end of period	\$	7,586,312	\$	10,293,460
-				

See the accompanying notes to the unaudited condensed consolidated financial statements.

MAIA Biotechnology, Inc. and Subsidiaries Notes to Unaudited Condensed Consolidated Financial Statements

1. NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business, Organization, and Principles of Consolidation

MAIA Biotechnology, Inc. and Subsidiaries (collectively, "the Company") is a biopharmaceutical company that develops oncology drug candidates to improve and extend the lives of people with cancer. MAIA Biotechnology, Inc. ("MAIA") was incorporated in the state of Delaware on August 3, 2018. These consolidated financial statements include the accounts of MAIA and its subsidiaries, as follows:

- THIO Therapeutics, Inc. ("THIO"), incorporated in the state of Delaware on November 26, 2018. On August 13, 2021, MAIA and THIO completed a plan of
 reorganization in which THIO merged with and into MAIA. Prior to the merger, MAIA owned 93.3% of the outstanding shares of THIO common stock, which were
 canceled in connection with the merger. The remaining 6.7% minority stockholder of THIO received one share of MAIA common stock for each share of THIO
 common stock owned prior to the merger.
- DGD Pharmaceuticals Corporation ("DGD"), incorporated in the state of Delaware of April 1, 2019. In July 2020, the board of directors approved the dissolution of DGD, and shortly thereafter also approved a special dividend/return of capital to its stockholders. On August 13, 2021, DGD was officially dissolved via a filing of a Certificate of Dissolution with the state of Delaware.
- MAIA Drug Development Corporation ("MAIA DD") incorporated in the state of Texas on September 10, 2018, and was 100% owned by MAIA, until MAIA DD
 was legally dissolved in July 2021. The operations of MAIA DD were nominal.
- In July 2021, the Company established a wholly owned Australian subsidiary, MAIA Biotechnology Australia Pty Ltd, to conduct various pre-clinical and clinical
 activities for the development of the Company's product candidates.
- In April 2022, the Company established a wholly owned Romanian subsidiary, MAIA Biotechnology Romania S.R.L., to conduct various pre-clinical and clinical
 activities for the development of the Company's product candidates.

Going Concern Considerations

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

To date the Company has incurred recurring losses, negative cash flow from operations and has accumulated a deficit of \$48,324,148 from the Company's inception through March 31, 2023. As of March 31, 2023, the Company had \$7,586,312 in cash and cash equivalents.

To meet the Company's future working capital needs, the Company will need to raise additional equity or enter into debt financing. While the Company has historically been able to raise additional capital through issuance of equity and/or debt financing, and while the Company has implemented a plan to control its expenses in order to satisfy its obligations due within one year from the date of issuance of these financial statements, the Company cannot guarantee that it will be able to raise additional equity, raise debt, or contain expenses. Accordingly, there is substantial doubt about the Company's ability to continue as a going concern within one year after these financial statements are issued.

Basis of Presentation

Basis of presentation and consolidation principles

The accompanying condensed consolidated financial statements have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. generally accepted accounting principles ("GAAP") have been condensed or omitted pursuant to such rules and regulations. The condensed consolidated financial statements may not include all disclosures required by GAAP; however, the Company believes that the disclosures are adequate to make the information presented not misleading. These unaudited condensed financial statements should be read in conjunction with the audited financial statements and the notes thereto for the fiscal year ended December 31, 2022 included in the Company's Annual Report on Form 10-K filed on March 24, 2023. The condensed consolidated balance sheet as of December 31, 2022 was derived from the audited financial statements.

In the opinion of management, all adjustments, consisting of only normal recurring adjustments that are necessary to present fairly the financial position, results of operations, and cash flows for the interim periods, have been made. The results of operations for the interim periods are not necessarily indicative of the operating results for the full fiscal year or any future periods.

The unaudited interim condensed consolidated financial statements include the accounts of the Company's wholly owned subsidiaries. All transactions and accounts between and among its subsidiaries have been eliminated. All adjustments and disclosures necessary for a fair presentation of these unaudited interim condensed consolidated financial statements have been included.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision-maker in deciding how to allocate resources and assess performance. The Company and the Company's chief operating decision-maker, the Company's Chief Executive Officer, views the Company's operations and manages its business as a single operating segment, which is the business of discovering and developing products for the treatment of immunotherapies for cancer.

Use of Estimates

The preparation of the Company's unaudited interim condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The most significant estimates in the Company's financial statements relate to the valuation of common stock, stock options and warrants, the embedded features in convertible notes, and accruals for outsourced research and development activities. These estimates and assumptions are based on current facts, historical experience and various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources. Actual results may differ materially and adversely from these estimates. To the extent there are material differences between the estimates and actual results, the Company's future results of operations will be affected.

Certain Risks and Uncertainties

The Company's activities are subject to significant risks and uncertainties including the risk of failure to secure additional funding to properly execute the Company's business plan. The Company is subject to risks that are common to companies in the pharmaceutical industry, including, but not limited to, development by the Company or its competitors of new technological innovations, dependence on key personnel, reliance on third party manufacturers, protection of proprietary technology, and compliance with regulatory requirements.

Foreign Currency Translation

The financial statements of the Company's foreign subsidiaries, where the local currency is the functional currency, are translated using exchange rates in effect as of the applicable balance sheet dates for assets and liabilities and average exchange rates during the period for results of operations. The resulting foreign currency translation adjustment is included in shareholders' equity as accumulated other comprehensive loss.

Off-Balance Sheet Risk and Concentrations of Credit Risk

The Company has no significant off-balance sheet risks, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Cash accounts are maintained at financial institutions that potentially subject the Company to concentrations of credit risk. At March 31, 2023 and December 31, 2022, substantially all of the Company's cash was deposited in accounts at one financial institution. The Company maintains its cash deposits, which at times may exceed the federally insured limits, with a reputable financial institution and, accordingly, the Company believes such funds are subject to minimal credit risk.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with maturities of three months or less to be cash equivalents. As of March 31, 2023 and December 31, 2022, cash includes cash in a depository bank account; the Company has no cash equivalents as of March 31, 2023 or December 31, 2022.

Fair Value Measurements

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. "Accounting Standards Codification (ASC) Topic 820", Fair Value Measurements and Disclosures ("ASC 820") establishes a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available.

Under this accounting guidance, 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. To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs to valuation methodologies used to measure fair value:

- Level 1 Valuations based on quoted prices for identical assets and liabilities in active markets.
- Level 2 Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
- Level 3 Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market
 participants. These valuations require significant judgment.

Fair value measurements discussed herein are based upon certain market assumptions and pertinent information available to management as of and during the three months ended March 31, 2023, and as of and during the twelve months ended December 31, 2022. The carrying amount of accounts payable approximated fair value as they are short term in nature. The fair value of warrants issued for services is estimated based on the Black-Scholes model during the three months ended March 31, 2023. The estimated fair value of warrants issued to underwriters and embedded features, represented Level 3 measurements.

General and Administrative

General and administrative expenses primarily consist of costs for corporate functions, including payroll and related expenses, rent, outside legal expenses, insurance costs, and other general and administrative costs.

Research and Development

The Company's research and development expenses consist primarily of costs associated with the Company's clinical trials, salaries, payroll taxes, employee benefits, and stock-based compensation charges for those individuals involved in ongoing research and development efforts. Research and development costs are expensed as incurred.

Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received.

As part of the process of preparing the condensed consolidated financial statements, the Company is required to estimate its accrued expenses. This process involves reviewing quotations and contracts, identifying services that have been performed on the Company's behalf and estimating the level of service performed and the associated cost incurred for the service when the Company has not yet been invoiced or otherwise notified of the actual cost. The majority of the Company's service providers invoice the Company monthly in arrears for services performed or when contractual milestones are met. The Company makes estimates of its accrued expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known to the Company at that time. The Company periodically confirms the accuracy of its estimates with the service providers and makes adjustments if necessary. The significant estimates in the Company's accrued research and development expenses are related to expenses incurred with respect to CROs, CMOs and other vendors in connection with research and development and manufacturing activities.

The Company bases its expense related to CROs and CMOs on its estimates of the services received and efforts expended pursuant to quotations and contracts with such vendors that conduct research and development and manufacturing activities on the Company's 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 the Company's vendors will exceed the level of services provided and result in a prepayment of the applicable research and development or manufacturing expense. In accruing service fees, the Company estimates 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 its estimate, the Company adjusts the accrual or prepaid expense accordingly. Although the Company does not expect its estimates to be materially different from amounts actually incurred, the Company's understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in us reporting amounts that are too high or too low in any particular period. There have been no material changes in estimates for the periods presented.

Research and Development Incentive

The Company recognizes other income from Australian research and development incentives when there is reasonable assurance that the income will be received, the relevant expenditure has been incurred, and the consideration can be reliably measured. The research and development incentive is one of the key elements of the Australian Government's support for Australia's innovation system and is supported by legislative law primarily in the form of the Australian Income Tax Assessment Act 1997, as long as eligibility criteria are met. Under the program, a percentage of eligible research and development expenses incurred by the Company through its subsidiary in Australia are reimbursed.

Management has assessed the Company's research and development activities and expenditures to determine which activities and expenditures are likely to be eligible under the research and development incentive regime described above. At each period end, management estimates the refundable tax offset available to the Company based on available information at the time and it is included in Australian research and development incentives in the condensed consolidated statements of operations.

Derivative Financial Instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. The Company evaluates all of its financial instruments, to determine if such instruments 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. Bifurcated embedded derivatives are recognized at fair value, with changes in fair value recognized in the statement of operations each period.



Stock-Based Compensation

The Company records share-based compensation for awards granted to employees, non-employees, and to members of the board of directors based on the grant date fair value of awards issued, and the expense is recorded on a straight-line basis over the requisite service period. Forfeitures are recognized when they occur.

The Company uses the Black-Scholes-Merton option pricing model to determine the fair value of stock options and warrants. The use of the Black-Scholes-Merton optionpricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the common stock consistent with the expected life of the option, risk-free interest rates and expected dividend yields of the common stock. The Company has concluded that its historical share option exercise experience does not provide a reasonable basis upon which to estimate expected term. Therefore, the expected term was determined according to the simplified method, which is the average of the vesting tranche dates and the contractual term. Due to the lack of company specific historical and implied volatility data, the estimate of expected volatility is primarily based on the historical volatility of a group of similar companies that are publicly traded. For these analyses, companies with comparable characteristics are selected, including enterprise value and position within the industry, and with historical share price information sufficient to meet the expected life of the share-based awards. The Company computes the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of its share-based awards. The risk-free interest rate is determined by reference to U.S. Treasury zero-coupon issues with remaining maturities similar to the expected term of the options. The Company has not paid, and does not anticipate paying, cash dividends on shares of its common stock.

Prior to the initial public offering, in order to estimate the fair value of shares of the common stock, the Company's board of directors considered, among other things, sales of common stock to third party investors and valuations of common stock, business, financial condition and results of operations, including related industry trends affecting operations; the likelihood of achieving a liquidity event, such as an initial public offering, or sale, given prevailing market conditions; the lack of marketability of our common stock; the market performance of comparable publicly traded companies; and U.S. and global economic and capital market conditions.

During the three months ended March 31, 2023, 40,500 restricted shares of common stock were issued. There were no issuances of restricted stock awards during three months ended March 31, 2022. The fair value of restricted stock awards is based on the common stock price.

All stock-based compensation costs are recorded in general and administrative or research and development costs in the condensed consolidated statements of operations based upon the underlying individual's role at the Company.

Common Stock Warrants

The Company accounts for common stock warrants as either equity instruments or as liabilities in accordance with ASC 480, Distinguishing Liabilities from Equity ("ASC 480"), depending on the specific terms of the warrant agreement.

When warrants are issued for services provided by non-employees, under ASC 718, Compensation – Stock Compensation ("ASC 718"), the warrants shall be classified as a liability if 1) the underlying shares are classified as liabilities or 2) the entity can be required under any circumstances to settle the warrant by transferring cash or other assets. The measurement of equity-classified non-employee share-based payments is generally fixed on the grant date and are considered compensatory, as defined by ASC 718.

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 financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement 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.

Deferred Offering Costs

Deferred offering costs are included in other assets and consist of legal, accounting, underwriting fees and other costs incurred through the December 31, 2022 and the March 31, 2023 balance sheet date that are directly related to a planned follow-on offering and will be charged to additional paid-in capital upon the completion of the follow-on offering.

Net Loss Per Share

Basic loss per share of common stock is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of common stock outstanding for the period. Diluted net loss per share is calculated by adjusting the weighted-average number of shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method. Diluted loss per share excludes, when applicable, the potential impact of stock options, unvested shares of restricted stock awards, and common stock warrants because their effect would be anti-dilutive due to our net loss. Gains on warrant liabilities are only considered dilutive when the average market price of the common stock during the period exceeds the exercise price of the warrants. Since the Company had a net loss in each of the periods presented, basic and diluted net loss per common share are the same.

The following table summarizes the Company's potentially dilutive securities, in common share equivalents, which have been excluded from the calculation of dilutive loss per share as their effect would be anti-dilutive:

	Three Month March	
	2023	2022
Shares issuable upon exercise of stock options	7,217,915	5,859,589
Shares issuable upon exercise of warrants	796,985	1,250,006
Unvested restricted stock awards	—	29,168

Recent Accounting Standards

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and are adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations upon adoption.

Leases

In February 2016, the FASB issued ASU No. 2016-02, as amended, Leases ("Topic 842"), which applies to all leases. Under Topic 842, a right-of-use asset and lease obligation will be recorded for all leases, whether operating or financing leases, while the statement of operations will reflect lease expense for operating leases and amortization and interest expense for financing leases. Topic 842 is effective for public entities for fiscal years beginning after December 15, 2018 and periods beginning after December 15, 2021 for all other entities. Entities are required to use a modified retrospective approach of adoption for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. The Company adopted this new standard as of January 1, 2022. At the inception of an arrangement the Company determines whether the arrangement is or contains a lease based on the circumstances present. Currently none of the Company's operating lease commitments are subject to the new standard as its leases are short-term in nature (i.e., less than twelve months).

2. RELATED PARTY TRANSACTIONS

10b5-1 Plan

Certain of our directors and executive officers have adopted written plans, known as Rule 10b5-1 plans, in which they have contracted with a broker to buy shares of our common stock on a periodic basis. Our other directors and executive officers may also adopt Rule 10b5-1 plans in which they contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in limited circumstances. Our directors and executive officers may also buy or sell additional shares of our common stock outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

3. ACCRUED EXPENSES

As of March 31, 2023 and December 31, 2022, accrued expenses consisted of the following:

	Γ	March 31,	December 31,			
	2023			2022		
Bonus	\$	1,409,860	\$	1,094,582		
Professional fees		709,454		332,589		
Research and development costs		357,469		516,961		
Other		162,251	_	159,269		
Total accrued expenses	\$	2,639,034	\$	2,103,401		

4. FAIR VALUE OF FINANCIAL LIABILITIES

Derivative Liability

Financial liabilities consisting of warrant liabilities measured at fair value on a recurring basis are summarized below. The fair value of the warrant liabilities recorded are as follows:

	Fair value at March 31, 2023							
		Total	Le	evel 1	Le	vel 2		Level 3
Liabilities:								
Warrant liability		224,399		—		—		224,399
Total liabilities	\$	224,399	\$		\$		\$	224,399

The table below provides a summary of the changes in fair value of the warrant liabilities measured on a recurring basis using significant unobservable inputs (Level 3):

	Years Ended March 31,					
Warrant liabilities:	202	2023 2022				
Balance, beginning of period	\$	245,341	\$			
Warrant liability				—		
Gain on fair value of warrant liability		(20,942)		—		
Reclassification of warrant liability to equity				—		
Balance, end of period	\$	224,399	\$	_		

5. STOCKHOLDERS' EQUITY

Upon the closing of the Company's initial public offering, the Company's shareholders agreement terminated pursuant to its terms. In connection with the closing of the Company's initial public offering, the Company amended and restated its Amended and Restated Certificate of Incorporation (the "Amended and Restated Certificate of Incorporation") and amended and restated its Bylaws (the "Amended and Restated Bylaws"). The Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on August 1, 2022 and became effective on that date, and among other things, increased the authorized number of common stock to 70,000,000 shares and decreased the authorized number of preferred stock to 30,000,000 shares.

Sales of MAIA Common Stock

During January and February 2022, the Company sold 263,729 shares of common stock at \$9.00 per share for gross proceeds of \$2,373,561 with no transaction costs. During May 2022, the Company sold 11,111 shares of common stock at \$9 per share for gross proceeds of \$99,999 with no transaction costs. The Company issued these shareholders additional shares ("Ratchet Shares") upon the closing of the Company's initial public offering such that the \$9.00 price per share they paid was equal to the price per share in the Company's initial public offering of \$5.00. The number of Ratchet Shares were calculated using the \$5.00 per share price in the Company's initial public offering and 219,872 shares of common stock were issued on August 1, 2022 to the investors in the Recent Private Rounds. The Ratchet shares were determined to be a freestanding instrument that was classified as a liability when the right was granted and subsequently reclassified to equity when shares were issued. The Ratchet Shares were valued at \$1,099,360, based on the \$5 price of the initial public offering and were recorded as expense included in operating expense in the 2022 Consolidated Statement of Operations.

Initial Public Offering

On July 28, 2022 the Company's shares of common stock began trading on the NYSE American under the symbol MAIA. On August 1, 2022, the Company sold 2,000,000 shares of common stock at \$5.00 per share for gross proceeds of \$10,000,000 in an initial public offering prior to deducting underwriting discounts, commissions, and other offering expenses. On August 3, 2022, the Company sold an additional 300,000 shares of common stock at \$5.00 per share when the underwriter exercised the overallotment for gross proceeds of \$1,500,000 prior to deducting underwriting discounts, commissions, and other offering expenses. After deducting the underwriting discount and other offering expenses payable by the Company, the total net proceeds for the initial public offering and the overallotment were \$9,093,830.

MAIA Biotechnology, Inc. Restricted Stock Awards

During the three months ended March 31, 2022, MAIA recognized \$52,500 of stock compensation expense related to 29,168 of MAIA's restricted shares granted to the founders.

During the three months ended March 31, 2023, the company expensed \$164,070 to consulting for investor relations related to the grant of 40,500 restricted shares of common stock. There are no unvested restricted shares as of March 31, 2023.

MAIA Stock Warrants

In January 2022, the Company and certain warrant holders executed waivers related to the acceptance and approval of an amendment to the holders' warrant agreements originally issued between May 6, 2020 and February 26, 2021 in connection with the Company's issuance of convertible notes. The amendment removed the IPO expiration provision from the warrant agreements, and the warrants are now only to be exercisable, in whole or in part, during the exercise period ending on the earliest to occur of: (a) various dates in 2028 as stated within the warrant agreements; or (b) immediately prior to the closing of a change of control. The value of the warrant modification to the 144,497 warrants was calculated using the Black-Scholes-Merton option pricing model. The incremental fair value attributable to the modified awards compared to the original awards immediately prior to the modification was calculated at \$450,578 and was treated as a deemed dividend for the three months ended March 31, 2022 and is reflected as "Deemed dividend on warrant modification" in the accompanying statement of operations.

During January 2022, warrants were exercised, resulting in the issuance of 61,111 shares of MAIA common stock for proceeds of \$110,000. During May 2022, warrants were exercised, resulting in the issuance of 153,000 shares of common stock for proceeds of approximately \$275,400. Another 394,501 warrants were exercised with a cashless exercise assuming the fair market value of \$9 per share resulting in the issuance of 315,601 shares of common stock.

On August 1, 2022 at the closing of the initial public offering, 20,520 warrants with an exercise price of \$5.00 per share expired.

Concurrently with the closing of the Company's initial public offering, the Company issued warrants to purchase an aggregate of up to 100,000 shares of its common stock to the Representative or its designees, at an exercise price of \$6.25 per share (the "Representative's Warrants"). The Representative's Warrants are exercisable beginning on January 23, 2023, and expire on July 27, 2027, pursuant to the terms and conditions of the Representative's Warrants. On August 3, concurrently with the full exercise of the Underwriter's over-allotment option, the Company issued additional warrants to purchase an aggregate of up to 15,000 shares of its common stock to the Representative or its designees on the same terms. The warrants are not indexed to the Company's own stock and therefore meet the definition of a derivative liability. The warrants are liability classified instruments and were initially recorded as \$343,735, which was the value determined using the Black-Scholes method using a term of five years, risk free interest rate of 2.82% and volatility of 77.5%. As of March 31, 2023 and December 31, 2022 the Company remeasured the warrant liability resulting in a value of \$224,399 and \$245,341 respectively. The gain on remeasurement of the warrant liability in the amount of \$20,942 was included in other income.

	Warrants Outstanding	Av Ex	ighted erage ercise Price	Weighted Average Remaining Contractual Term in Years
Balance at January 1, 2023	796,985	\$	6.04	5.16
Issued	—		—	
Exercised	—		—	
Expired	—		—	
Balance at March 31, 2023	796,985	\$	6.04	4.91

MAIA Biotechnology, Inc. Stock Award Plans

In 2018, the Company adopted the MAIA Biotechnology, Inc. 2018 Stock Option Plan (the "MAIA 2018 Plan"). MAIAs board of directors administers the MAIA Plan for the purposes of attracting, retaining, and motivating key employees, directors, and consultants of MAIA. The terms of the MAIA 2018 Plan continue to govern the 1,924,500 options outstanding in the plan of March 31, 2023.

In 2020, the Company adopted the MAIA Biotechnology, Inc. Amended and Restated 2020 Equity Incentive Plan (the "MAIA 2020 Plan"), also administered by the board of directors. The MAIA 2020 Plan permitted awards to take the form of stock options, restricted stock and restricted stock units. The terms of the MAIA 2020 Plan continue to govern the 3,983,023 options outstanding in the plan as of March 31, 2023. There are no shares reserved for future issuance in the MAIA 2018 Plan or the MAIA 2020 Plan.

On August 1, 2022 the Company approved the MAIA Biotechnology, Inc. 2021 Equity Incentive Plan (the "MAIA 2021 Plan") with 1,909,518 shares of common stock reserved for issuance. As of March 31, 2023 there are 599,126 shares of common stock available for future issuance under the MAIA 2021 Plan and 1,310,392 options are outstanding in the MAIA 2021 Plan.

Stock options are to be granted with an exercise price which is at least equal to the stock's estimated fair value at the date of grant, and with a contractual term of no more than ten years from the date of grant. In the case of an option granted to a 10% stockholder, the exercise price shall be generally no less than 110% of the fair market value per share on the date of grant, and the contractual term shall be seven years. Outstanding options awarded under the MAIA 2021 Plan may, but need not, vest and therefore become exercisable in periodic installments that may, but need not, be equal. The option may be subject to other terms and conditions as to the time or times when it may be

exercised (which may be based on performance or other criteria) as the board of directors may deem appropriate. Unexercised options are canceled ninety days after termination of an employee, director, founder, or consultant. Unexercised options are canceled immediately if an employee, director, founder, or consultant is terminated for cause; under certain other circumstances, the period to cancellation may differ as described in the respective plan documents. Certain clauses in the Plans also govern the Company's exercise repurchase rights and various other features of awards granted under the plans.

As of March 31, 2023, only stock options have been awarded pursuant to the MAIA stock award plans.

The following table summarizes the activity and information regarding MAIA's outstanding and exercisable options for the three months ended March 31, 2023:

	Options Outstanding	Weighted Average Exercise Price		Average Contractual Exercise Term in		Average Remaining Contractual Term in	Aggregate Intrinsic Value	
Balance at January 1, 2023	6,545,628	\$	2.55	7.59	 _			
Granted	672,287		4.08					
Exercised	—		—					
Cancelled/forfeited	—		—					
Balance at March 31, 2023	7,217,915	\$	2.69	7.82	\$ 8,907,071			
Options exercisable at March 31, 2023	5,676,837	\$	2.29	7.39	\$ 8,591,943			

During the three months ended March 31, 2023, the fair value of our common stock is based on the closing price of the common stock in the public market.

During the three months ended March 31, 2022, the fair value of the Company's common stock was estimated for financial reporting purposes from January 1 to January 26, 2022 based on valuations of \$8.87 per share as of December 31, 2021. For our valuations of common stock performed, we used a hybrid method of the Option Pricing Method ("OPM") and the Probability-Weighted Expected Return Method ("PWERM"). PWERM considers various potential liquidity outcomes. Our approach included the use of an initial public offering scenario, a scenario assuming continued operation as a private entity, and a dissolution scenario. Under the hybrid OPM and PWERM, the per share values calculated under the OPM and PWERM are weighted based on expected exit outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a discount for lack of marketability is applied. From January 27 to March 31, 2022 the fair value of the Company's common stock was estimated for financial reporting purposes at \$9 per share based on the sale of common stock from January 27, 2022 to March 31, 2022.

The value of option grants is calculated using the Black-Scholes option pricing model with the following assumptions for options granted during the three months ended March 31, 2023 and 2022:

	2023	2022
Risk-free interest rate	3.64% -4.23%	2.14%
Expected term (in years)	5 - 6.08	5 - 6.25
Expected volatility	99.6% - 101.1%	72.0% - 74.2%
Expected dividend yield	%	%

The weighted-average grant date fair value of stock options issued during the three months ended March 31, 2023 and 2022 was \$3.27 and \$5.78, respectively. As of March 31, 2023, the total unrecognized compensation related to unvested employee and non-employee stock option awards granted was \$5,097,294, which the Company expects to recognize over a weighted average period of approximately 3.3 years.

Stock based compensation related to the Company's stock plans are as follows:

	Three Months Ended				
	March 31,				
	2023 2022			2022	
General and administrative	\$	256,677	\$	440,551	
Research and development		280,845		272,779	
Total stock-based compensation	\$	537,522	\$	713,330	

6. COMMITMENTS AND CONTINGENCIES

Legal

From time to time, the Company is involved in legal actions and claims arising in the normal course of business. Management believes there are no matters which will have a material adverse effect on the Company's financial position, operations or cash flows.

Patent Licensing, Sponsored Research, and Patent & Technology Agreements

THIO – In November 2018 and as amended in December 2020, the Company entered into a Global Patent Licensing Agreement ("PLA") titled "Patent and Technology License Agreement AGT. NO. L2264 – MAIA Biotechnology" with the University of Texas Southwestern ("UTSW") to license patent families for a specific compound ("THIO") from UTSW to MAIA. The agreement, as amended, has a term of 20 years. The agreement requires MAIA to reimburse UTSW for agreed-upon expenses related to THIO. The agreement requires certain payments upon assignment of the license to a third party as well as upon reaching specific milestones, ranging between \$1,000,000 and \$50,000,000, not to exceed a combined milestone payment total of \$112,000,000. As of March 31, 2023, no assignment has occurred and none of the defined milestones have been completed and therefore no payments are due to UTSW related to the milestones. The agreement requires royalties of 2-4% (depending on THIO reaching specified sales levels in the respective jurisdictions) royalty payments on net sales up to \$1,000,000, and 2.5-5% on net sales above \$1,000,000.

Also in December 2020, the Company entered into a second license agreement with UTSW titled "Patent and Technology License Agreement AGT. NO. L3648 — MAIA Biotechnology" pursuant to which UTSW is licensing an additional compound to MAIA. The agreement has a term of 20 years and requires the Company to reimburse UTSW for certain agreed-upon expenses. The agreement requires certain payments upon assignment of the license to a third party as well as upon reaching specific milestones, ranging between \$1,000,000 and \$50,000,000, not to exceed a combined milestone payment total of \$112,000,000. As of March 31, 2023, no assignment has occurred and none of the defined milestones have been completed and therefore no payments are due to UTSW related to the milestones.

The agreement requires royalties of 2-4% (depending on THIO reaching specified sales levels in the respective jurisdictions) royalty payments on net sales up to \$1,000,000, and 2.5-5% on net sales above \$1,000,000.

The Company will also pay UTSW running royalties on a yearly basis as a percentage of Net Sales of the Company or its sublicensee. There are single digit royalty rates for licensed products and licensed services covered by a Valid Claim (as defined in the agreement) and dependent on whether Net Sales are greater than or less than/equal to \$1,000,000,000, with Net Sales above that amount commanding a slightly higher percentage. In each case, the royalty percentage is lower before patent issuance in each jurisdiction. In the event that the licensed product or licensed service is not covered by a Valid Claim, the running royalty rates are reduced by fifty percent (50%). The royalty obligations continue on a country-by-country basis until the later of expiration of the last Valid Claim in each country or ten (10) years after the First Commercial Sale (as defined in UTSW2 Agreement) in each country.

Regeneron – In February 2021, the Company reached an agreement with Regeneron Pharmaceuticals, Inc. ("Regeneron") to perform one clinical trial for the treatment of patients with Non-Small Cell Lung Cancer (NSCLC) involving a Regeneron drug candidate that utilizes one of the Company's compounds/agents. The Company is responsible for all costs of the study with Regeneron supplying their drug cemiplimab representing a cost savings for the Company, the first phase of which is expected to take approximately two years. The overall term of the agreement is for five years unless earlier terminated for certain reasons as defined in the agreement. Either party may terminate a study plan in the event that patient screening for the clinical study does not commence within twelve (12) months after (a) the Effective Date, with respect to the initial study, or (b) the execution of the applicable study plan, with respect to each other study. If either party terminates a study plan, the Company shall reimburse Regeneron for the Regeneron product it received in connection with such study plan based on the actual out-of-pocket cost to Regeneron of such Regeneron product. As of March 31, 2023 neither party has terminated the agreement.

6. INCOME TAXES

The Company provides for income taxes using the asset and liability approach. Deferred tax assets and liabilities are recorded based on the differences between the financial statement and tax bases of assets and liabilities and the tax rates in effect when these differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if, based on 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 issuance of shares in connection with the Company's IPO, as well as prior share issuances, may result in limitations on the utilization of the Company's net operating loss carryforwards under IRS section 382. As of March 31, 2023, and December 31, 2022, the Company had a full valuation allowance against its deferred tax assets.

For the three months ended March 31, 2023 and 2022, the Company recorded zero income tax expense. No tax benefit has been recorded in relation to the pre-tax losses for three months ended March 31, 2023 and 2022, due to full valuation allowance to offset any deferred tax assets.

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7. SUBSEQUENT EVENTS

Issuance of Common Stock

On April 3, 2023, the Company entered into an agreement with Acorn Management Partners, LLC for professional relations services, pursuant to which the Company agreed to issue 43,000 restricted shares of common stock on April 6, 2023 and an additional \$45,000 worth of restricted shares of common stock, with the number of shares of the Company to be determined by dividing the \$45,000 by the closing price in six months and again nine months after the execution date of the contract unless the contract is terminated.

On April 6, 2023, the Company entered into an agreement with Outside the Box Capital Inc. for media services, pursuant to which we agreed to issue \$50,000 worth of restricted shares of common stock on April 11, 2023, the effective date of the agreement. Based on the closing price of common stock on April 11, 2023, 13,021 restricted shares of common stock were issued. An additional \$50,000 worth of restricted shares of common stock will be issued on June 11, 2023 if the agreement is not terminated.

On April 16, 2023, the Company issued 18,000 restricted shares of common stock to FON Consulting, an assignee of FORCE Family Office, LLC, for investor services through July 16, 2023.

On April 27, 2023, the Company sold 2,555,500 shares of the Company's common stock at a price of \$2.25 per share in an underwritten public offering. ThinkEquity LLC ("ThinkEquity") served as underwriter of the offering. The aggregate net proceeds of the offering were approximately \$5.1 million, after deducting underwriting discounts and expenses. The shares of common stock were offered, issued and sold to the public pursuant to the Registration Statement on Form S-1, as amended from time to time (File No. 333-269606). The Company intends to use the net proceeds from the offering to fund the ongoing clinical trials of THIO, pre-clinical development of second-generation of telomere targeting compounds, and other research and development activities, as well as for working capital and other general corporate purposes. Concurrently with the closing of the public offering, the Company also issued warrants to purchase an aggregate of up to 127,775 shares of its common stock to ThinkEquity or its designees, at an exercise price of \$2.8125 per share (the "Representative's Warrants"). The Representative's Warrants are exercisable beginning on October 24, 2023, and expire on April 24, 2028, pursuant to the terms and conditions of the Representative's Warrants.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion together with our financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward-looking statements that are based on our current expectations, estimates and projections about our business and operations. Our actual results may differ materially from those currently anticipated and expressed in such forward-looking statements as a result of a number of factors, including those which we discuss under "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q.

Overview

We are a clinical stage biotechnology company engaged in the discovery, development and commercialization of therapies targeting cancer. Our initial disease target is lung cancer, a serious medical condition with an incidence of over 236,000 new cases in the US in 2022, representing 12.3% of all cancers, and over 130,000 deaths, or 21.4% of all cancers. Worldwide, lung cancer incidence is over 2,200,000 per year (ranking second only after breast cancer), and mortality over 1,800,000 (ranking first). Specifically, we are targeting Non-Small Cell Lung Cancer (NSCLC), which represents 85% of all lung cancers.

We accomplished the following key milestones:

- In November 2018, we in-licensed THIO from University of Texas Southwestern, in Dallas. The patent license is global and exclusive for the duration of the
 patients' lives.
- In 2019, we generated the first data for THIO demonstrating complete regression with no recurrence when administered in advance of atezolizumab (TecentriQ®; Genentech), in colorectal and lung cancer preclinical models.
- In the First Quarter 2020, we filed a provisional patent application for THIO in sequential combination with checkpoint inhibitors, covering all tumor types. The patent has not been allowed to date, but if it is allowed will have an expiration date in 2041, excluding any patent term adjustment or patent extension.
- In the First Quarter 2021, we entered into a Drug Supply Agreement with Regeneron Pharmaceuticals, Inc. Under this agreement, Regeneron will provide cemiplimab (LIBTAYO; anti-PD-1 checkpoint inhibitor) at no charge for the THIO-101 trials, testing THIO administration for immune activation followed by cemiplimab in NSCLC. This drug supply agreement replaces direct drug purchase expense that we would be otherwise required to incur. In exchange, Regeneron received development exclusivity in NSCLC for the duration of the trial which is expected to be two years, meaning we cannot conduct trials in NSCLC with another checkpoint inhibitor during the time of the trial. All other areas of study and development in any other tumor types remain open.
- In the First Quarter 2021, we initiated our clinical supply manufacturing (CMC) under Good Manufacturing Practices (GMP) conditions to provide clinical supply for THIO-101 and other development needs.
- In the First Quarter 2022, we completed the Crossover Round for total proceeds of approximately \$2.4 million.
- In the First Quarter 2022, THIO received approval by the Bellberry Human Research Ethics Committee (HREC) in Australia to initiate the THIO-101 Phase 2 clinical study.
- In March 2022, the U.S. Food and Drug Administration (FDA) granted Orphan Drug Designation (ODD) to THIO for the treatment of hepatocellular carcinoma, and in May 2022, the FDA granted ODD to THIO for the treatment of small-cell lung cancer. The FDA's Office of Orphan Products Development may grant orphan designation status to drugs and biologics that are intended for the treatment, diagnosis or prevention of rare diseases, or conditions that affect fewer than 200,000 people in the U.S. Orphan Drug Designation provides certain benefits, including financial incentives, to support clinical development and the potential

for up to seven years of market exclusivity for the drug for the designated orphan indication in the U.S. if the drug is ultimately approved for its designated indication.

- In May 2022, we completed the Additional Round for total proceeds of approximately \$99,999.
- In May 2022, we entered into a research and collaboration agreement with the Nationwide Children's Hospital to evaluate the potential of THIO in combination
 with current standard-of-care therapies for brain cancer. The organizations are conducting preclinical studies to assess the efficacy and safety of THIO in
 combination with radiotherapy and immune checkpoint inhibitors in vitro and in vivo models.
- In July 2022, we completed our selection process for the clinical sites for our Phase 2 study in Australia and Europe and our application to start the Phase 2 study in Australia has been approved. In July 2022, the first patient was administered with THIO in our Phase 2 human trial (THIO-101) in Australia. We have also submitted a similar application to conduct the same Phase 2 study in Europe.
- On July 28, 2022, the Company's shares of common stock began trading on the NYSE American under the symbol MAIA. On August 1, 2022, the Company sold 2,000,000 shares of common stock at \$5.00 per share for net proceeds of \$10,000,000 in an initial public offering prior to deducting underwriting discounts, commissions, and other offering expenses. On August 3, 2022, the Company sold an additional 300,000 shares of common stock at \$5.00 per share when the underwriter exercised the overallotment for net proceeds of \$1,500,000 prior to deducting underwriting discounts, commissions, and other offering expenses. We believe we have raised sufficient capital to fund the THIO-101 lead-in and preliminary efficacy of the phase 2 THIO-101 trial.
- In November 2022, we completed a pre-Investigational New Drug (pre-IND) meeting with the U.S. Food and Drug Administration (FDA) for the planned U.S. expansion of the THIO-101 Phase 2 trial evaluating THIO, an investigational telomere-targeting agent, in patients with advanced non-small cell lung cancer (NSCLC).
- In December 2022, regulatory authorities in three European countries, Hungary, Poland, and Bulgaria, approved the implementation of THIO-101, MAIA's Phase 2 clinical trial. THIO-101 is a critical component of THIO's clinical development process and it is of the utmost importance that we collaborate with leading cancer institutes in Australia and now in Europe, for a target total of 30 clinical trial sites in six countries.
- In the first week of March 2023, the first two patients were dosed in Europe in MAIA's Phase 2 clinical trial, THIO-101 evaluating THIO in patients with advanced Non-Small Cell Lung Cancer (NSCLC). Following regulatory clearances in Hungary, Poland, and Bulgaria, nine clinical sites have been activated in these three European countries.
- On April 18, 2023, we published data in HCC (liver cancer) models: as monotherapy, THIO achieved complete and durable responses in Hepatocellular Carcinoma (HCC), the dominant histology in primary liver cancer (90%), in in vivo models. When combined with Libtayo®, duration of response was further potentiated. Upon rechallenge with two times more cancer cells and no additional treatment, tumor growth was completely prevented. Administration of THIO alone and in combination with Libtayo® generated anti-cancer immune memory.
- On April 20, 2023, we announced preliminary survival data from Part A of THIO-101. The first two patients enrolled in Part A of the study continue to be alive, approximately 10 and 9 months respectively, from treatment initiation. Both patients have advanced Stage IV metastatic disease and are heavily pretreated, receiving third and fourth line of therapy respectively after previously failing treatment with an immune checkpoint inhibitor. They continue to be progression free following their last dose of THIO, 7 and 6 months respectively, with no new treatment. The current treatment options in patients with advanced relapsed or refractory NSCLC who failed two or more therapy regimens are limited and show minimal benefit. Furthermore, discontinuation of treatment is rapidly followed by physical decline and death, therefore seeing patients with such survival and no disease progression in this clinical setting, is

noteworthy. In real-world clinical practice, observed survival in such heavily pretreated patients is 3-4 months.

• On April 27, we closed a follow-on offering and sold 2,555,500 shares of common stock at a public offering price of \$2.25 per share, for gross proceeds of approximately \$5.75 million, before deducting underwriting discounts and offering expenses. The shares sold in the offering include the exercise in full by the underwriter of its option to purchase an additional 333,300 shares of common stock, in addition to the 2,222,200 shares of common stock which the underwriters initially agreed to purchase.

Impact of the War in Ukraine on Our Operations

The short and long-term implications of Russia's invasion of Ukraine are difficult to predict at this time. The imposition of sanctions and counter sanctions may have an adverse effect on the economic markets generally and could impact our business, financial condition, and results of operations. Because of the highly uncertain and dynamic nature of these events, the Company terminated any planned research activities in Russia.

Financial Operations Overview and Analysis for the Three Months Ended March 31, 2023 and 2022

Comparison of the three months ended March 31, 2023 and 2022

	Three Mon Marc		nded		Chang	
	 2023		2022		Dollars	Percentage
Operating expenses:	 					0
Research and development						
expenses	\$ 2,195,991	\$	2,077,329	\$	118,662	6%
General and administrative						
expenses	 1,988,259		1,366,229		622,030	46%
Total operating costs and expenses	4,184,250		3,443,558		740,692	22%
Loss from operations	(4,184,250)		(3,443,558)		(740,692)	22%
Other income (expense):	 			-		
Interest expense	(5,147)		_		(5,147)	100%
nterest income	336		472		(136)	(29)%
Australian research and						
development incentives	51,243		29,241		22,002	75%
Change in fair value of warrant						
liability	20,942		—		20,942	100%
Other income, net	67,374		29,713		37,661	127%
Net loss	 (4,116,876)	_	(3,413,845)		(703,031)	21%
Deemed dividend on warrant modification	_		(450,578)		450,578	(100)%
Net loss attributable to MAIA Biotechnology, Inc. shareholders	\$ (4,116,876)	\$	(3,864,423)	\$	(252,453)	7%

Operating Expenses

Research and development expenses

Research and development expenses increased by approximately \$119,000 or 6%, from approximately \$2,077,000 for the three months ended March 31, 2022 to approximately \$2,196,000 for the three months ended March 31, 2023. The increase was primarily related to an increase in payroll and bonus expenses of approximately \$462,000 related to the increased headcount of additional research and development employees and an increase in stock-based compensation costs of approximately \$8,000 offset by a decrease in Clinical and Scientific research of approximately \$227,000 due less THIO-101 trial start-up fees, and a decrease in consulting and other fees of approximately \$124,000.



General and administrative expenses

General and administrative expenses increased by approximately \$622,000, or 46% from approximately \$1,366,000 for the three months ended March 31, 2022 to approximately \$1,988,000 for the three months ended March 31, 2023. The increase was primarily related to an increase in payroll expense of approximately \$278,000, an increase in other expenses of approximately \$580,000 related to the costs of operating as a public company, offset by a decrease in stock-based compensation of approximately \$184,000 and professional fees of approximately \$52,000.

Other expense, net

Other income, net increased by approximately \$38,000 or 127% from other income of approximately \$30,000 for the three months ended March 31, 2022 to other income of approximately \$67,000 for the three months ended March 31, 2023. The increase was primarily related to increases in the Australia research and development incentives of approximately \$22,000 and a gain on the change in the fair value of the warrant liability of approximately \$21,000 offset by increases to interest expense of approximately \$5,000.

Liquidity and Capital Resources

Our Ability to Continue as a Going Concern

As of March 31, 2023, our cash totaled approximately \$7,586,000 which represented a decrease of approximately \$3,365,000 compared to December 31, 2022. As of March 31, 2023, we had working capital of approximately \$4,567,000 which represents a decrease of approximately \$3,972,000 compared to December 31, 2022. We have generated no revenues as of March 31, 2023. The Company's current operating plan indicates that it will continue to incur losses from operations and generate negative cash flows from operating activities given ongoing expenditures related to the completion of its ongoing clinical trials and the Company's lack of revenue generating activities. Based on the Company's cash reserves as March 31, 2023 of approximately \$7,586,000 million and current financial condition as of the date of the Quarter Report on Form 10-Q, the accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

To meet the Company's future working capital needs, the Company will need to raise additional equity or enter into debt financing. While the Company has historically been able to raise additional capital through issuance of equity and/or debt financing, and while the Company has implemented a plan to control its expenses in order to satisfy its obligations due within one year from the date of issuance of these financial statements, the Company cannot guarantee that it will be able to raise additional equity, raise debt, or contain expenses. Accordingly, there is substantial doubt about the Company's ability to continue as a going concern within one year after these financial statements are issued.

Sales of Common Stock

On April 27, 2023, the Company sold 2,555,500 shares of the Company's common stock at a price of \$2.25 per share in an underwritten public offering. ThinkEquity LLC ("ThinkEquity") served as underwritter of the offering. The aggregate net proceeds of the offering were approximately \$5.1 million, after deducting underwriting discounts and estimated offering expenses. The shares of common stock were offered, issued and sold to the public pursuant to the Registration Statement on Form S-1, as amended from time to time (File No. 333-269606). The Company intends to use the net proceeds from the offering to fund the ongoing clinical trials of THIO, pre-clinical development of second-generation of telomere targeting compounds, and other research and development activities, as well as for working capital and other general corporate purposes. Concurrently with the closing of the public offering, the Company also issued warrants to purchase an aggregate of up to 127,775 shares of its common stock to ThinkEquity or its designees, at an exercise price of \$2.8125 per share (the "Representative's Warrants"). The Representative's Warrants are exercisable beginning on October 24, 2023, and expire on April 24, 2028, pursuant to the terms and conditions of the Representative's Warrants.



During January and February 2022, the Company sold 263,729 shares of common stock at \$9 per share for gross proceeds of \$2,373,561 before transaction costs and expenses.

Between April 22, 2022 and May 3, 2022, warrant holders exercised warrants, resulting in the issuance of 153,000 shares of common stock for proceeds of approximately \$275,400.

On May 19, 2022, the Company sold 11,111 shares of common stock at \$9.00 per share for gross proceeds of \$99,999 with no transaction costs. On August 1, 2022, the Company sold 2,000,000 shares of common stock at \$5 per share for gross proceeds of \$10,000,000 in an initial public offering. On August 3, 2022, the Company sold an additional 300,000 shares of common stock at \$5 per share for gross proceeds of \$1,500,000 per the overallotment option for the underwriter.

We will need to raise additional capital to fund our operations, to develop and commercialize THIO, and to develop, acquire or in-license other products. We may seek to fund our operations through public equity, private equity, or debt financings, as well as other sources. We cannot make any assurances that additional financings will be available to us and, if available, on acceptable terms or at all. This could negatively impact our business and operations and could also lead to the reduction of our operations.

Cash Flows

Cash Flows three months ended March 31, 2023 and 2022

	Three Months Ended March 31,				
	 2023		2022		
Net cash flows used in operating activities	\$ (3,360,649)	\$	(2,807,811)		
Net cash flows provided by financing activities	_		2,531,261		
Effect of foreign currency exchange rate changes on cash	(3,966)		(4,282)		
Net increase in cash and cash equivalents	\$ (3,364,615)	\$	(280,832)		

Operating Activities

For the three months ended March 31, 2023, net cash used in operating activities was approximately \$3,361,000, which consisted of a consolidated net loss of approximately \$4,117,000 offset by non-cash charges of approximately \$538,000 in stock-based compensation, approximately \$164,000 of expense to issue stock to consultants offset by the remeasurement of the warrant liability of approximately \$21,000. Total changes in operating assets and liabilities of approximately \$76,000 were driven by an approximate \$154,000 decrease in prepaid expense and other assets, and an approximate \$499,000 net increase in accounts payable and accrued expenses offset by an approximate \$51,000 increase in the Australia research and development incentives receivable and by an increase of approximately \$526,000 in deferred offering costs.

For the three months ended March 31, 2022, net cash used in operating activities was approximately \$2,808,000, which consisted of a net loss of approximately \$3,414,000 offset by non-cash charges of approximately \$713,000 in stock-based compensation. Total changes in operating assets and liabilities of approximately \$107,000 were primarily driven by an approximate \$286,000 net increase in accrued expenses and accounts payable and an approximate decrease of \$3,000 in deferred compensation offset by an increase in deferred offering costs of approximately \$262,000 and prepaid expenses and other current assets of approximately \$134,000.

For the three months ended March 31, 2023 the effect of foreign currency exchange rate changes on cash decreased the cash balance as of March 31, 2023 by approximately \$4,000.

Financing Activities

Net cash provided by financing activities was approximately \$0 and \$2,531,000 for the three months ended March 31, 2023 and 2022, respectively. Total net cash provided by financing activities for three months ended March 31, 2022 consisted of proceeds for issuance of common stock net of transactions costs totaling approximately



\$2,373,000, proceeds from exercise of stock options of approximately \$48,000 and proceeds from the exercise of warrants of \$110,000.

Critical Accounting Policies and Significant Judgments and Estimates

Our condensed consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). These accounting principles require us to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements. We believe that the estimates, judgments and assumptions are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. To the extent there are material differences between these estimates, judgments or assumptions and actual results, our financial statements will be affected. For a discussion of our critical accounting estimates, please read Part II, Item 7., Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 24, 2023. There have been no material changes to the critical accounting estimates previously disclosed in such report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are a smaller reporting company and are not required to provide the information otherwise required under this item.

Item 4. Controls and Procedures.

Management's Evaluation of our Disclosure Controls and Procedures

Under the supervision of and with the participation of our management, including our Chief Executive Officer, who is our principal executive officer, and our Chief Financial Officer, who is our principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of March 31, 2023 the end of the period covered by this Quarterly Report. The term "disclosure controls and procedures," as set forth in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, means controls and other procedures of a company that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms promulgated by the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a control system, misstatements due to error or fraud may occur and not be detected. Based on the evaluation of our disclosure controls and procedures as of March 31, 2023, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were not effective at the reasonable assurance level due to material weaknesses in internal control over financial reporting.

Material weaknesses were identified at December 31, 2022 as previously disclosed in our Form 10-K, as filed on March 24, 2023 and related to the effectiveness of controls over our review and approval procedures with respect to financial information generated to prepare our consolidated financial statements, coupled with a lack of segregation of duties. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be presented or detected on a timely basis.

Specifically, the Company noted 1) insufficient segregation of duties within the Company's control activities and procedures throughout the year, and 2) an insufficient level of detail to identify all relevant risks of material misstatement including the risks associated with the accounting treatment and financial reporting of non-recurring complex transactions. These factors contributed to a material weaknesses in the application U.S. GAAP to effectively evaluate the accounting treatment for certain non-recurring complex transactions during the quarter ended September 30, 2022.

Although the material weaknesses described above have not yet been fully remediated as of March 31, 2023, our management is committed to remediating identified control deficiencies, fostering continuous improvement in our internal controls and enhancing our overall internal controls environment. Our management believes that these actions, when fully implemented, will remediate the material weaknesses we have identified and strengthen our internal control over financial reporting. Our remediation efforts are ongoing and additional initiatives may be necessary.



Changes in Internal Control over Financial Reporting

During the quarter ended March 31, 2023, there were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, other than the material weakness identified relating to the application of U.S. generally accepted accounting principles ("U.S. GAAP") to effectively evaluate the accounting treatment for complex financial instruments. In light of the material weakness discussed above, we are taking steps to remediate the material weakness including the hiring of additional accounting staff. 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.

Plan of Remediation

As we work towards remediating these material weaknesses, we will design and implement controls to properly address the risks associated with segregation of duties and to account for non-recurring complex transactions in accordance with U.S. GAAP. To assist us in the remediation and performance of remediated controls we hired a Corporate Controller, and we will expand the nature and extent of our review of technical accounting treatment internally and continue to utilize an accounting and financial reporting advisory firm with significant experience with publicly held companies to assist our management in evaluating the accounting treatment for complex transactions.

We may identify future material weaknesses in our internal controls over financial reporting or fail to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley, and we may be unable to accurately report our financial results, or report them within the timeframes required by law or stock exchange regulations. We cannot assure that our existing material weakness will be remediated or that additional material weaknesses will not exist or otherwise be discovered, any of which could adversely affect our reputation, financial condition and results of operations.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are not party to any material legal proceedings. From time to time, we may be involved in legal proceedings or subject to claims incident to the ordinary course of business. Regardless of the outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Item 1A. Risk Factors.

Factors that could cause our actual results to differ materially from those in this Quarterly Report are any of the risks described in our Annual Report on Form 10-K filed under the heading "*Risk Factors*" and filed with the SEC on March 24, 2023. Any of these factors could result in a significant or material adverse effect on our results of operations or financial condition. Additional risk factors not presently known to us or that we currently deem immaterial may also impair our business or results of operations. As of the date of this Quarterly Report, there have been no material changes to the risk factors disclosed in our Annual Report on Form 10-K.

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

Recent sales of unregistered securities

On March 8, 2023, we entered into an agreement with The Money Channel NYC Inc. for media services, pursuant to which we agreed to issue 22,500 shares of common stock on March 8, 2023 and an additional 22,500 shares of common stock every ninety days after the execution date of the contract until termination of the agreement. The term of the agreement extends for 180 days, and renews automatically until we provide written notice prior to the end of the term.

No underwriters were involved in the foregoing issuance of securities. The securities described above were issued in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. The recipient of securities in the transaction described above represented that it was an accredited investor and was acquiring the securities for its own account for investment purposes only, and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time and appropriate legends were affixed to the instruments representing such securities issued in such transactions

Use of Proceeds

On August 1, 2022, we consummated the initial public offering of our common stock pursuant to which we issued and sold 2,000,000 shares of our common stock at a price to the public of \$5.00 per share, for aggregate approximate net proceeds of \$7,706,000, after deducting underwriting discounts and commissions and estimated offering expenses. On August 3, 2022, the Company sold an additional 300,000 shares of common stock at \$5.00 per share when the underwriter exercised the overallotment option in full. In connection with the underwriter's exercise of its overallotment, we received net proceeds of \$1,387,500, after deducting underwriting discounts and commissions and estimated offering expenses. All of the shares of common stock issued and sold in our initial public offering were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-266453), which was declared effective by the SEC on July 27, 2022. None of the expenses incurred by us were direct or indirect payments to any of (i) our directors or officers or their associates, (ii) persons owning 10% or more of our common stock, or (iii) our affiliates. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC on July 29, 2022 pursuant to Rule 424(b)(4). ThinkEquity acted as sole book-running manager for the initial public offering.



Purchases of equity securities by the issuer and affiliated purchasers.

None.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None

Item 6. Exhibits.

The following exhibits are included, or incorporated by reference, in this Quarterly Report on Form 10-Q for the quarter ended March 31, 2023 (and are numbered in accordance with Item 601 of Regulation S-K).

Exhibit Number	Description
3.1 ⁽¹⁾	Amended and Restated Certificate of Incorporation of MAIA Biotechnology, Inc.
3.2 ⁽¹⁾	Amended and Restated Bylaws of MAIA Biotechnology, Inc.
4.1 ⁽²⁾	Form of Representative's Warrant (included in Exhibit 10.1).
$10.1^{(2)}$	Underwriting Agreement by and between the Company and the Representative dated April 24, 2023.
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 – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline
	XBRL 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.

** These certifications are furnished to the SEC pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

(1) Filed as an exhibit to our Current Report on Form 8-K filed with the SEC on August 1, 2022. (2) Filed as an exhibit to our Current Report on Form 8-K filed with the SEC on April 27, 2023.

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.

	Company Name		
Date: May 8, 2023	By:	/s/ Vlad Vitoc	
		Vlad Vitoc	
		Chief Executive Officer	
Date: May 8, 2023	By:	/s/ Joseph McGuire	
		Joseph McGuire	
		Chief Financial Officer	
	31		

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, Vlad Vitoc, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of MAIA Biotechnology, 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(s) 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(s) 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: May 8, 2023

: /s/ Vlad Vitoc

Vlad Vitoc Chairman and Chief Executive Officer (Principal Executive Officer)

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, Joseph F. McGuire, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MAIA Biotechnology, 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(s) 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(s) 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: May 8, 2023

By: /s/ Joseph F. McGuire

Joseph F. McGuire Chief Financial Officer (Principal Financial Officer)

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 MAIA Biotechnology, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Vlad Vitoc, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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 and results of operations of the Company.

Date: May 8, 2023

By: /s/ Vlad Vitoc

Vlad Vitoc Chairman and Chief Executive Officer (Principal Executive Officer)

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 MAIA Biotechnology, Inc. (the "Company")on Form 10-Q or the period ended March 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph F. McGuire, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 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 and results of operations of the Company.

Date: May 8, 2023

By: /s/ Joseph F. McGuire

Joseph F. McGuire Chief Financial Officer (Principal Financial Officer)