UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2016

OR

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

Commission File Number: 333-193455

MATINAS BIOPHARMA HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**No. 46-3011414**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1545 Route 206 South, Suite 302
Bedminster, New Jersey 07921
(Address of principal executive offices) (Zip Code)

908-443-1860
(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☒

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

As of August 15, 2016, 57,593,414 shares of common stock, $0.0001 par value per share, were outstanding.

MATINAS BIOPHARMA HOLDINGS, INC.
FORM 10-Q
Quarter Ended June 30, 2016

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Matinas BioPharma Holdings Inc.
Condensed Consolidated Balance Sheets

	June 30, 2016 (Unaudited)	December 31, 2015 (Audited)
ASSETS		
CURRENT ASSETS		
Cash	$ 578,313	$ 3,226,997
Restricted cash	55,557	100,326
Prepaid expenses	139,640	231,797
Total current assets	773,510	3,559,120
Equipment - net	382,489	377,723
In-process research and development	3,017,377	3,017,377
Goodwill	1,336,488	1,336,488
Other assets including long term security deposit	54,844	115,370
TOTAL ASSETS	$ 5,564,708	$ 8,406,078
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 475,863	$ 497,842
Accrued expenses	845,061	610,206
Deferred rent liability	10,967	9,225
Lease liability - current	9,616	11,261
Total current liabilities	1,341,507	1,128,534
LONG TERM LIABILITIES		
Deferred tax liability	1,205,141	1,205,141
Lease liability - net of current	20,681	-
TOTAL LIABILITIES	2,567,329	2,333,675
STOCKHOLDERS' EQUITY		
Common stock, par value $ 0.0001, 250,000,000 and 250,000,000 shares authorized, at June 30, 2016 and December 31, 2015, respectively; 57,593,414 issued and outstanding as of June 30, 2016; 57,180,148 issued and outstanding as of December 31, 2015	5,760	5,719
Additional paid in capital	30,047,278	29,253,848
Accumulated deficit	(27,055,659)	(23,187,164)
Total stockholders' equity	2,997,379	6,072,403
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 5,564,708	$ 8,406,078

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

Matinas BioPharma Holdings, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30,	
	2016	**2015**
Revenue:		
Contract research revenue	$ -	$ 77,000
Costs and Expenses:		
Research and development	642,576	1,354,728
General and administrative	977,653	1,124,066
Total costs and expenses	1,620,229	2,478,794
Loss from operations	(1,620,229)	(2,401,794)
Other expense, net	(3,656)	(2,738)
Net loss	$ (1,623,885)	$ (2,404,532)
Net loss per share - basic and diluted	$ (0.03)	$ (0.04)
Weighted average common shares outstanding:		
Basic and diluted	57,593,414	55,942,013

	Six Months Ended June 30,	
	2016	**2015**
Revenue:		
Contract research revenue	$ -	$ 134,636
Costs and Expenses:		
Research and development	1,564,287	2,803,141
General and administrative	2,293,430	2,301,907
Total costs and expenses	3,857,717	5,105,048
Loss from operations	(3,857,717)	(4,970,412)
Other expense, net	(10,778)	(4,231)
Net loss	$ (3,868,495)	$ (4,974,643)
Net loss per share - basic and diluted	$ (0.07)	$ (0.11)
Weighted average common shares outstanding:		
Basic and diluted	57,440,685	45,815,657

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

Matinas BioPharma Holdings Inc.
Condensed Consolidated Statements of Cash Flow
(Unaudited)

	Six Months Ended June 30,	
	2016	**2015**
Cash flows from operating activities:		
Net loss	$ (3,868,495)	$ (4,974,643)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	26,298	20,583
Deferred rent	1,742	-
Share based compensation expense	793,471	733,761
Changes in operating assets and liabilities, net of amounts acquired:		
Grant receivable	-	(14,213)
Prepaid expenses	163,962	5,213
Other assets	105,295	(158)
Accounts payable	(21,979)	173,983
Accrued expenses - other liabilities	163,050	(483,925)
Net cash used in operating activities	(2,636,656)	(4,539,399)
Cash flows from investing activities		
Equipment purchases	(31,064)	(38,734)
Acquisition of Aquarius, net of cash acquired	-	70,754
Net cash (used in) provided by investing activities	(31,064)	32,020
Cash flows from financing activities:		
Issuance of common stock	-	8,522,164
Capital lease liability, net	19,036	-
Net cash provided by financing activities	19,036	8,522,164
Net (decrease) increase in cash and cash equivalents	(2,648,684)	4,014,785
Cash and cash equivalents at beginning of period	3,226,997	2,590,713
Cash and cash equivalents at end of period	$ 578,313	$ 6,605,498
Supplemental non-cash financing activities		
Stock consideration for Aquarius merger	$ -	$ 2,119,689
Accrued issuance Costs for Private Placement July 2016	$ 71,805	$ -

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

NOTE A – Nature of Business

[1] Corporate History

Matinas BioPharma Holdings Inc. ("Holdings") is a Delaware corporation formed in 2013. Holdings is the parent company of Matinas BioPharma, Inc. ("BioPharma"), and Aquarius Biotechnologies, Inc., its operating subsidiaries ("Aquarius", and together with "Holdings" and "BioPharma", "the Company" or "we" or "our" or "us"). The Company is a development stage biopharmaceutical company with a focus on identifying and developing novel pharmaceutical products.

On January 29, 2015, we completed the acquisition of Aquarius ("Aquarius Merger"), a New Jersey-based, early-stage pharmaceutical company focused on the development of differentiated and orally delivered therapeutics based on a proprietary, lipid-based, drug delivery platform called "cochleate delivery technology." Following the Aquarius Merger, we are a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective broad spectrum antifungal and anti-bacterial therapeutics for the treatment of serious and life-threatening infections, using our innovative lipid-crystal nano-encapsulation drug delivery platform. See Note D for additional information on this transaction.

On March 31, 2015 and April 10, 2015, we completed a private placement ("2015 Private Placement"), under which the Company sold an aggregate of 20,000,000 shares of common stock and warrants to purchase 20,000,000 shares of common stock (see Note E for additional details) resulting in net proceeds of approximately $8.5 million after offering expenses. On July 29, 2016, we conducted a closing of a private placement offering ("2016 Private Placement") and issued and sold an aggregate of 880,058 shares (the "Series A Preferred Shares") of the Company's Series A Preferred Stock, par value $0.001 per share (the "Series A Preferred Stock") resulting in net proceeds to us of approximately $3.8 million, after deducting the placement agent fees described below (see Note J) and other estimated offering expenses.

[2] Proprietary Products and Technology Portfolios

Our proprietary cochleate lipid-crystal nano-particle delivery technology platform, licensed from Rutgers University on an exclusive worldwide basis, is designed specifically for the targeted and safe delivery of orally bioavailable pharmaceuticals directly to the site of infection or inflammation. This license comprises a range of issued patents and patent applications, as well as the use of proprietary know-how with respect to the manufacturing and testing of products using this technology.

Our lead product candidate using the cochleate delivery technology is MAT2203, an oral formulation of the broad spectrum intravenous(IV)-delivered anti-fungal agent amphotericin B. MAT2203 is under development for serious fungal infections and a single-escalating-dose Phase 1 study with MAT2203 has been completed. The Company is developing MAT2203 in collaboration with the National Institute of Allergy and Infectious Diseases, or NIAID, of the National Institutes of Health, or NIH. The U.S. Food and Drug Administration (FDA) has designated MAT2203 as a Qualified Infectious Disease Product (QIDP) with Fast Track status for the treatment of invasive candidiasis aspergillus. We are developing a pipeline of targeted delivery formulations by applying our cochleate oral delivery technology to a potentially broad array of proven medications, including MAT2501. MAT2501 is an oral cochleate formulation of the broad spectrum intravenous (IV)-delivered aminoglycoside antibiotic called amikacin, which is most often used for treating severe, hospital-acquired infections, including Gram-negative bacterial infections. The Company has an open Investigational New Drug (IND) application for MAT2501. MAT2501 has been granted a QIDP designation and Orphan Drug designation by the U.S. FDA for the treatment of Nontuberculous Mycobacteria (NTM).

In addition, the Company is exploring development and partnership options for MAT9001, a prescription-only omega-3 fatty acid-based composition under development for hypertriglyceridemia.

NOTE B – Going Concern and Plan of Operations

The accompanying financial statements have been prepared in conformity with generally accepted accounting principles, which contemplate continuation of the Company as a going concern.

The Company has experienced net losses and negative cash flows from operations each period since its inception. Through June 30, 2016, the Company had an accumulated deficit of approximately $27.1 million. The Company's operations have been financed primarily through the sale of equity securities. The Company's net loss for the six months ended June 30, 2016 was approximately $3.9 million and $9.1 million for the year ended December 31, 2015.

The Company has been engaged in developing a pipeline of product candidates since 2011. To date, the Company has not obtained regulatory approval for any of its product candidates nor generated any revenue from products and the Company expects to incur significant expenses to complete development of its product candidates. The Company may never be able to obtain regulatory approval for the marketing of any of its product candidates in any indication in the United States or internationally and there can be no assurance that the Company will generate revenues or ever achieve profitability.

The Company will need to secure additional capital in order to fund operations and to continue and complete its planned clinical and operational activities related to the product candidates and technologies that the Company recently acquired from Aquarius. The Company can provide no assurances that such additional financing will be available to the Company on acceptable terms, or at all. During the third quarter of 2015, the Company instituted cost deferral and savings measures to preserve its cash. The Company has taken steps to reduce and delay expenses through the timing and monitoring of our preclinical animal programs and as well as reducing professional fees, and compensation expenses in the short term. The Company is anticipating that the existing cash balance on hand at the filing of this form 10Q would be sufficient to meet its operating obligations through January 2017. The Company's recurring losses from operations, and need for additional funding, raise substantial doubt about its ability to continue as a going concern, and as a result, the Company's independent registered public accounting firm included an explanatory paragraph on the Company's financial statements for the year ended December 31, 2015 with respect to this uncertainty.

NOTE C – Summary of Significant Accounting Policies

[1] **Basis of Presentation**

The accompanying unaudited condensed consolidated financial statements include the consolidated accounts of Matinas BioPharma Holdings Inc. ("Holdings") and its wholly owned subsidiaries, Matinas BioPharma, Inc. and Aquarius Biotechnologies, Inc. the operational subsidiaries of Holdings. The accompanying unaudited condensed consolidated financial statements have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and reflect the operations of the Company and its wholly-owned subsidiary. All intercompany transactions have been eliminated in consolidation.

These interim unaudited financial statements do not include all the information and footnotes required by U.S. GAAP for annual financial statements and should be read in conjunction with the audited financial statements for the year ended December 31, 2015, which are included in the Form 10-K filed with the SEC on March 30, 2016. In the opinion of management, the interim unaudited financial statements reflect all normal recurring adjustments necessary to fairly state the Company's financial position and results of operations for the interim periods presented. The year-end condensed consolidated balance sheet data presented for comparative purposes was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP.

Operating results for the six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for any future interim periods or for the year ending December 31, 2016. For further information, refer to the consolidated financial statements and notes thereto included in the Company's Form 10-K for the year ended December 31, 2015.

[2] **Use of Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Certain accounting principles require subjective and complex judgments to be used in the preparation of financial statements. Accordingly, a different financial presentation could result depending on the judgments, estimates, or assumptions that are used. Such estimates and assumptions include, but are not specifically limited to, those required in the assessment of the impairment of intangible assets, all acquired assets and liabilities, the valuation of Level 3 financial instruments and determination of stock-based compensation.

[3] **Cash**

The Company considers all highly liquid instruments purchased with original maturity of three months or less to be cash to the extent the funds are not being held for investment purposes.

[4] **Concentration of Credit Risk**

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents. Cash balances are maintained principally at one major U.S. financial institution and are insured by the Federal Deposit Insurance Corporation ("FDIC") up to regulatory limits. At all times throughout the six months ended June 30, 2016, the Company's cash balances exceeded the FDIC insurance limit. The Company has not experienced any losses in such accounts.

[5] **Equipment**

Equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. The estimated useful lives of the Company equipment ranges from three to ten years. Capitalized costs associated with leasehold improvements are amortized over the lesser of the useful life of the asset or the remaining life of the lease.

[6] **Income Taxes**

Deferred taxes are provided on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carry forwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates.

The Company adopted the provisions of ASC 740-10 and has analyzed its filing positions in jurisdictions where it may be obligated to file returns. The Company believes that its income tax filing position and deductions will be sustained on audit and does not anticipate any adjustments that will result in a material change to its financial position. Therefore, no reserves for uncertain income tax positions have been recorded. The Company's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had no accrual for interest or penalties as of June 30, 2016.

Since the Company incurred net operating losses in every tax year since inception, the 2013, 2014 and 2015 income tax returns are subject to examination and adjustments by the IRS for at least three years following the year in which the tax attributes are utilized.

[7] **Stock-Based Compensation**

The Company accounts for stock-based compensation to employees in conformity with the provisions of ASC Topic 718, "*Stock Based Compensation"* . Stock-based compensation to employees consist of stock options grants and restricted shares that are recognized in the statement of operations based on their fair values at the date of grant.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of ASC Topic 505, subtopic 50, *Equity-Based Payments to Non-Employees* based upon the fair-value of the underlying instrument. The equity instruments, consisting of stock options granted to consultants, are valued using the Black-Scholes valuation model. The measurement of stock-based compensation is subject to periodic adjustments as the underlying equity instruments vest and is recognized as an expense over the period which services are received.

The Company calculates the fair value of option grants utilizing the Black-Scholes pricing model, and estimates the fair value of the restricted stock based upon the estimated fair value of the common stock. The amount of stock-based compensation recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. The authoritative guidance requires forfeitures to be estimated at the time stock options are granted and warrants are issued and revised. If necessary in subsequent periods, an adjustment will be booked if actual forfeitures differ from those estimated. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered stock option or warrant. The Company estimates forfeiture rates for all unvested awards when calculating the expense for the period. In estimating the forfeiture rate, the Company monitors both stock option and warrant exercises as well as employee and non-employee termination patterns.

The resulting stock-based compensation expense for both employee and non-employee awards is generally recognized on a straight-line basis over the requisite service period of the award.

[8] **Fair Value Measurements**

ASC 820 "Fair Value Measurements" defines fair value, establishes a framework for measuring fair value in GAAP and expands disclosures about fair value measurements. ASC 820 defines fair value as the price 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. ASC 820 establishes a fair value hierarchy that distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under ASC 820 are described below:

- Level 1 - Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

- Level 2 - Directly or indirectly observable inputs as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in markets that are not active. Level 2 also includes assets and liabilities that are valued using models or other pricing methodologies that do not require significant judgment since the input assumptions used in the models, such as interest rates and volatility factors, are corroborated by readily observable data from actively quoted markets for substantially the full term of the financial instrument.

- Level 3 - Unobservable inputs that are supported by little or no market activity and reflect the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management's estimates of market participant assumptions.

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible as well as considers counterparty credit risk in its assessment of fair value.

The carrying amounts of cash, restricted cash, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

[9] **Basic Net Loss per Common Share**

Basic earnings per common share is computed as net loss divided by the weighted average number of common shares outstanding during the period. Diluted earnings per common share is the same as basic earnings per common share because the Company incurred a net loss during each period presented, and the potentially dilutive securities from the assumed exercise of all outstanding stock options and warrants would have an antidilutive effect. The following schedule details the number of shares issuable upon the exercise of stock options and warrants, which have been excluded from the diluted loss per share calculation for the six months ended June 30, 2016 and 2015:

	2016	2015
Stock options	8,270,694	6,755,361
Warrants	39,250,000	39,250,000
Total	**47,520,694**	**46,005,361**

[10] **Revenue Recognition**

The Company recognizes revenue from the NIH contracts when the specified performance milestone is achieved. The milestones are analyzed and approved on a monthly basis through progress reports submitted by the Company.

[11] **Research and Development**

Research and development costs are charged to operations as they are incurred. Legal fees and other direct costs incurred in obtaining and protecting patents are also expensed as incurred, due to the uncertainty with respect to future cash flows resulting from the patents and our included as part of general and administrative expenses.

[12] **Recent Accounting Pronouncements**

In March 2016, the FASB issued ASU 2016-09, "Stock Compensation (Topic 718): Improvements to Employee share-Based Payment Accounting." This ASU simplifies several aspects of the accounting for share –based payment award transactions. The ASU is effective for interim and annual periods beginning after December 15, 2016. Early application is permitted. The Company is in the process of evaluating the impact of this standard but does not expect this standard to have a material impact on the Company's consolidated financial position or results of operation.

In February 2016, the FASB issued ASU No. 2016-02, Leases. The new standard will require most leases to be recognized on the balance sheet which will increase reported assets and liabilities. Lessor accounting remains substantially similar to current guidance. The new standard is effective for annual and interim periods in fiscal years beginning after December 15, 2018, which for us is the first quarter of fiscal 2019 and mandates a modified retrospective transition method. We are currently assessing the impact of this update, and believe that its adoption will not have a material impact on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17 "Simplifying the Classification of Deferred Tax Assets and Liabilities." The new standard requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. The standard is effective for interim and annual periods beginning after December 15, 2016 and allows for early adoption using a full retrospective method or a prospective method. We have elected to early adopt the provisions of this new standard using a prospective method. As a result, all deferred taxes as of June 30, 2016 are classified as noncurrent in our consolidated balance sheet, while prior periods remain as previously reported. As of June 30, 2016 there are no deferred tax assets.

In September 2015, the FASB issued ASU 2015-16 "Simplifying the Accounting for Measurement-Period Adjustments." The new standard eliminates the requirement to restate prior period financial statements for measurement period adjustments. The new standard requires that the cumulative impact of a measurement period adjustment (including the impact on prior periods) be recognized in the reporting period in which the adjustment is identified. The standard was effective for interim and annual periods beginning after December 15, 2015 and does not have a material impact on our financial condition or results of operations.

In August 2014, the FASB issued ASU 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern." This ASU describes how an entity should assess its ability to meet obligations and sets rules for how this information should be disclosed in the financial statements. The standard provides accounting guidance that will be used along with existing auditing standards. The ASU is effective for interim and annual periods beginning after December 15, 2016. Early application is permitted. The Company is in the process of evaluating the impact of this standard and we do expect this standard to have a material impact on the Company's consolidated financial position or results of operation.

In May 2014, the FASB issued ASU 2014-09 "Revenue From Contracts with Customers." This standard specifies how and when an entity will recognize revenue arising from contracts with customers. The ASU is effective beginning after December 15, 2017. The Company will evaluate the adoption of this standard when it generates revenue.

[13] **Business Combination**

The Company accounts for acquisitions using the acquisition method of accounting which requires the recognition of tangible and identifiable intangible assets acquired and liabilities assumed at their estimated fair values as of the business combination date. The Company allocates any excess purchase price over the estimated fair value assigned to the net tangible and identifiable intangible assets acquired and liabilities assumed to goodwill. Transaction costs are expensed as incurred in general and administrative expenses. Results of operations and cash flows of acquired companies are included in the Company's operating results from the date of acquisition.

The Company's intangible assets are comprised of acquired in-process research and development, or IPR&D. The fair value of IPR&D acquired through a business combination is capitalized as an indefinite-lived intangible asset until the completion or abandonment of the related research and development activities. IPR&D is tested for impairment annually or when events or circumstances indicate that the fair value may be below the carrying value of the asset. There was no impairment for the three or six months ended June 30, 2016. If and when research and development is complete, the associated assets would then be amortized over their estimated useful lives.

[14] **Goodwill and Other Intangible Assets**

Goodwill is assessed for impairment at least annually on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. In accordance with the authoritative accounting guidance we have the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If we determine this is the case, we are required to perform the two-step goodwill impairment test to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized, if any. If we determine that it is more-likely-than-not that the fair value of the reporting unit is greater than its carrying amounts, the two-step goodwill impairment test is not required.

As defined in the authoritative guidance, a reporting unit is an operating segment, or one level below an operating segment. Historically, we conducted our business in a single operating segment and reporting unit. In the quarter ended June 30, 2016, we assessed goodwill impairment by performing a qualitative test for our reporting unit. During our qualitative review, we considered the Company's cash position and our ability to obtain additional financing in the near term to meet our operational and strategic goals and substantiate the value of our business. Based on the results of our assessment, it was determined that it is more-likely-than-not that the fair value of the reporting units are greater than their carrying amounts. There was no impairment of goodwill for the quarter ended June 30, 2016.

We review other intangible assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. The authoritative accounting guidance allows a qualitative approach for testing indefinite-lived intangible assets for impairment, similar to the impairment testing guidance for goodwill. It allows the option to first assess qualitative factors (events and circumstances) that could have affected the significant inputs used in determining the fair value of the indefinite-lived intangible asset. The qualitative factors assist in determining whether it is more-likely-than-not (i.e. > 50% chance) that the indefinite-lived intangible asset is impaired. An organization may choose to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to calculating its fair value. Our indefinite-lived intangible assets are IPR&D intangible assets. In all other instances we used the qualitative test and concluded that it was more-likely-than-not that all other indefinite-lived assets were not impaired and therefore, there were no impairments in quarter ended June 30, 2016.

NOTE D – Acquisition of Aquarius Biotechnologies, Inc.

On January 29, 2015, we entered into the Merger Agreement with Aquarius, Saffron Merger Sub, Inc., a Delaware corporation and a wholly-owned subsidiary of ours ("Merger Sub") and J. Carl Craft, as the stockholder representative. The merger contemplated by the Aquarius Merger became effective on January 29, 2015, following the satisfaction or waiver of the conditions described in the Merger Agreement, including approval of the transaction by 100% of Aquarius' stockholders. Pursuant to the Aquarius Merger, the Merger Sub merged with and into Aquarius, with Aquarius surviving the merger as a wholly-owned subsidiary of ours.

Pursuant to the terms of the Merger Agreement, we were obligated to issue an aggregate of up to 5,000,000 shares of our common stock at closing, subject to adjustment as set forth in the Merger Agreement. At closing, we issued 4,608,020 shares (the "Closing Shares") of our common stock as closing consideration. In addition, subject to our right of offset for indemnification claims, we may issue up to an additional 3,000,000 shares (the "Additional Shares") of our common stock upon the achievement of certain milestones. The milestone consideration consists of (i) 1,500,000 shares issuable upon the dosing of the first patient in a phase III trial sponsored by us for a product utilizing Aquarius' proprietary cochleate delivery technology and (ii) 1,500,000 shares issuable upon FDA approval of the first NDA submitted by us for a product utilizing Aquarius' proprietary cochleate delivery technology. The Company concluded that the contingent share issuance represented equity settled contingent consideration and have recorded the amounts to equity as of December 31, 2015.

The transaction was accounted for as a business combination, and accordingly the Company has included the results of operations of Aquarius subsequent to the January 29, 2015 closing date. The transaction resulted in a significant amount of in-process research and development, goodwill and deferred tax liability on the balance sheet, as detailed below.

The acquisition-date fair value of the consideration transferred totaled $2,873,035 as of January 29, 2015 and consisted of the following items:

Fair value of 4,608,020 of common stock issued at a price per share of $0.46 as of January 29, 2015 the closing date of the merger.	$	2,119,689
Fair value of potential Matinas common stock as contingent consideration that will be issued upon achieving certain future clinical milestone-(a)		422,609
Fair value of potential Matinas common stock as contingent consideration that will be issued upon achieving certain future regulatory milestone-(a)		330,737
Total consideration	$	2,873,035

(a)-Reflects recognition of the estimated fair value of the contingent consideration payable with issuance of Matinas common stock upon achievement of certain future clinical and regulatory milestones, the achievement of which is uncertain. The fair value of the additional shares were established by assigning probabilities and projected dates of positive outcome for the milestones and valuing the future issuance of the shares by using the Black-Scholes options pricing model to account for the uncertainty in the future value of the shares. The value of the shares as derived using the options pricing model were then weighted based on the probability of achieving the milestones to determine the fair market value of the additional shares. The entire $753,346 of contingent consideration was recorded as additional paid-in capital at December 31, 2015.

The allocation of the total purchase price is described below based on the estimated fair value of the assets acquired and liabilities assumed on the date of the acquisition.

Cash	$	70,754
Contract/ Grant receivable		45,644
Prepaid expenses and other current assets		5,084
Equipment, net		5,051
Other assets		700
In-process research and development-(b)		3,017,377
Total identifiable assets		3,144,610
Accounts payable		300,413
Notes payable-(d)		10,000
Accrued expenses		92,509
Total liabilities assumed		402,922
Net identifiable assets acquired		2,741,688
Goodwill-(c)		1,336,488
Deferred income taxes arising from basis differences of tax aspects of in-process research and development		(1,205,141)
Net assets acquired	$	2,873,035

(b)-The fair value of the in-process research and development asset was estimated on the basis of its replacement cost as determined by a buildup of the costs incurred to develop the technology as it existed as of the acquisition date resulting in a fair value of $3,017,377. The fair value of other assets and liabilities approximate their book value.

(c)-The Company allocated the purchase price to the net tangible and intangible assets based upon their estimated fair values at the Merger date. The excess of the purchase price over the estimated fair values of the net tangible and intangible assets acquired has been recorded as goodwill including deferred tax liabilities resulting from the tax attributes of the in-process research and development (see Note C 14). In connection with the Aquarius acquisition, the Company made an adjustment as a result of the purchase accounting requirements to reflect a change in the value of the deferred tax liabilities resulting from an adjustment to the Company's effective tax rate, recording a $48,186 reduction to the deferred tax liabilities with an offsetting credit to Goodwill.

(d)- Aquarius issued a note for a loan that was made to a related party. Interest on the note is calculated using the applicable federal rate for midterm loans. Since the note has no specified repayment terms, it is considered a current liability. This note was subsequently paid in full in 2015.

NOTE E – 2015 Private Placement Funding

The Company had two closings for a private placement, on March 31, 2015 and April 10, 2015, respectively.

This private placement offered to accredited investors (the “Offering”) of units (the “Units”) at a price of $0.50 per Unit, with each Unit consisting of: (i) one share of the Company’s common stock and (ii) a five-year warrant to purchase one share of common stock at an exercise price of $0.75 per share (“Warrants”). The Warrants are callable by the Company following the effectiveness of the registration statement covering the resale of the shares of common stock underlying the Warrants (which occurred on July 23, 2015) if the closing bid price for the Company’s common stock is at or above $3.00 per share for the twenty (20) consecutive trading days immediately prior to such a call and provided that the registration statement is current at the time.

In connection with the Offering, the Company also entered into definitive subscription agreements (the “Subscription Agreements”) with accredited investors (the “Investors”) and issued an aggregate of 20,000,000 Units in the Offering, consisting of an aggregate of 20,000,000 shares of common stock and Warrants to purchase an aggregate 20,000,000 shares of common stock for aggregate gross proceeds to the Company of $10 million and net proceeds of approximately $8.5 million after paying expenses after deducting the placement agent fees described below and other estimated Offering expenses.

In addition, the Company entered into a Registration Rights Agreement with the Investors pursuant to which the Company granted the Investors certain registration rights which terminated in July 2016.

The Company entered into a Placement Agency Agreement with Aegis Capital Corp. (“Aegis”) pursuant to which Aegis acted as the Company’s exclusive placement agent (the “Placement Agent”) for the Offering. Immediately prior to the Offering, the Placement Agent and its affiliates beneficially owned an aggregate of more than 10% of our outstanding equity securities. In addition, Adam Stern, Head of Private Equity Banking at Aegis, is a member of the Company’s board of directors. Pursuant to the terms of the Placement Agency Agreement, in connection with the Offering, the Company paid the Placement Agent an aggregate cash fee of $1,000,000 and non-accountable expense allowance of $300,000 through April 2015 and issued to the Placement Agent and its designees warrants (substantially similar to the Warrants) to purchase 2,000,000 shares of common stock at $0.50 per share and additional warrants to purchase 2,000,000 shares of common stock at $0.75 per share. In addition, the Company has agreed to engage the Placement Agent as our warrant solicitation agent in the event the Warrants are called for redemption and shall pay a warrant solicitation fee to the Placement Agent equal to five (5%) percent of the amount of funds solicited by the Placement Agent upon the exercise of the Warrants following such redemption.

NOTE F – Equipment

Fixed assets, summarized by major category, consist of the following ($ in thousands) for the six months ended June 30, 2016 and year ended December 31, 2015:

	June 30, 2016	December 31, 2015
Lab equipment	$ 438	327
Furniture and fixtures	20	20
Capitalized Leased equipment	31	111
Leasehold improvements	7	7
Total	496	465
Less accumulated depreciation and amortization	114	87
Equipment, net	$ 382	$ 378

On February 12, 2016, the Company entered in a new 36 month capital lease for lab equipment. The payments under the lease are accounted for as interest and payments under capital lease using 3 year amortization. During the six months ended June 30, 2016 the Company recognized interest expense of $204 associated with the lease payments.

NOTE G – Stock Holders Equity

Warrants

As of June 30, 2016, the Company had outstanding warrants to purchase an aggregate of 39,250,000 shares of common stock at exercise prices ranging from $0.50 to $2.00 per share.

The Warrants are exercisable immediately upon issuance and have a five-year term. The Warrants may be exercised at any time in whole or in part upon payment of the applicable exercise price until expiration of the Warrants. No fractional shares will be issued upon the exercise of the Warrants. All of the Warrants may be exercised on a “cashless” basis in certain circumstances. However, since all such cashless exercises are settled on a net share basis, the exercise price and the number of warrant shares purchasable upon the exercise of the Investor Warrants (as opposed to Placement Agent Warrants) are subject to adjustment upon the occurrence of certain events, which include stock dividends, stock splits, combinations and reclassifications of the Company capital stock or similar “organic changes” to the equity structure of the Company (see Warrant table below). Accordingly, pursuant to ASC 815, the warrants are classified as equity in the accompanying statement of stockholder’s Equity.

The Company may call the Warrants, other than the Placement Agent Warrants, at any time the common stock trades above $5.00 (for 13 million warrants issued in 2013) or above $ 3.00 (for 20 million warrants issued in 2015) for twenty (20) consecutive days following the effectiveness of the registration statement covering the resale of the shares of common stock underlying the Warrants, provided that the Warrants can only be called if such registration statement is current and remains effective at the time of the call and provided further that the Company can only call the Investor Warrants for redemption, if it also calls all other Warrants for redemption on the terms described above. The Placement Agent Warrants do not have a redemption feature. Such term is a contingent feature and within the control of the Company, therefore does not require liability classification.

A summary of equity warrants outstanding as of June 30, 2016 is presented below, all of which are fully vested.

	Shares
July 11, 2013 formation of Holdings, 4,000,000 warrants issued, terms 5 years, exercisable at $2.00, including 250,000 warrants sold to Mr. Adam Stern	4,000,000
July 11, 2013 recapitalization of Matinas BioPharma Inc. 1,000,000 warrants issued, terms 5 years, exercisable at $2.00	1,000,000
July and August 2013 completion of Private Placement, 7,500,000 warrants issued, terms 5 years, exercisable at $2.00	7,500,000
July 30, 2013 Placement Agent warrants issued as part of compensation for Private Placement. Terms 5 years, exercisable at $2.00	750,000
July 30, 2013 Placement Agent warrant issued as part of compensation for Private Placement. Terms 5 years exercisable at $1.00	1,500,000
July 30, 2013 500,000 warrants sold to Chairman of Board Mr. Herb Conrad for $20,000. Terms 5 years, exercisable at $2.00 per share	500,000
March 31, 2015 Warrants:	
March 31, 2015 first close of Private Placement, 9,875,0000 warrants issued, terms 5 years, exercisable at $0.75	9,875,000
March 31, 2015, Placement Agent Warrants, 987,500 issued, terms 5 years, exercisable at $0.75	987,500
March 31, 2015, Placement Agent Warrants, 987,500 issued, terms 5 years, exercisable at $ 0.50	987,500
April 10, 2015 Warrants:	
April 10, 2015 first close of Private Placement, 10,125,000 warrants issued, terms 5 years, exercisable at $0.75	10,125,000
April 10, 2015, Placement Agent Warrants, 1,012,500 issued, terms 5 years, exercisable at $0.75	1,012,500
April 10, 2015, Placement Agent Warrants, 1,012,500 issued, terms 5 years, exercisable at $0.50	1,012,500
Total Warrants Outstanding at June 30, 2016	39,250,000

NOTE H – Stock Based Compensation

In August 2013, the Company adopted the 2013 Equity Compensation Plan (the "Plan"), which provides for the granting of incentive stock options, nonqualified stock options, restricted stock units, performance units, and stock purchase rights. Options under the Plan may be granted at prices not less than 100% of the fair value of the shares on the date of grant as determined by the Board Committee. The Board Committee determines the period over which the options become exercisable subject to certain restrictions as defined in the Plan, with the current outstanding options generally vesting over three years. The term of the options is no longer than ten years. The Company currently has 11,828,912 shares of common stock for issuance under the plan.

With the approval of the Board of Directors and majority Shareholders, effective May 8, 2014, the Plan was amended and restated. The amendment provides for an automatic increase in the number of shares of common stock available for issuance under the Plan each January (with Board approval), commencing January 1, 2015 in an amount up to four percent (4%) of the total number of shares of common stock outstanding on the preceding December 31st.

The Company recognized stock-based compensation expense (options, and restricted share grants) in its consolidated statements of operations as follows ($ in thousands):

	Quarter Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Research and Development	$ 140	$ 86	$ 271	$ 288
General and Administrative	261	315	523	446
Total	$ 401	$ 401	$ 794	$ 734

The following table contains information about the Company's stock plan at June 30, 2016:

	Awards Reserved for Issuance	Awards Issued	Awards Available for Grant
2013 Equity Compensation Plan	11,828,912	9,255,393*	2,573,519

* includes both stock grants and option grants

The following table summarizes the Company' stock option activity and related information for the period from December 31, 2015 to June 30, 2016 (number of options in thousands):

	Number of Options	Weighted average Exercise Price
Outstanding at December 31, 2015	6,904	$ 0.93
Granted	1,467	0.43
Exercised	-	-
Forfeited	(100)	0.43
Expired	-	-
Outstanding at June 30, 2016	8,271	$ 0.85

As of June 30, 2016, the number of vested shares underlying outstanding options was 5,462,288 at a weighted average exercise price of $1.66. The aggregate intrinsic value of in the-money options outstanding as of June 30, 2016 was $1.0 million. The aggregate intrinsic value is calculated as the difference between the Company's closing stock price of $0.79 on June 30, 2016, and the exercise price of options, multiplied by the number of options. As of June 30, 2016, there was $2.3 million of total unrecognized share-based compensation. Such costs are expected to be recognized over a weighted average period of approximately 1.06 years.

All options expire ten years from date of grant. Except for options granted to consultants, all remaining options vest entirely and evenly over three years. A portion of options granted to consultants vests over four years, with the remaining vesting being based upon the achievement of certain performance milestones, which are tied to either financing or drug development initiatives.

The Company recognizes compensation expense for stock option awards on a straight-line basis over the applicable service period of the award. The service period is generally the vesting period, with the exception of options granted subject to a consulting agreement, whereby the option vesting period and the service period defined pursuant to the terms of the consulting agreement may be different. Stock options issued to consultants are revalued quarterly until fully vested, with any change in fair value expensed. The following weighted-average assumptions were used to calculate share based compensation:

	For the Six Months Ended June 30,	
	2016	**2015**
Volatility	68.38 % - 89.15%	91.1%
Risk-free interest rate	1.15 % - 1.375%	1.34% - 1.85%
Dividend yield	0.0%	0.0%
Expected life	6.0 years	4.29 – 6.0 years

The Company does not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior. Hence, the Company uses the "simplified method" described in Staff Accounting Bulletin (SAB) 107 to estimated expected term of share option grants.

The expected stock price volatility assumption was determined by examining the historical volatilities for industry peers, as the Company has limited history for the Company's common stock. The Company will continue to analyze the historical stock price volatility and expected term assumptions as more historical data for the Company's common stock becomes available.

The risk-free interest rate assumption is based on the U.S treasury instruments whose term was consistent with the expected term of the Company's stock options.

The expected dividend assumption is based on the Company's history and expectation of dividend payouts. The Company has never paid dividends on its common stock and does not anticipate paying dividends on its common stock in the foreseeable future. Accordingly, the Company has assumed no dividend yield for purposes of estimating the fair value of the Company share-based compensation.

The Company estimates the forfeiture rate at the time of grant and revisions, if necessary, were estimated based on management's expectation through industry knowledge and historical data.

NOTE I – COMMMITMENTS

On November 1, 2013, the Company entered into a 7 year lease for office space in Bedminster, New Jersey which commenced in June, 2014 at a monthly rent of $12,723, increasing to approximately $14,200 per month toward the end of the term. The Company records rent expense on a straight-line basis.

In December of 2015, the Company renewed its agreement to lease laboratory space for one year starting January 1, 2016 in Monmouth Junction, New Jersey at a monthly rent of $2,287.

Listed below is a summary of future lease rental payments (including the remainder of 2016) as of June 30, 2016:

	Lease Commitments
2016	92,976
2017	160,012
2018	162,948
2019	165,896
2020	168,220
2021	84,544
Total future minimum lease payments	$ 834,596

The Company was obligated to provide a security deposit of $300,000 to obtain lease space. This deposit was reduced by $100,000 in 2015 and $100,000 in June 2016, down to $100,000. An additional $50,000 will be received in June 2017.

Through our acquisition of Aquarius, we acquired a license from Rutgers University for the cochleate delivery technology. The Amended and Restated Exclusive License Agreement between Aquarius and Rutgers, The State University of New Jersey (successor in interest to the University of Medicine and Dentistry of New Jersey) provides for, among other things, (1) royalties on a tiered basis between low single digits and the mid-single digits of net sales of products using such licensed technology, (2) a one-time sales milestone fee of $100,000 when and if sales of products using the licensed technology reach the specified sales threshold and (3) an annual license fee of initially $10,000, increasing to $50,000 over the term of the license agreement.

The Company also has employment agreements with certain employees which require the funding of a specific level of payments, if certain events, such as a change in control, termination without cause or retirement, occur.

NOTE J – SUBSEQUENT EVENTS

On July 29, 2016, the Company conducted a closing (the "Initial Closing") of the 2016 Private Placement. In connection with the Initial Closing, the Company entered into definitive subscription agreements (the "Subscription Agreements") with accredited investors (the "Investors") and issued an aggregate of 880,058 Series A Preferred Shares at a purchase price of $5.00 per share, for aggregate gross proceeds to the Company of $4.4 million. The Subscription Agreements contain customary representations, warranties and agreements. The net proceeds to the Company from the Initial Closing, after deducting the placement agent fees described below and other estimated offering expenses, were approximately $3.8 million. Certain of our officers and directors, and entities affiliated with such individuals, and affiliates and related parties of the Placement Agent purchased Series A Preferred Shares in this 2016 Private Placement.

In connection with the 2016 Private Placement, on July 26, 2016, the Company filed a Certificate of Designation (the "Certificate of Designations") with the Secretary of State of the State of Delaware to designate the preferences, rights and limitations of the Series A Preferred Shares. Pursuant to the Certificate of Designations, the Company designated 1,600,000 shares of the Company's previously undesignated preferred stock as Series A Preferred Stock. Each Series A Preferred Share is convertible at the option of the holder into such number of shares of the Company's common stock equal to the number of Series A Preferred Shares to be converted, multiplied by the stated value of $5.00 (the "Stated Value"), divided by the Conversion Price in effect at the time of the conversion (the initial conversion price will be $0.50, subject to adjustment in the event of stock splits, stock dividends, and similar transactions). Each Series A Preferred Share will automatically convert into common stock upon the earlier of (i) notice by the Company to the holders that the Company has elected to convert all outstanding Series A Preferred Shares; provided however that in the event the Company elects to force automatic conversion pursuant to this clause (i), the conversion date for purposes of calculating the accrued Dividend (as defined below) is deemed to be the third anniversary of the Initial Closing, (ii) three years from the Initial Closing, (iii) the approval of the Company's MAT2203 product candidate by the U.S. Food and Drug Administration or the European Medicines Agency (the "Regulatory Approval") or (iv) the Regulatory Approval of the Company's MAT2501 product candidate. Pursuant to the Certificate of Designations, the Series A Preferred Shares will accrue dividends at a rate of 8.0% per year, payable to the holders of such Series A Preferred Shares in shares of common stock upon conversion. The Series A Preferred Shares will vote on an as converted basis with the Company's common stock. Upon any dissolution, liquidation or winding up, whether voluntary or involuntary, holders of Series A Preferred Shares will be entitled to (i) first receive distributions out of our assets in an amount per share equal to the Stated Value plus all accrued and unpaid dividends, whether capital or surplus before any distributions shall be made on any shares of common stock and (ii) second, on an as-converted basis alongside the common stock.

The Series A Preferred Shares include the right, as a group, to receive: (i) 3%, and up to 4.5% (depending on the final size of the offering) of the net sales of MAT2203 and MAT2501, in each case from and after the date, respectively, such candidate has received FDA or EMA approval, and (ii) 5%, and up to 7.5% (depending on the final size of the offering) of the proceeds, if any, received by the Company in connection with the licensing or other disposition by the Company of MAT2203 and/or MAT2501 ("Royalty Payment Rights"). The royalty will be payable so long as the Company has valid patents covering MAT2203 and MAT2501, as applicable. The Royalty Payment Rights are unsecured obligations of the Company. The royalty payment will be located to the holders based on their pro rata ownership of vested Series A Preferred Shares. The royalty rights that are part of the Series A Preferred Shares will vest, in equal thirds, upon each of the first, second and third anniversary dates of the Initial Closing (each a "Vesting Date"); provided however, if the Series A Preferred Shares automatically convert into common stock prior to the 36 month anniversary of the Initial Closing, then the royalty rights that are part of the outstanding Series A Preferred Shares shall be deemed to be fully vested as of the date of conversion. Even if the Series A Preferred Shares are purchased after the Initial Closing, the vesting periods for the royalty rights that are part of the Series A Preferred Shares shall still be based on the Vesting Dates. During the first 36 months following the Initial Closing, the right to receive a royalty will follow the Series A Preferred Shares. Each investor in the 2016 Private Placement should be aware that in the event such investor transfers any of its Series A Preferred Shares, the transferee of such shares will thereafter have the right to receive any royalty payments related to the Series A Preferred Shares it received, including with respect to royalty rights that vested on prior to the date on which the transferee receives the shares, and the transferring investor will thereafter no longer have any right to receive any royalty payment in respect of the Series A Preferred Shares it transferred.

The Company entered into a Placement Agency Agreement with a registered broker dealer, which acted as the Company's exclusive placement agent (the "Placement Agent") for the 2016 Private Placement. Pursuant to the terms of the Placement Agency Agreement, in connection with the Initial Closing, the Company paid the Placement Agent an aggregate cash fee of $440,029 and non-accountable expense allowance of $132,008.70 and will issue to the Placement Agent or its designees warrants to purchase 88,006 shares of Common Stock at an exercise price of $0.50 per share. The warrants provide for a cashless exercise feature and are exercisable for a period of five years from the date of closing. We have also agreed to pay the Placement Agent similar cash and

warrant compensation with respect to, and based on, any individual or entity that the Placement Agent solicits interest from in connection with this 2016 Private Placement, excluding existing stockholders of the Company and certain other specified investors, who subsequently invests in us at any time prior to the date that is twelve (12) months following the final Closing of this offering. In addition, we entered into a three year, non-exclusive finder's fee agreement with the Placement Agent providing that if the Placement Agent shall introduce us to a third party that consummates certain types of transactions with our Company, such as business combinations, joint ventures and licensing arrangements, then the Placement Agent will be paid a finder's fee, payable in cash at the closing of such transaction, equal to (a) 5% of the first $1,000,000 of the consideration paid in such transaction; plus (b) 4% of the next $1,000,000 of the consideration paid in such transaction; plus (c) 3% of the next $5,000,000 of the consideration paid in the such transaction; plus (d) 2.5% of any consideration paid in such transaction in excess of $7,000,000.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and the related notes and the other financial information included elsewhere in this Quarterly Report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Quarterly Report, in our Annual Report on Form 10-K for the year ended December 31, 2015 and in other reports we file with the Securities and Exchange Commission, particularly those under "Risk Factors." Dollars in tabular format are presented in thousands, except per share data, or otherwise indicated.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended . Forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, assumptions, estimates, intentions and future performance, and involve known and unknown risks, uncertainties and other factors, which may be beyond our control, and which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be forward-looking statements. You can identify these forward-looking statements through our use of words such as "may," "can," "anticipate," "assume," "should," "indicate," "would," "believe," "contemplate," "expect," "seek," "estimate," "continue," "plan," "point to," "project," "predict," "could," "intend," "target," "potential" and other similar words and expressions of the future.

There are a number of important factors that could cause the actual results to differ materially from those expressed in any forward-looking statement made by us. These factors include, but are not limited to:

- our ability to raise additional capital to fund our operations and to develop our product candidates;
- our anticipated timing for preclinical development, regulatory submissions, commencement and completion of clinical trials and product approvals;
- our limited operating history;
- our history of operating losses in each year since inception and the expectation that we will continue to incur operating losses for the foreseeable future;
- our ability to realize the anticipated benefits of certain cost-savings measures we recently implemented;
- our dependence on product candidates, which are still in an early development stage;
- our reliance on proprietary cochleate drug delivery technology, which is licensed to us by Rutgers University;
- our ability to manufacture GMP (Good Manufacturing Practices) batches of our product candidates which are required for pre-clinical and clinical trials and, subsequently, if regulatory approval is obtained for any of our products, our ability to manufacture commercial quantities;
- our ability to complete required clinical trials for our lead product candidate and other product candidates and obtain approval from the FDA or other regulatory agents in different jurisdictions;
- our dependence on third-parties, including third-parties to manufacture and third-party CROs (Clinical Research Organizations) including, without limitation, the National Institutes of Health (NIH) to conduct our clinical trials;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executive members;
- our ability to internally develop new inventions and intellectual property;
- interpretations of current laws and the passages of future laws;
- our lack of a sales and marketing organization and our ability to commercialize products, if we obtain regulatory approval;
- acceptance of our business model by investors;

- the accuracy of our estimates regarding expenses and capital requirements;
- our ability to adequately support growth; and
- the factors listed under the headings "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2015, elsewhere in this report and other reports that we file with the Securities and Exchange Commission.

All forward-looking statements are expressly qualified in their entirety by this cautionary notice. You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this report or the date of the document incorporated by reference into this report. We have no obligation, and expressly disclaim any obligation, to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise. We have expressed our expectations, beliefs and projections in good faith and we believe they have a reasonable basis. However, we cannot assure you that our expectations, beliefs or projections will result or be achieved or accomplished.

Overview

We are a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective broad spectrum therapeutics for the treatment of serious and life-threatening infections. We are developing a balanced and broad pipeline of product and development candidates, with an initial focus on serious fungal and bacterial infections. On January 29, 2015, we completed the acquisition of Aquarius Biotechnologies Inc., (referred to as the "Aquarius Merger" throughout this document), a New Jersey-based, early-stage pharmaceutical company focused on the development of differentiated and orally delivered therapeutics based on a proprietary, lipid crystal drug delivery platform called "cochleate delivery technology".

Our proprietary cochleate delivery technology platform, licensed from Rutgers University on an exclusive worldwide basis, is designed specifically for the targeted and safe delivery of pharmaceuticals directly to the site of infection or inflammation. This innovative technology utilizes lipid-crystal nano-particle cochleates to nano-encapsulate existing drugs, which is designed to make them safer, more tolerable, less toxic and orally bioavailable. We believe this platform represents a significant innovation that may result in meaningful improvements to currently available therapies to treat numerous life-threatening diseases, including serious fungal infections, NTM infections and multi-drug resistant, or MDR, gram-negative bacterial infections.

Currently, we are focused on the anti-infectives market and on drug candidates which demonstrate the value and innovation associated with our unique delivery technology platform. We believe initially focusing on the anti-infectives market has distinct advantages for the development of products which meet significant unmet medical need, including:

- a current regulatory environment which provides small development and clinical stage companies incentives and opportunities to reduce development cost and timeline to market for anti-infective drug candidates;
- traditional high correlation between efficacy and safety data in preclinical animal models and the outcome of human clinical trials with these product candidates;
- attractive commercial opportunities for a product differentiated in its safety profile, mode of action and oral bioavailability positioned against current therapies with significant side effects, limited efficacy and intravenous delivery resulting in lack of convenience, compliance and at a significant burden to the cost of healthcare; and
- an ability to commercialize anti-infective products with a focused and cost-efficient sales and marketing organization

We currently have two clinical-stage products designed for the treatment of infectious disease. Our lead product candidate is MAT2203, a novel oral formulation of a broad spectrum anti-fungal drug called amphotericin B which uses our cochleate delivery technology. We are initially developing MAT2203 for the treatment of Candida infections. A Phase 1a study has been completed and demonstrated that MAT2203 was generally well tolerated at all dosage levels with no serious adverse events reports and no laboratory or renal function abnormalities observed. We are currently screening and enrolling patients in a Phase 2a study of MAT2203 in collaboration with the National Institute of Allergy and Infectious Diseases, or NIAID, of the National Institutes of Health, or NIH, and, assuming the NIH meets the anticipated clinical timelines, we anticipate announcing results during 2016.

Our second clinical stage product candidate is MAT2501, an orally administered, encochleated formulation of the broad spectrum aminoglycoside antibiotic amikacin which may be used to treat different types of multidrug-resistant bacteria, including non-tubercular mycobacterial infections (NTM), as well as various multidrug-resistant gram negative and intracellular bacterial infections. Currently, amikacin cannot be absorbed enterally and must be given by intravenous, intramuscular or nebulization routes with the significant risk of nephrotoxicity and ototoxicity, which makes it an impractical choice when treating serious infections which often require long courses of therapy, often 12 to 18 months or longer. MAT2501, taking advantage of its innovative, nano-encapsulation delivery technology, is being developed to be orally administered, and is designed to be a safer and targeted therapy for improved treatment of these serious and life-threatening bacterial infections in patients, including those who are severely immunocompromised. We are initially developing MAT2501 for the treatment of non-tuberculous mycobacteria (NTM). NTM causes many serious and life-threatening diseases, including pulmonary disease, skin and soft tissue disease, joint infections and, in immunocompromised individuals, disseminated infection. The most common clinical manifestation of NTM disease is pulmonary, or lung, disease. NTM lung infection occurs when a person inhales the organism from their environment. There are about 50,000 to 90,000 people with NTM pulmonary disease in the United States, with a much higher prevalence in older adults, and these numbers appear to be increasing. However, NTM can affect any age group. Without treatment, the progressive lung infection caused by NTM results in severe cough, fatigue and weight loss, and ultimately can lead to death. In some people NTM infections can become chronic and require ongoing treatment. Treatment may be difficult because NTM bacteria may be resistant to many common types of antibiotics. Severe NTM lung disease can have a significant impact on quality of life and can be life-threatening. We are also developing MAT2501 for the treatment of a variety of serious and acute bacterial infections, including the treatment of gram negative bacterial infections, currently the most significant unmet medical need identified by infectious disease specialists. We recently filed an Investigational New Drug (IND) application with FDA and are cleared to commence Phase 1 clinical studies in January 2016. We plan to initiate the first Phase 1 study of MAT2501 during 2016.

We are currently exploring strategic partnering options for our legacy cardiovascular drug, MAT9001, which has been developed and targeted to date for the treatment of very high triglycerides and MAT8800, our discovery program seeking to identify product candidates derived from omega-3 fatty acids for the treatment of nan-alcoholic fatty liver disease.

We are a clinical stage company and have generated $135,000 and $0 in contract research revenues during the six months ended June 30, 2015 and the six months ended June 30, 2016, respectively. These contract research revenues ended during 2015 and we do not anticipate any revenues during the remainder of 2016. We have incurred losses for each period from inception. Our net loss was approximately $3.9 million and $5.0 million for the six months ended June 30, 2016 and 2015, respectively. We expect to incur significant expenses and increasing operating losses for the foreseeable future. We expect our expenses to increase significantly in connection with our ongoing activities to develop, seek regulatory approval and commercialization of MAT2203 and MAT2501 and any other product candidates we choose to develop based upon our platform technology. Accordingly, we will need additional financing to support our continuing operations. We will seek to fund our operations through public or private equity or debt financings or other sources, which may include collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would impact our going concern and would have a negative impact on our financial condition and our ability to pursue our business strategy and continue as a going concern. We will need to generate significant revenues to achieve profitability, and we may never do so.

Financial Operations Overview

Revenue

We generated Contract Research Revenue in the amount of $135,000 for the six months ended June 30, 2015 versus zero in the same period of 2016. This revenue is directly related to contracts which our subsidiary Aquarius had with the National Institutes of Health (NIH). These contracts were related to work being done on MAT2203 and MAT2501. These contracts ended in 2015 and we expect no additional revenue in 2016 unless we enter into a new revenue arrangement.

Research and Development Expenses

Research and development expenses consist of costs incurred for the development of MAT2203 and MAT2501 and, to a lesser extent, MAT9001, which include:

- the cost of conducting pre-clinical work;
- the cost of acquiring, developing and manufacturing pre-clinical and human clinical trial materials;
- costs for consultants and contractors associated with Chemistry and Manufacturing Controls (CMC), pre-clinical and clinical activities and regulatory operations;
- expenses incurred under agreements with contract research organizations, or CROs, including the National Institutes of Health (NIH), that conduct our pre-clinical or clinical trials; and
- employee-related expenses, including salaries and stock-based compensation expense for those employees involved in the research and development process.

The table below summarizes our direct research and development expenses for our product candidates for the six months ended June 30, 2016 and 2015. Our direct research and development expenses consist principally of external costs, such as fees paid to contractors, consultants, analytical laboratories and CROs and/or the NIH, in connection with our development work. We typically use our employee and infrastructure resources for manufacturing clinical trial materials, conducting product analysis, study protocol development and overseeing outside vendors. Included in "Internal Staffing, Overhead and Other" below is the cost of laboratory space, supplies, R&D employee costs (including stock option expenses), travel and medical education.

	Six Months Ended June 30,	
	2016	**2015**
	($ in thousands)	
Direct research and development expenses:		
Manufacturing process development	$ 39	$ 249
Preclinical trails	13	157
Clinical development	310	1,108
Regulatory	39	107
Internal staffing, overhead and other	1,163	1,182
Total research and development	$ 1,564	$ 2,803

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage human trials.

Consistent with the cost deferral and savings measures we implemented recently, we expect our R&D expenses to remain relatively flat or slightly increase in the near term. We will control our R&D expenses through the timing and monitoring of our preclinical animal programs, for the near term. In the longer term, we expect R&D expenses to increase as we implement our development programs.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive and finance functions. Other general and administrative expenses include facility costs, communication expenses, and professional fees for legal, patent review, consulting and accounting services. General and Administrative expenses were $2.3 million as compared to $2.3 million for the six months ended June 30, 2016 and 2015 respectively.

We anticipate that our general and administrative expenses will be flat throughout 2016 due to the implementation of a cost savings steps, offset by increased expenses related to our status as a publicly traded company, including expenses in support of compliance with the requirements of Section 404 of the Sarbanes Oxley Act.

Other Expense, net

Other expense, net is largely comprised of interest expense and franchise taxes.

Application of Critical Accounting Policies

Our critical accounting policies are more fully described in Note C to our financial statements included in our annual report on Form 10-K for the year ended December 31, 2015, there have been no material changes to our critical accounting policies.

Stock-Based Compensation

Option Grants

We account for all share-based compensation payments issued to employees, directors, and non-employees using an option pricing model for estimating fair value. Accordingly, share-based compensation expense is measured based on the estimated fair value of the awards on the date of grant, net of forfeitures. We recognize compensation expense for the portion of the award that is ultimately expected to vest over the period during which the recipient renders the required services to us using the straight-line single option method. In accordance with authoritative guidance, we re-measure the fair value of non-employee share-based awards as the awards vest, and recognize the resulting value, if any, as expense during the period the related services are rendered.

Significant Factors, Assumptions and Methodologies Used in Determining Fair Value

We apply the fair value recognition provisions of ASC Topic 718, Compensation-Stock Compensation, which we refer to as ASC 718. Determining the amount of share-based compensation to be recorded required us to develop estimates of the fair value of stock options as of their grant date before operating as a public company. We recognize share-based compensation expense ratably over the requisite service period, which in most cases is the vesting period of the award. Calculating the fair value of share-based awards requires that we make highly subjective assumptions.

We use the Black-Scholes option pricing model to value our stock option awards. Use of this valuation methodology requires that we make assumptions as to the volatility of our common stock, the expected term of our stock options, and the risk free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. As a publicly-held company with a limited operating history, we utilized data from a representative group of companies to estimate expected stock price volatility. We selected companies from the biopharmaceutical industry with similar characteristics to us, including those in the early stage of product development and with a therapeutic focus.

We use the simplified method as prescribed by the Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment* , to calculate the expected term of stock option grants to employees as we do not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term of stock options granted to employees.

We recognize compensation expense for stock option awards on a straight-line basis over the applicable service period of the award. The service period is generally the vesting period, with the exception of options granted subject to a consulting agreement, whereby the option vesting period and the service period defined pursuant to the terms of the consulting agreement may be different. Stock options issued to consultants are revalued quarterly until fully vested, with any change in fair value expensed. For awards subject to performance conditions, the Company recognizes stock-based compensation expense using the accelerated attribution recognition method when it is probable that the performance condition will be achieved. The following range of assumptions were used to value options granted for the six months ended June 30, 2016 and 2015 and to re-measure stock options issued to consultants.

	For the Six Months Ended June 30,	
	2016	**2015**
Volatility	68.38 % - 89.15%	91.1%
Risk-free interest rate	1.15 % - 1.375%	1.34% - 1.85%
Dividend yield	0.0%	0.0%
Expected life	6.0 years	4.29 - 6.0 years

The expected term of stock options represents the weighted average period the stock options are expected to remain outstanding and is based on the options vesting term, contractual terms, and industry peers as we did not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior.

The expected stock price volatility assumption was determined by examining the historical volatilities for industry peers, as our stock has not been trading long enough to calculate its own volatility. We will continue to analyze the historical stock price volatility and expected term assumptions as more historical data for our common stock becomes available. The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected term of our stock options. The expected dividend assumption is based on our history and expectation of dividend payouts.

We have never paid dividends on our common stock and do not anticipate paying dividends on our common stock in the foreseeable future. Accordingly, we have assumed no dividend yield for purposes of estimating the fair value of our share-based compensation.

We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record share-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised.

The closing price of our stock (on the date of a grant) is used as an input in the measurement of stock-based compensation.

Share-based compensation expense associated with stock options and restricted stock granted to employees and non-employees for the six months ended June 30, 2016 and 2015 was $0.8 million and $0.5 million, respectively. As of June 30, 2016, we had $2.3 million of total unrecognized share-based compensation expense, which we expect to recognize over a weighted-average remaining vesting period of approximately 1.1 years. In future periods, our share-based compensation expense is expected to increase as a result of recognizing our existing unrecognized share-based compensation for awards that will vest and as we issue additional share-based awards to attract and retain our employees.

We have included stock based compensation as part of our operating expenses in our statement of operation for the six months ended June 30 ($ in thousands) as follows:

	2016	2015
General and administrative	$ 271	$ 288
Research and development	523	446
Total	$ 794	$ 734

The 2013 Equity Compensation Plan, or the Plan, is the only active plan pursuant to which options to acquire common stock or restricted stock awards can be granted and are currently outstanding. As of June 30, 2016, there were 2,573,519 shares of our common stock available for issuance under the Plan.

As of June 30, 2016, we had outstanding options to purchase an aggregate of 8,270,694 shares of our common stock with a weighted average exercise price of $0.85. The computation of the aggregate intrinsic value is based upon the difference between the original exercise price of the options and our estimate of the deemed fair value of our common stock at June 30, 2016. The total intrinsic value of options outstanding and vested at June 30, 2016 was $1.0 million.

Emerging Growth Company Status

Under Section 107(b) of the Jumpstart Our Business Startups Act of 2012, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Results of Operations ($ in Thousands)

Comparison of Three Months Ended June 30, 2016 and 2015.

	2016	2015	Increase (Decrease)
Revenues	$ -	77	(77)
Cost and expenses:			
Research and development	$ 642	$ 1,355	$ (713)
General and administrative	978	1,124	(146)
Total cost and expenses	$ 1,620	$ 2,479	$ (859)

Revenues. Revenue for the three months ended June 30, 2016 was $0, compared to $77,000 for the prior period. Revenue consists of revenue earned under the National Institutes of Health grants for MAT2203 and MAT2501. These grants ended in 2015 and we do not anticipate any revenue for the remainder of 2016

Research and Development expenses. Research and Development expense for the three months ended June 30, 2016 decreased $713,000 compared to the prior year period. This decrease is primarily due to a decrease in spending on clinical studies, associated with MAT9001. In the longer term, we expect R&D expenses to increase as we implement our development programs.

General and Administrative expenses. General and Administrative expenses for the three month period ending June 30, 2016 were $978,000 a decrease of $ 146,000, due to cost saving measures instituted in late 2015.

Comparison of Six Months Ended June 30, 2016 and 2015.

	2016	2015	Increase (Decrease)
Revenues	$ -	135	(135)
Cost and expenses:			
Research and development	$ 1,564	$ 2,803	$ (1,239)
General and administrative	2,293	2,302	(9)
Total cost and expenses	$ 3,857	$ 5,105	$ (1,248)

Revenues. Revenue for the six months ended June 30, 2016 was zero, compared to $134,636 for the six months ended June 30, 2015. Revenue consists of revenue earned under the National Institutes of Health grants for MAT2203 and MAT2501. These grants ended in 2015 we do not anticipate any revenue for the remainder of 2016.

Research and Development expenses. Research and Development expense for the six months ended June 30, 2016 decreased $1.2 million compared to the prior year period. This decrease is primarily due to a decrease in spending on clinical studies, associated with MAT9001. In the longer term, we expect R&D expenses to increase as we implement our development programs.

General and Administrative expenses. General and Administrative expenses for the six month period ending June 30, 2016 were $2.3 million, essentially flat when compared to the prior period, due to cost saving measures instituted in late 2015 offsetting an increase in marketing studies prepared for our primary development products.

Sources of Liquidity

We have funded our operations since inception through private placements of our equity instruments, most recently through unit offerings of our common stock and common stock warrants. As of June 30, 2016, we have raised approximately $22 million in net proceeds from sales of our equity securities.

As of June 30, 2016, we had cash totaling $0.6 million.

2015 and 2016 Private Placements

In March and April 2015, we completed the 2015 Private Placement, under which we sold an aggregate of 20,000,000 shares of our common stock and warrants to purchase an aggregate of 20,000,000 shares of our common stock at an exercise price of $0.75 per share. The gross proceeds to us from the 2015 Private Placement were $10.0 million (see Note E, for additional information).

In July 2016, we conducted a closing for a private placement of our preferred stock. See Note J – Subsequent Events for additional information.

Cash Flows

The following table sets forth the primary sources and uses of cash for each of the period set forth below:

	Six months ended June 30,	
	2016	**2015**
Cash used in operating activities	$ (2,637)	$ (4,539)
Cash (used in) provided by investing activities	(31)	32
Cash provided by financing activities	19	8,522
Net (decrease) increase in cash	$ (2,649)	$ 4,015

Operating Activities

We have incurred significant costs in the area of research and development, including manufacturing, analytical, regulatory and clinical development costs and costs associated with being a public company. Net cash used in operating activities was approximately $2.6 million for the six months ended June 30, 2016 and $4.5 million for the six months ended June 30, 2015.

Investing Activities

Net cash used in investing activities was $31,063 for the six months ended June 30, 2016 for equipment purchases and Net cash provided was $32,020 for the six months ended June 30, 2015. The cash provided in investing activities in 2015 was primarily the result of equipment purchases offset by cash acquired from the acquisition of Aquarius.

Financing Activities

Net cash provided by financing activities was $19,036 for the six months ended June 30, 2016 for equipment lease costs. The cash provided by financing activities for the six months ended June 30, 2015 was due to net proceeds of $8,522,164 received from the closing of our 2015 Private Placement.

Funding Requirements and Other Liquidity Matters

MAT2203 and MAT2501 are still in development stages. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We anticipate that our expenses will increase substantially if and as we:

- initiate our planned Phase 2a clinical trials of MAT2203, our lead product candidate;
- initiate and continue the research and development of our other product candidates and potential product candidates, including MAT2501;
- seek to discover and develop additional product candidates using our cochleate lipid-crystal delivery technology platform;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;

- establish a sales, marketing and distribution infrastructure in the future to commercialize any products for which we may obtain regulatory approval;

- require the manufacture of larger quantities of product candidates for clinical development and potentially commercialization;

- maintain, expand and protect our intellectual property portfolio;

- hire additional clinical, quality control and scientific personnel; and

- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts and personnel and infrastructure necessary to help us comply with our obligations as a public company.

We expect that our existing cash and cash equivalents (including the net proceeds from the private placement closing in July 2016) will only be sufficient to fund our operating expenses and capital expenditures requirements through the January 2017 period (see footnote J – Subsequent Events). We will need additional financing to fund our operating expenses and to initiate and conduct our intended clinical programs, file additional patent applications and enhance our intellectual property position for lead compounds, and prepare for submission of an NDA for MAT2203 and MAT2501, and potentially conduct preclinical work in order to identify product candidates utilizing our cochleate delivery platform technology. We have based this estimate on assumptions that may prove to be wrong in the future, and we may use our available capital resources sooner than we currently expect. Unless we obtain additional financing, there is substantial doubt we can continue as a going concern.

Until the time we can generate substantial product revenues from commercializing MAT2203, MAT2501 or any future product candidates, if ever, we expect to finance our cash needs through a combination of private and public equity offerings, debt financings, collaborations, strategic alliances and/or licensing arrangements. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends and could increase our expenses and require that our assets secure such debt. If we raise additional funds through collaborations, strategic alliances or licensing arrangements with pharmaceutical partners, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market any product candidates under our development that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The disclosures relating to our future contractual obligations reported in our annual report on Form 10-K for the year ended December 31, 2015 which was filed with the SEC on March 30, 2016 have not materially changed since we filed the report.

On November 1, 2013, we entered into a seven year lease for office space in Bedminster, New Jersey. The commencement date and first obligation to pay rent was June 2014, with annual rent beginning at approximately $.1 million per year, increasing to $.2 million in the final year.

In December 2015, the Company renewed an agreement to lease laboratory space for one year commencing January 1, 2016 in Monmouth Junction, New Jersey. Base rent for the year ended December 31, 2016 will be approximately $27 thousand.

We may enter into contracts in the normal course of business with clinical research organizations for clinical trials and clinical supply manufacturing and with vendors for preclinical research studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Through our acquisition of Aquarius, we acquired a license from Rutgers University for the cochleate delivery technology. The Amended and Restated Exclusive License Agreement between Aquarius and Rutgers, The State University of New Jersey (successor in interest to the University of Medicine and Dentistry of New Jersey) provides for, among other things, (1) royalties on a tiered basis between low single digits and the mid-single digits of net sales of products using such licensed technology, (2) a one-time sales milestone fee of $100,000 when and if sales of products using the licensed technology reach the specified sales threshold and (3) an annual license fee of initially $10,000, increasing to $50,000 over the term of the license agreement.

The Company also has employment agreements with certain employees which require the funding of a specific level of payments, if certain events, such as a change in control, termination without cause or retirement, occur.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our balance sheets.

RECENT ACCOUNTING PRONOUNCEMENTS

Refer to Note (c)(12), "Recent Accounting Policies," in the accompanying notes to the condensed consolidated financial statements for a discussion of recent accounting pronouncements.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures.

As of June 30, 2016, we evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level as of June 30, 2016. Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within time periods specified by the SEC's rules and forms, and that such information is accumulated and communicated to our management, including principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, but not absolute, assurance that the objectives of the disclosure controls and procedures are met. The design of any disclosure control and procedure 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.

Changes in internal control over financial reporting.

There were no changes in our internal control over financial reporting during the three months ended June 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 1. LEGAL PROCEEDINGS

None.

Item 1A. Risk Factors

There were no material changes from the risk factors set forth under Part I, Item 1A., "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015. You should carefully consider these factors in addition to the other information set forth in this report which could materially affect our business, financial condition or future results. The risks and uncertainties described in this report and in our Annual Report on Form 10-K for the year ended December 31, 2015, as well as other reports and statements that we file with the SEC, are not the only risks and uncertainties facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also have a material adverse effect on our financial position, results of operations or cash flows.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Not applicable.

Item 3. DEFAULTS UNDER SENIOR SECURITIES

None.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Item 5. OTHER INFORMATION

None.

Item 6. EXHIBITS

See the Exhibit Index following the signature page to this Quarterly Report on Form 10-Q for a list of exhibits filed or furnished with this report, which Exhibit Index is incorporated herein by reference.

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.

MATINAS BIOPHARMA HOLDINGS, INC.

BY:

/s/ Roelof Rongen

Dated: August 15, 2016

Roelof Rongen
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Gary Gaglione

Dated: August 15, 2016

Gary Gaglione
Acting Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

3.1	Certificate of Incorporation of the Company, incorporated by reference to Exhibit 3.1 of the Company's Registration Statement on Form S-1 (Reg. No. 333-193455), filed February 7, 2014 with the Securities and Exchange Commission.
3.2	Certificate of Designation of Series A Preferred Stock, incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed August 1, 2016 with the Securities and Exchange Commission.
3.3	Bylaws of the Company, incorporated by reference to Exhibit 3.2 of the Company's Registration Statement on Form S-1 (Reg. No. 333-193455), filed February 7, 2014 with the Securities and Exchange Commission.
*31.1	Certification of President and Chief Executive Officer
*31.2	Certification of Interim Chief Financial Officer
**32.1	Section 1350 Certifications
*101.1	XBRL Instance Document.
*101.2	XBRL Taxonomy Extension Schema Document.
*101.3	XBRL Taxonomy Extension Calculation Linkbase Document.
*101.4	XBRL Taxonomy Extension Definition Linkbase Document.
*101.5	XBRL Taxonomy Extension Label Linkbase Document.
*101.6	XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed herewith.
** Furnished herewith.

Exhibit 31.1

CERTIFICATION

I, Roelof Rongen, certify that:

1. I have reviewed this report on Form 10-Q of Matinas BioPharma Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 15, 2016

By /s/ Roelof Rongen
Name: Roelof Rongen
Title: President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Gary Gaglione, certify that:

1. I have reviewed this report on Form 10-Q of Matinas BioPharma Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 15, 2016

By: /s/ Gary Gaglione
Name: Gary Gaglione
Title: Acting Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

SECTION 1350 CERTIFICATIONS

Pursuant to 18 U.S.C. §1350 as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, the undersigned officers of Matinas BioPharma Holdings, Inc. (the "Company") hereby certify that to their knowledge and in their respective capacities that the Company's quarterly report on Form 10-Q to which this certification is attached (the "Report"), fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 15, 2016

By: /s/ Roelof Rongen
Name: Roelof Rongen
Title: President and Chief Executive Officer

Date: August 15, 2016

By: /s/ Gary Gaglione
Name: Gary Gaglione
Title: Acting Chief Financial Officer
(Principal Financial and Accounting Officer)

This certification shall not be deemed "filed" for any purpose, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act. A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Matinas BioPharma Holdings, Inc. and will be retained by Matinas BioPharma Holdings, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.