

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

Post-Effective  
Amendment No. 1

## Form S-1

REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

### Matinas BioPharma Holdings, Inc.

*(Exact Name of Registrant as Specified in its Charter)*

Delaware

2834

46-3011414

(State or other jurisdiction of incorporation  
or organization)

(Primary Standard Industrial Classification  
Code Number)

(I.R.S. Employer  
Identification No.)

**1545 Route 206 South, Suite 302  
Bedminster, New Jersey 07921  
Telephone: 908-443-1860**

*(Address, including zip code, and telephone number,  
including area code, of principal executive offices)*

**Roelof Rongen**

**Chief Executive Officer**

**Matinas BioPharma Holdings, Inc.**

**1545 Route 206 South, Suite 302  
Bedminster, New Jersey 07921**

**Telephone: 908-443-1860**

*(Address, including zip code, and telephone number,  
including area code, of agent for service)*

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Approximate date of proposed sale to public: As soon as practicable on or after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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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 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

Smaller reporting company

(Do not check if a smaller reporting company)

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Amount to Be Registered	Proposed Maximum Offering Price per Share <sup>(1)</sup>	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee <sup>(5)</sup>
Shares of common stock sold to selling stockholders in private placement <sup>(2)</sup>	14,915,000	\$ 1.00	\$ 14,915,000	\$ 1,921
Shares of common stock underlying warrants sold to selling stockholders in private placement <sup>(3)</sup>	7,500,000	\$ 2.00	\$ 15,000,000	\$ 1,932
Other shares of common stock underlying warrants held by selling stockholders <sup>(4)</sup>	3,007,500	\$ 2.00	\$ 6,015,000	\$ 775
<b>Total</b>	<b>25,422,500</b>	<b>\$</b>	<b>\$ 35,930,000</b>	<b>\$ 4,628</b>

- (1) No market presently exists of our common stock. The selling stockholders will be required to offer their shares at \$1.00 per share until our common stock is listed for quotation on the OTC Bulletin Board or OTCQB Market. Assuming such listing is obtained, offers may be made at prevailing market prices or at privately negotiated prices.
- (2) Represents shares of common stock purchased pursuant to our private placement which had its final closing on August 8, 2013 (the “Private Placement”).
- (3) Represents shares of common stock issuable upon the exercise of warrants issued in the Private Placement with an exercise price per share of \$2.00 per share. Pursuant to Rule 416, there are also being registered such indeterminable additional securities as may be issued to prevent dilution as a result of stock splits, stock dividends or similar transactions. Proposed maximum offering price per share is based on the exercise price of the warrant in accordance with Rule 457(g).
- (4) Represents shares of common stock issuable upon the exercise of warrants issued to selling stockholders not in the Private Placement with an exercise price of \$2.00 per share. Pursuant to Rule 416, there are also being registered such indeterminable additional securities as may be issued to prevent dilution as a result of stock splits, stock dividends or similar transactions. Proposed maximum offering price per share is based on the exercise price of the warrant in accordance with Rule 457(g).
- (5) Previously paid.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, as amended, or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.**

**The information in this prospectus is not complete and may be changed. We may not sell these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**Preliminary Prospectus**

**Subject to Completion, dated May \_\_, 2014**

## **Matinas BioPharma Holdings, Inc.**

**25,422,500 Shares  
Common Stock**

This prospectus relates to the offer for sale of up to an aggregate of 25,422,500 shares of common stock of Matinas BioPharma Holdings, Inc. by the selling stockholders named herein. We are not offering any securities pursuant to this prospectus. The shares of common stock offered by the selling stockholders include 10,507,500 shares of common stock underlying warrants.

Our common stock is not presently traded on any market or securities exchange, and we have not applied for listing or quotation on any exchange. We are seeking sponsorship for the trading of our common stock on the OTC Bulletin Board and/or OTCQB Market upon the effectiveness of the registration statement of which this prospectus forms a part. The 25,422,500 shares of our common stock can be sold by selling security holders at a fixed price of \$1.00 per share until our shares are quoted on the OTC Bulletin Board and/or OTCQB Market and thereafter at prevailing market prices or privately negotiated prices. There can be no assurance that a market maker will agree to file the necessary documents with the Financial Industry Regulatory Authority (referred to herein as FINRA), nor can we provide assurance that our shares will actually be quoted on the OTC Bulletin Board and/or OTCQB Market or, if quoted, that a viable public market will materialize or be sustained.

Following the effectiveness of the registration statement of which this prospectus forms a part, the sale and distribution of securities offered hereby may be effected in one or more transactions that may take place on the OTC Bulletin Board and/or OTCQB Market, including ordinary brokers' transactions, privately negotiated transactions or through sales to one or more dealers for resale of such securities as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by the selling stockholders. See "Plan of Distribution."

The selling stockholders and intermediaries through whom such securities are sold may be deemed "underwriters" within the meaning of the Securities Act of 1933, as amended, with respect to the securities offered hereby, and any profits realized or commissions received may be deemed underwriting compensation.

**We are an "emerging growth company" under the federal securities laws and will be subject to reduced public company reporting requirements. Investing in our common stock is highly speculative and involves a significant degree of risk. See "Risk Factors" beginning on page 11 of this prospectus for a discussion of information that should be considered before making a decision to purchase our common stock.**

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

**The date of this prospectus is \_\_\_\_\_, 2014.**

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You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with information different from or in addition to that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

**Additional risks and uncertainties not presently known or that are currently deemed immaterial may also impair our business operations. The risks and uncertainties described in this document and other risks and uncertainties which we may face in the future will have a greater impact on those who purchase our common stock. These purchasers will purchase our common stock at the market price or at a privately negotiated price and will run the risk of losing their entire investments.**

**For investors outside the United States:** We have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

In this prospectus, we rely on and refer to information and statistics regarding our industry. We obtained this statistical, market and other industry data and forecasts from publicly available information.

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## PROSPECTUS SUMMARY

*This summary highlights information contained in other parts of this prospectus. Because it is a summary, it does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should read the entire prospectus carefully, including our consolidated financial statements and the related notes included in this prospectus and the information set forth under the headings “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”*

*When used herein, unless the context requires otherwise, references to the “Company,” “we,” “our” and “us” refer to Matinas BioPharma Holdings, Inc., a Delaware corporation, collectively with its wholly-owned subsidiary, Matinas BioPharma, Inc., a Delaware corporation, which we sometimes refer to herein as Matinas BioPharma.*

### **Our Company**

#### **General**

We are a development stage biopharmaceutical company, founded in 2011, with a focus on identifying and developing novel pharmaceutical products for the treatment of abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular and metabolic diseases. By capitalizing on our management’s experience working on pharmacological formulation, evaluation and clinical development in the field of lipid science and the therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop our lead product candidate, MAT9001, with a focus on cardiovascular disease. Our Chief Executive Officer, Chief Scientific Officer and Executive Vice President for Pharmaceutical and Supply Chain Development were all colleagues at Reliant Pharmaceuticals, Inc., where they were directly responsible for the in-licensing, development, manufacturing optimization and commercialization of various dyslipidemia therapies, including Lovaza<sup>®</sup>, the first prescription omega-3 drug approved in the United States, Antara<sup>®</sup>, a fenofibrate, and Lescol<sup>®</sup>, more commonly known by its generic name fluvastatin. With respect to our lead product candidate, MAT9001, our goal is to establish significant differentiation over existing available therapies by demonstrating significant reductions in triglyceride levels, lowering of cholesterol levels, and improving other important physiological parameters thereby addressing what we believe is currently a significant unmet medical need. In addition, our MAT8800 discovery program is seeking to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions available. We believe that our unique ability to produce and isolate highly concentrated omega-3 fatty acids which have demonstrated effects on liver enzyme levels and histology could yield product candidates which are particularly well suited to treat these diseases.

#### **Our Lead Product Candidate**

Our lead product candidate, MAT9001, is a proprietary prescription-only omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid, or EPA, docosapentaenoic acid, or DPA, a potent but less prevalent omega-3 fatty acid, several other omega-3 fatty acids, and relatively nominal amounts of docosahexaenoic acid, or DHA, and non-omega-3 fatty acids. We have initiated the good manufacturing practice, or GMP, manufacturing process for our complex composition and have initiated animal studies. To date, we have been optimizing the manufacturing process for the MAT9001 active pharmaceutical ingredient and working toward our Investigational New Drug, or IND, filing with the United States Food and Drug Administration, or FDA.

We believe that based upon MAT9001’s unique composition, it will prove to be differentiated from other existing therapies for the treatment of high triglycerides, or hypertriglyceridemia, and dyslipidemia. Triglycerides are fats that are carried in the blood, together with cholesterol, within lipoproteins. High levels of triglyceride-rich lipoproteins are associated with an increased risk of atherosclerotic cardiovascular disease and in the case of severe hypertriglyceridemia (defined below), acute pancreatitis. High levels of triglyceride-rich lipoproteins are due to both genetic and environmental factors and are associated with comorbid conditions such as diabetes, chronic renal failure and nephrotic syndrome. Unlike the current approved therapies in this product category, many of which have been repurposed following clinical failures in their originally intended indications, we have specifically designed and developed MAT9001 to treat hypertriglyceridemia and dyslipidemia. We believe that the results of these targeted development activities and related clinical investigations may yield an improved therapeutic profile compared to the currently-existing therapies, characterized most importantly by MAT9001’s differentiating mechanistic features associated with its unique composition and enhanced potency.

We are primarily focused on developing and commercializing MAT9001 through approval by the FDA, with an initial indication for the treatment of severe hypertriglyceridemia. Severe hypertriglyceridemia refers to a condition in which patients have high blood levels of triglycerides (TG  $\geq$ 500 mg/dl) and is recognized as an independent risk factor for pancreatitis and cardiovascular disease. Based on information provided by the National Heart, Lung and Blood Institute and National Cholesterol Education Program, or NCEP ATP III Guidelines (collectively, the “NCEP Guidelines”), we estimate that more than four million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for treating severe hypertriglyceridemia, we may seek approval for use of MAT9001 in additional indications, including the treatment of patients with mixed dyslipidemia who may already be undergoing treatment with a statin, a commonly used class of cholesterol lowering medication. Mixed dyslipidemia refers to a condition in which patients have a combination of both elevated triglycerides ( $\geq$ 200mg/dl), and elevated cholesterol levels. Based on the NCEP Guidelines, we estimate that approximately 30 to 35 million Americans have mixed dyslipidemia.

### ***Differentiation Strategy for MAT9001***

In contrast to certain other omega-3 based prescription products, MAT9001 is not a product repurposed from a previous development program aimed at treating another disease or condition, but was instead specifically designed and optimized for the treatment of severe hypertriglyceridemia and dyslipidemia. Specifically, we are pursuing two avenues of differentiation:

- MAT9001 has unique mechanistic features due to its proprietary composition of omega-3 fatty acids, including DPA, which we believe is a key differentiating omega-3 fatty acid component ( *i.e.*, DPA has different properties than EPA or DHA); and
- MAT9001 is designed to have a highly concentrated potency versus other omega-3 products due to its optimized formulation.

We believe that based upon both publicly available pre-clinical and human data associated with the DPA component contained in MAT9001, our product will likely:

- Better control triglyceride levels;
- Better control cholesterol, and may decrease low-density lipoproteins, or LDL, cholesterol levels; and
- Produce aspirin-like anti-coagulatory effects.

In addition, MAT9001 contains a much lower concentration of DHA than certain competitive omega-3 based products, such as Lovaza®, Epanova® or CaPre® (products with mixtures of mostly EPA and DHA). As described above, these products reduce triglycerides as the main desired effect but also have the negative side effect of increasing LDL-cholesterol levels. This side effect has been observed with the use of Lovaza and Epanova in patients with severe hypertriglyceridemia as well as in patients with mixed dyslipidemia. In contrast, products with very low concentrations of DHA, such as Vascepa®, have not shown the increase in LDL-cholesterol levels relative to placebo in either the severe hypertriglyceridemia or mixed dyslipidemia patient populations. Omega-3 products containing low DHA levels have demonstrated reductions in LDL-cholesterol and non-HDL-cholesterol levels. We believe MAT9001's unique composition will produce differentiating results in reducing both cholesterol and triglyceride levels. That, combined with MAT9001's product design, leads us to believe that MAT9001 is well positioned to become a leading treatment for severe hypertriglyceridemia if approved by the FDA.

### ***MAT9001 Development and Regulatory Program***

Our MAT9001 development and regulatory program for severe hypertriglyceridemia has been designed to be similar to the clinical trial programs used by other pharmaceutical companies for FDA approval of omega-3 fatty acid based products in this indication. These companies performed Phase III trials only, as they were not required to perform Phase I and II trials. By designing the MAT9001 program in a manner consistent with the established FDA guidance for obtaining approval of an indication to treat severe hypertriglyceridemia, we believe the required clinical development program and regulatory approval pathway for MAT9001 for severe hypertriglyceridemia is somewhat predictable and may be relatively lower in risk compared to other typical clinical development programs in the cardiovascular field. See "Business – MAT9001 Development Program" for a detailed description of our proposed FDA process.

### ***Additional Pipeline Opportunities***

In addition to MAT9001, we have established a discovery program called MAT8800 to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions. Our own development work has indicated that certain omega-3 fatty acids may yield improvement in liver enzyme levels and liver histology. Accordingly, we have identified potential omega-3 fatty acid compositions to study in preclinical settings. This discovery program is focused on identifying and optimizing product candidates comprising omega-3 fatty acids as potential treatments for nonalcoholic fatty liver disease (NAFLD), nonalcoholic steatohepatitis (NASH) or other hepatic conditions.

## Recent Developments

### *The Merger Transaction*

On July 11, 2013, Matinas BioPharma entered into a merger agreement with Matinas Merger Sub, Inc., a Delaware corporation and our wholly owned subsidiary, or Merger Sub. Pursuant to the terms of the merger agreement, as a condition of and contemporaneously with the initial closing of the 2013 Private Placement described below, Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly-owned subsidiary of us. In connection with the merger, or the Merger, the stockholders of Matinas BioPharma received an aggregate of 9,000,000 shares of our common stock and warrants, the Merger Warrants, to purchase 1,000,000 shares of our common stock at an exercise price of \$2.00 per share and all outstanding shares of common stock and preferred stock of Matinas BioPharma were cancelled.

### *2013 Private Placement*

In July and August 2013, we completed a private placement, or the 2013 Private Placement, pursuant to which we sold an aggregate of 15,000,000 shares of our common stock and warrants, the Investor Warrants, to purchase an aggregate of 7,500,000 shares of our common stock with an exercise price of \$2.00 per share, which warrants are exercisable for a period of five years from the initial closing date. Aegis Capital Corp. acted as the placement agent, or the Placement Agent, for the 2013 Private Placement. The gross proceeds to us from the 2013 Private Placement were \$15 million.

In connection with the 2013 Private Placement, we paid Aegis (i) a cash fee of \$1,500,000 and (ii) a non-accountable expense allowance equal to \$450,000. In addition, as part of its compensation for acting as placement agent for the 2013 Private Placement, we issued (x) warrants to the placement agent to purchase 750,000 shares of our common stock with an exercise price of \$2.00 per share and (y) warrants to the placement agent to purchase 1,500,000 shares of our common stock with an exercise price of \$1.00 per share. Such warrants, the Placement Agent Warrants, contain a “cashless exercise” feature and are exercisable at any time prior to July 30, 2018.

### *Warrant Private Placement*

Contemporaneously with the initial closing of the 2013 Private Placement, we sold warrants, the Private Placement Warrants, to purchase an aggregate of 500,000 shares of our common stock at an exercise price of \$2.00 per share to Herbert Conrad, our chairman of the board, for a purchase price of \$0.04 per warrant. The Private Placement Warrants were offered to all preferred stockholders of Matinas BioPharma prior to the Merger, including Mr. Conrad.

## Our Risks

An investment in our common stock involves a high degree of risk. You should carefully consider the risks summarized below. These risks are discussed more fully in the “Risk Factors” section of this prospectus immediately following this prospectus summary. These risks include, but are not limited to, the following:

- we have a limited operating history and have incurred operating losses of approximately \$6.0 million from inception through March 31, 2014 and we expect to incur substantial losses for the foreseeable future and may never achieve or maintain profitability, as a result of which our independent registered public accounting firm has issued a going concern opinion, which could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or otherwise;
- we will need to obtain additional financing to complete clinical development of MAT9001 and to initiate and complete clinical development of any product candidate which emerges from our MAT8800 discovery program;
- clinical trials for our lead product candidate, MAT9001, may not be successful and we may not obtain approval from the FDA or other regulatory bodies in different jurisdictions for MAT9001;
- we are highly dependent on the success of our lead product candidate, MAT9001, which is still in early stage development;
- we may not be able to manufacture a sufficient number of GMP batches of MAT9001 as required for pre-clinical and clinical trials or sufficient commercial quantities of MAT9001;
- we rely on third parties to manufacture MAT9001 and to conduct our clinical trials;
- we currently do not have the infrastructure to commercialize MAT9001 should we be successful in obtaining FDA approval;
- we face significant competition from other biotechnology and pharmaceutical companies who currently market or have plans to market prescription omega-3 fatty acid based products and may also be subject to competition from omega-3 fatty acid based products which are marketed as dietary supplements for which no prescription is required;
- even if we obtain marketing approval for MAT9001, we will be subject to ongoing obligations and continued regulatory review;



- it is difficult and costly to protect our intellectual property and we may not be able to protect our intellectual property; and
- we rely on our key employees and executives and the loss of the services of our key employees and executives would adversely impact our business prospects.

### **Implications of Being an Emerging Growth Company**

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, for as long as we continue to be an “emerging growth company,” we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies,” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an “emerging growth company” for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1 billion, (ii) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. Also, we have irrevocably elected to “opt out” of the extended transition periods available under the JOBS Act for complying with new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

### **Corporate Information**

Matinas BioPharma Holdings Inc., sometimes referred to herein as Holdings, is a Delaware corporation formed in 2013 and is the parent company of Matinas BioPharma, Inc., its operating subsidiary, a Delaware corporation. Nereus BioPharma LLC, a Delaware limited liability company (and Matinas BioPharma’s predecessor) was formed on August 12, 2011. On February 29, 2012, Nereus BioPharma LLC converted from a limited liability company to a corporation and changed its name to Matinas BioPharma, Inc.

Our principal offices are located at 1545 Route 206 South, Suite 302, Bedminster, New Jersey 07921. Our web address is [www.matinasbiopharma.com](http://www.matinasbiopharma.com). Information contained in or accessible through our web site is not, and should not be deemed to be, part of this prospectus.

We currently do not own or license any U.S. federal trademark registrations or applications. Some trademarks referred to in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

## THE OFFERING

**Common Stock Outstanding** 32,000,000 shares (1)

**Common Stock, including Shares of  
Common Stock underlying Warrants,  
Offered by Selling Stockholders** 25,422,500 shares (2)

**Use of Proceeds** We will not receive any proceeds from the sale of the common stock by the selling stockholders. We would, however, receive proceeds upon the exercise of the warrants held by the selling stockholders which, if such warrants are exercised in full (and assuming no “cashless” exercise features are utilized), would be approximately \$21,015,000. Proceeds, if any, received from the exercise of such warrants will be used for working capital and general corporate purposes. No assurances can be given that any of such warrants will be exercised.

**Quotation of Common Stock:** Our common stock is not presently traded on any market or securities exchange, and we have not applied for listing or quotation on any exchange. We are seeking sponsorship for the trading of our common stock on the OTC Bulletin Board and/or OTCQB Market upon the effectiveness of the registration statement of which this prospectus forms a part. The 25,422,500 shares of our common stock can be sold by selling stockholders at a fixed price of \$1.00 per share until our shares are quoted on the OTC Bulletin Board and/or OTCQB Market and thereafter at prevailing market prices or privately negotiated prices. There can be no assurance that a market maker will agree to file the necessary documents with FINRA, nor can we provide any assurance that our shares will actually be quoted on the OTC Bulletin Board and/or OTCQB Market or, if quoted, that a viable public market will materialize.

**Risk Factors** An investment in our company is highly speculative and involves a significant degree of risk. See “Risk Factors” and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.

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- (1) Excludes: (i) outstanding options to purchase 3,160,000 shares of our common stock, as of March 31, 2014, at an exercise price of \$0.94 per share; (ii) up to 5,090,000 shares of our common stock that are available, as of March 31, 2014, for issuance under our 2013 Equity Compensation Plan; (iii) 7,500,000 shares of our common stock underlying the Investor Warrants, which have an exercise price of \$2.00 per share, issued in our 2013 Private Placement, (iv) 1,000,000 shares of common stock underlying the Merger Warrants, which have an exercise price of \$2.00 per share, issued in connection with the Merger, (v) 500,000 shares of common stock underlying the Private Placement Warrants, which have an exercise price of \$2.00 per share, issued in the warrant private placement, (vi) 4,000,000 shares of our common stock underlying the Formation Warrants, which have an exercise price of \$2.00 per share, issued in connection with the formation of Holdings (vii) 1,500,000 shares of our common stock underlying warrants, which have an exercise price of \$1.00 per share, issued to the Placement Agent in the 2013 Private Placement and (viii) 750,000 shares of our common stock underlying warrants, which have an exercise price of \$2.00 per share issued to the Placement Agent in the 2013 Private Placement.
- (2) Includes: (i) 7,457,500 shares of our common stock underlying the Investor Warrants, which have an exercise price of \$2.00 per share, (ii) 1,000,000 shares of our common stock underlying the Merger Warrants, which have an exercise price of \$2.00 per share, (iii) 500,000 shares of our common stock underlying the Private Placement Warrants, which have an exercise price of \$2.00 per share, and (iv) 1,550,000 shares of our common stock underlying the Formation Warrants, which have an exercise price of \$2.00 per share.

## RISK FACTORS

*An investment in our common stock involves a high degree of risk, including the risk of a loss of your entire investment. You should carefully consider the risks and uncertainties described below and the other information contained in this Prospectus before purchasing shares of our common stock. The risks set forth below are not the only ones facing us. Additional risks and uncertainties, including those of which the Company is not aware or that it deems immaterial, may exist that could also adversely affect our business, operations and prospects. If any of the following risks actually materialize, our business, financial condition, prospects and/or operations could suffer and be materially harmed. In such event, the value of our common stock could decline, and you could lose all or a substantial portion of the money that you pay for our common stock.*

### **Risks Related to Our Financial Position and Need for Capital**

***We are a development stage biopharmaceutical company with a limited operating history.***

We are a development stage biopharmaceutical company with a limited operating history. We have not commenced human trials and anticipate meeting with the FDA prior to commencing such clinical trials to discuss our proposed clinical pathway. The likelihood of success of our business plan must be considered in light of the problems, substantial expenses, difficulties, complications and delays frequently encountered in connection with developing and expanding early-stage businesses and the regulatory and competitive environment in which we operate. Biopharmaceutical product development is a highly speculative undertaking, involves a substantial degree of risk and is a capital-intensive business.

Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early stages of development, especially development stage biopharmaceutical companies such as ours. Potential investors should carefully consider the risks and uncertainties that a company with a limited operating history will face. In particular, potential investors should consider that we cannot assure you that we will be able to:

- receive FDA acceptance of our proposed regulatory pathway for MAT9001;
- successfully implement or execute our current business plan, or that our business plan is sound;
- successfully complete pre-clinical and clinical trials for MAT9001 and obtain regulatory approval for the marketing of MAT9001;
- successfully identify product candidates under our MAT8800 discovery program;
- successfully manufacture clinical product and establish commercial drug supply for MAT9001;
- secure market exclusivity and/or adequate intellectual property protection for MAT9001 or a product candidate under our MAT8800 discovery program;
- attract and retain an experienced management and advisory team; and
- raise sufficient funds in the capital markets to effectuate our business plan, including the preparation and completion of our Phase III clinical program for MAT9001.

If we cannot successfully execute any one of the foregoing, our business may not succeed.

***We have incurred operating losses in each year since our inception and expect to continue to incur substantial losses for the foreseeable future. We may never become profitable or, if achieved, be able to sustain profitability.***

We expect to incur substantial expenses without corresponding revenues unless and until we are able to obtain regulatory approval and successfully commercialize MAT9001. We have been engaged in developing MAT9001 since 2011. To date, we have not generated any revenue from MAT9001 and we expect to incur significant expense to complete our Phase III clinical program for MAT9001 in the United States. We may never be able to obtain regulatory approval for the marketing of MAT9001 in any indication in the United States or internationally. Even if we are able to commercialize MAT9001 or any other product candidate, there can be no assurance that we will generate significant revenues or ever achieve profitability. Our net loss for the year ended December 31, 2012 and 2013 was \$0.1 million and \$3.7 million, respectively. The Company's net loss for the three months ended March 31, 2014 was approximately \$2.1 million. As of March 31, 2014, we had an accumulated deficit of \$6.0 million.

Assuming we obtain FDA approval for MAT9001, which we do not expect until 2017 at the earliest, we expect that our expenses will increase if we reach commercial launch of MAT9001. We also expect that our research and development expenses will continue to increase as we advance to human trials for an indication for the treatment of severe hypertriglyceridemia and we may pursue FDA approval for MAT9001 in other indications, which will result in significant additional research and development expense. Furthermore, we expect that our research and development expenses will significantly increase as our MAT8800 discovery program progresses and we advance to pre-clinical and clinical trials with one or more product candidates. As a result, we expect to continue to incur substantial losses for the foreseeable future, and we expect these losses will be increasing. We are uncertain when or if we will be able to achieve or sustain profitability. If we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Failure to become and remain profitable would impair our ability to sustain operations and adversely affect the price of our common stock and our ability to raise capital.

***We will need to raise significant additional capital to support our development and commercialization efforts for MAT9001 if the FDA does not accept our proposed regulatory pathway.***

We believe that our cash and cash equivalents will be sufficient to fund our operations and capital expenditure requirements through 2014 and will allow us to conduct our currently planned pre-clinical studies, file additional patent applications in order to potentially enhance our intellectual property position, file our investigational new drug application, or IND, initiate a special protocol assessment with the FDA for our MAT9001 Phase III clinical program for patients with severe hypertriglyceridemia. However, we will need to seek additional equity or debt financing to initiate and conduct our intended Phase III clinical program for MAT9001, file additional patent applications and enhance our intellectual property position for MAT9001 and MAT8800, validate the manufacturing processes at our various suppliers and prepare for submission of an NDA for MAT9001, and conduct preclinical work in order to identify product candidates under our MAT8800 discovery program. We believe we will need at least \$20 to \$60 million of additional capital to complete our Phase III clinical program and submit a New Drug Application, or NDA. See "Matinas' Business – MAT9001 Development Program". In addition, we will need to raise additional funding to complete clinical development of any product candidate that emerges from MAT 8800.

We do not currently have any arrangements or credit facilities in place as a source of funds, and there can be no assurance that we will be able to raise sufficient additional capital on acceptable terms, or at all. We may seek additional capital through a combination of private and public equity offerings, debt financings, strategic collaborations and/or licensing arrangements. Debt financing, if obtained, 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, could increase our expenses and require that our assets secure such debt. Moreover, any debt we incur must be repaid regardless of our operating results. Equity financing, if obtained, could result in dilution to our then existing stockholders and/or require such stockholders to waive certain rights and preferences or otherwise adversely affect their rights. If such financing is not available on satisfactory terms, or is not available at all, we may be required to delay, scale back or eliminate the development of business opportunities and our operations and financial condition may be materially adversely affected. In addition, if we are unable to secure sufficient capital to fund our operations, we might have to enter into strategic collaborations that could require us to share commercial rights to MAT9001 with third parties in ways that we currently do not intend or on terms that may not be favorable to us. If we choose to pursue additional indications and/or geographies for MAT9001 or otherwise expand more rapidly than we presently anticipate we may also need to raise additional capital sooner than expected.

***Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.***

Our recurring losses from operations raise substantial doubt about our ability to continue as a going concern, and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2013 with respect to this uncertainty. This going concern opinion, and any future going concern opinion, could materially limit our ability to raise additional capital. We have incurred significant losses since our inception and have never been profitable, and it is possible we will never achieve profitability. We have devoted our resources to developing MAT9001, but this product candidate cannot be marketed for any indication until regulatory approvals have been obtained. Meaningful revenues will likely not be available until, and unless, MAT9001 or any future product candidate is approved by the FDA or comparable regulatory agencies in other countries and successfully marketed, either by us or a partner. The perception that we may not be able to continue as a going concern may cause potential partners or investors to choose not to deal with us due to concerns about our ability to meet our contractual and financial obligations.

#### **Risks Related to Product Development, Regulatory Approval, Manufacturing and Commercialization**

***We currently depend entirely on the success of MAT9001, which is still in clinical development. If we are unable to generate revenues from MAT9001, our ability to create stockholder value will be limited.***

Our lead product candidate is MAT9001, which is at the clinical development stage. We do not commercialize any FDA-approved drug products and our drug discovery program, MAT8800, has yet to identify any specific product candidate. Other than MAT9001 and our MAT8800 discovery program, we currently have no other product candidates in development. We intend to follow the regulatory pathway described in this registration statement for the approval of MAT9001 with an indication to treat severe hypertriglyceridemia. We have commenced pre-clinical studies with MAT9001 and intend to submit an IND to the FDA seeking to initiate our first clinical trial in humans in the United States. We must complete these efforts before we will be able to commence our Phase III clinical program for MAT9001. We may not be successful in obtaining acceptance from the FDA for our proposed regulatory pathway under Section 505(b)(2) of the Food and Drug Act, including acceptance of the IND for MAT9001. If we do not obtain such acceptance, the time in which we expect to commence our Phase III clinical program will be extended and such extension will significantly increase our expenses, reduce our capital and we will likely need to seek additional equity or debt financing. Moreover, there is no guarantee that our Phase III clinical program will be successful or that it will ultimately be adequate to support an approval from the FDA for any indication. We note that most drug candidates never reach the clinical development stage and even those that do reach clinical development have only a small chance of successfully completing clinical development and gaining regulatory approval. Therefore, our business currently depends entirely on the successful development, regulatory approval and commercialization of MAT9001, which may never occur.

***If we are not able to obtain any required regulatory approvals for MAT9001, we will not be able to commercialize our only current product candidate and our ability to generate revenue will be limited.***

We must successfully complete pre-clinical and clinical trials for our lead product candidate, MAT9001, before we can apply for its marketing approval. We have limited experience in managing clinical trials, particularly late-stage clinical trials. Even if we complete our clinical trials, it does not assure FDA approval. We have commenced pre-clinical testing of MAT9001. Our pre-clinical trials may be unsuccessful, which would materially harm our business. Even if these trials are successful, we are required to conduct clinical trials and manufacturing quality assessments to establish MAT9001's safety and efficacy, and extensive pharmaceutical development to ensure its quality before a New Drug Application, or NDA, can be filed with the FDA for marketing approval of MAT9001.

Clinical testing is expensive, is difficult to design and implement, can take many years to complete and is uncertain as to outcome. Success in early phases of pre-clinical and clinical trials does not ensure that later clinical trials will be successful and interim results of a clinical trial do not necessarily predict final results. A failure of one or more of our clinical trials can occur at any stage of testing. We may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent our ability to receive regulatory approval or commercialize MAT9001. The research, testing, manufacturing, labeling, packaging, storage, approval, sale, marketing, advertising and promotion, pricing, export, import and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, which regulations differ from country to country. We are not permitted to market MAT9001 as a prescription pharmaceutical product in the United States until we receive approval of an NDA from the FDA, or in any foreign countries until we receive the requisite approval from such countries. In the United States, the FDA generally requires the completion of pre-clinical testing and clinical trials of each drug to establish its safety and efficacy and extensive pharmaceutical development to ensure its quality before an NDA is approved. Regulatory authorities in other jurisdictions impose similar requirements. Of the large number of drugs in development, only a small percentage result in the submission of an NDA to the FDA and even fewer are eventually approved for commercialization. We have not submitted an NDA to the FDA or comparable applications to other regulatory authorities. If our development efforts for MAT9001, including regulatory approval, are not successful for its planned indications, or if adequate demand for MAT9001 is not generated, our business will be materially adversely affected.

Our success depends on the receipt of regulatory approval and the issuance of such regulatory approvals is uncertain and subject to a number of risks, including the following:

- the FDA or comparable foreign regulatory authorities or institutional review boards, or IRBs, may disagree with the design or implementation of our clinical trials;
- we may not be able to provide acceptable evidence of MAT9001's safety and efficacy;
- the results of our pre-clinical or clinical trials may not be satisfactory or may not meet the level of statistical or clinical significance required by the FDA, European Medicines Agency, or EMA, or other regulatory agencies for marketing approval;
- the FDA may not agree with a portion or any of our planned streamlined approach for approval of MAT9001;
- the dosing of MAT9001 in a particular clinical trial may not be at an optimal level;
- patients in our clinical trials may suffer adverse effects for reasons that may or may not be related to MAT9001;
- the data collected from clinical trials may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Failure to obtain regulatory approval for MAT9001 for the foregoing or any other reasons will prevent us from commercializing this product candidate as a prescription product, and our ability to generate revenue will be materially impaired. We cannot guarantee that regulators will agree with our assessment of the results of the clinical trials we intend to conduct in the future or that such trials will be successful. The FDA, EMA and other regulators have substantial discretion in the approval process and may refuse to accept any application or may decide that our data is insufficient for approval and require additional clinical trials, or pre-clinical or other studies. In addition, varying interpretations of the data obtained from pre-clinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate.

We are a development stage biopharmaceutical company and we have not submitted an NDA or received regulatory approval to market MAT9001 in any jurisdiction. We have only limited experience in filing the applications necessary to gain regulatory approvals and expect to rely on consultants and third party contract research organizations, or CROs, with expertise in this area to assist us in this process. Securing FDA approval requires the submission of pre-clinical, clinical, and/or pharmacokinetic data, information about product manufacturing processes and inspection of facilities and supporting information to the FDA for each therapeutic indication to establish a product candidate's safety and efficacy for each indication. MAT9001 may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining regulatory approval or prevent or limit commercial use with respect to one or all intended indications.

The process of obtaining regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon, among other things, the type, complexity and novelty of the product candidates involved, the jurisdiction in which regulatory approval is sought and the substantial discretion of the regulatory authorities. Changes in the regulatory approval policy during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for a submitted product application may cause delays in the approval or rejection of an application. Regulatory approval obtained in one jurisdiction does not necessarily mean that a product candidate will receive regulatory approval in all jurisdictions in which we may seek approval, but the failure to obtain approval in one jurisdiction may negatively impact our ability to seek approval in a different jurisdiction. Failure to obtain regulatory marketing approval for MAT9001 in any indication will prevent us from commercializing the product candidate, and our ability to generate revenue will be materially impaired.

***MAT9001 is currently our only product candidate in development. If we fail to successfully commercialize MAT9001, we may need to acquire additional product candidates and our business may be adversely affected.***

We have never commercialized any product candidates and do not have any other compounds in pre-clinical testing, lead optimization or lead identification stages beyond MAT9001 and MAT8800. We cannot be certain that our lead product candidate, MAT9001, will prove to be sufficiently effective and safe to meet applicable regulatory standards for any indication. If we fail to successfully commercialize MAT9001 as a treatment for severe hypertriglyceridemia or any other indication, whether as a stand-alone therapy or in combination with other treatments, our business would be adversely affected. If this occurs, we may seek out opportunities to discover, develop, acquire or license additional promising product candidates or drug compounds to expand our product candidate pipeline beyond MAT9001 and our MAT8800 discovery program. This would constitute a significant change in our strategy and would likely require substantial additional capital. We would also be exposed to numerous additional risks related to our ability to identify, select and acquire the right product candidates and products on terms that are acceptable to us, and there is no guarantee that we would be successful in these efforts.

***Even if we receive regulatory approval for MAT9001, we still may not be able to successfully commercialize it and the revenue that we generate from its sales, if any, may be limited.***

If approved for marketing, the commercial success of MAT9001 will depend upon its acceptance by the medical community, including physicians, patients and health care payors. The degree of market acceptance of MAT9001 will depend on a number of factors, including:

- demonstration of clinical safety and efficacy of prescription omega-3 products generally;
- relative convenience, pill burden and ease of administration;
- the prevalence and severity of any adverse effects;
- the willingness of physicians to prescribe MAT9001 and of the target patient population to try new therapies;
- the efficacy of MAT9001 compared to competing products, including Lovaza, Vascepa and omega-3 dietary supplements;
- the introduction of any new products, including generic prescription omega-3 products and dietary supplements, that may in the future become available to treat indications for which MAT9001 may be approved;
- new procedures or methods of treatment that may reduce the incidences of any of the indications in which MAT9001 may show utility;
- pricing and cost-effectiveness;
- the inclusion or omission of prescription omega-3 products in applicable treatment guidelines;
- the effectiveness of our or any future collaborators' sales and marketing strategies;
- limitations or warnings contained in FDA-approved labeling;
- our ability to obtain and maintain sufficient third-party coverage or reimbursement from government health care programs, including Medicare and Medicaid, private health insurers and other third-party payors; and
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage or reimbursement.

If MAT9001 is approved, but does not achieve an adequate level of acceptance by physicians, health care payors and patients, we may not generate sufficient revenue and we may not be able to achieve or sustain profitability. Our efforts to educate the medical community and third-party payors on the benefits of MAT9001 may require significant resources and may never be successful.

In addition, even if we obtain regulatory approvals, the timing or scope of any approvals may prohibit or reduce our ability to commercialize MAT9001 successfully. For example, if the approval process takes too long, we may miss market opportunities and give other companies the ability to develop competing products or establish market dominance. Any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render MAT9001 not commercially viable. For example, regulatory authorities may approve MAT9001 for fewer or more limited indications than we request, may not approve the price we intend to charge for MAT9001, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve MAT9001 with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that indication. Further, the FDA may place conditions on approvals including potential requirements or risk management plans and the requirement for a Risk Evaluation and Mitigation Strategy (“REMS”) to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without an approved REMS, if required. A REMS could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of MAT9001. Moreover, product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following the initial marketing of the product. Any of the foregoing scenarios could materially harm the commercial success of MAT9001.

***We currently have no sales and marketing organization. If we are unable to establish satisfactory sales and marketing capabilities, we may not successfully commercialize MAT9001.***

At present, we have no sales or marketing personnel. In order to commercialize products that are approved for commercial sales, we must either develop a sales and marketing infrastructure or collaborate with third parties that have such commercial infrastructure. If we elect to develop our own sales and marketing organization, we do not intend to begin to hire sales and marketing personnel until the time of NDA submission to the FDA at the earliest, and we do not intend to establish our own sales organization in the United States until shortly prior to FDA approval of MAT9001. Therefore, at the time of our anticipated commercial launch of MAT9001, assuming regulatory approval of the drug by the FDA, our sales and marketing team will have worked together for only a limited period of time. Accordingly, we may not be successful in marketing MAT9001 in the United States.

We may not be able to establish a direct sales force in a cost-effective manner or realize a positive return on this investment. In addition, we will have to compete with established and well-funded pharmaceutical and biotechnology companies to recruit, hire, train and retain sales and marketing personnel. Factors that may inhibit our efforts to commercialize MAT9001 in the United States without strategic partners or licensees include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe MAT9001;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we are not successful in recruiting sales and marketing personnel or in building a sales and marketing infrastructure, or if we do not successfully enter into appropriate collaboration arrangements, we will have difficulty successfully commercializing MAT9001, which would adversely affect our business, operating results and financial condition. Outside the United States, we intend to commercialize MAT9001 by entering into collaboration agreements with pharmaceutical partners. We may not be able to enter into such agreements on terms acceptable to us or at all. In addition, even if we enter into such relationships, we may have limited or no control over the sales, marketing and distribution activities of these third parties. Our future revenues may depend heavily on the success of the efforts of these third parties.

***We face competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.***

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. We have competitors in a number of jurisdictions, many of which have substantially greater name recognition, commercial infrastructures and financial, technical and personnel resources than we have. Established competitors may invest heavily to quickly discover and develop novel compounds that could make MAT9001 or any product candidate resulting from our MAT8800 discovery program obsolete or uneconomical. Any new product that competes with an approved product may need to demonstrate compelling advantages in efficacy, cost, convenience, tolerability and safety to be commercially successful. Other competitive factors, including generic competition, could force us to lower prices or could result in reduced sales. In addition, new products developed by others could emerge as competitors to MAT9001 or to a product developed under our MAT8800 discovery program. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition and operations will suffer.

Our potential competitors both in the United States and Europe include large, well-established pharmaceutical companies, specialty pharmaceutical sales and marketing companies and specialized cardiovascular treatment companies. These companies include GlaxoSmithKline plc, which currently markets Lovaza, a prescription omega-3 fatty acid indicated for patients with severe hypertriglyceridemia, and Abbvie, Inc. (previously Abbott Laboratories), which currently markets Tricor® and Trilipix® (both fibrates) and Niaspan® (niacin) for the treatment of high triglycerides and severe hypertriglyceridemia in the United States and Omacor (the equivalent of Lovaza) in Europe and Asia. In March 2011, Pronova BioPharma Norge AS, now owned by BASF, which owns the patents for Lovaza, entered into an agreement with Apotex Corp. and Apotex Inc., or Apotex, to settle their patent litigation in the United States related to Lovaza. Pursuant to the terms of the settlement agreement, Pronova granted Apotex a license to enter the U.S. market with a generic version of Lovaza in the first quarter of 2015, or earlier depending on circumstances. In addition, Pronova recently lost an appeal in its patent infringement lawsuit against Teva Pharmaceuticals USA, Inc., or Teva, and Par Pharmaceutical Inc., or Par, which would have prevented Teva and Par from launching generic versions of Lovaza. Apotex, Teva and Par must obtain FDA approval of generic versions of Lovaza before they are permitted to sell such products in the United States. On April 8, 2014, Teva announced that it had received FDA approval of its abbreviated new drug application, or ANDA, to sell a generic equivalent of Lovaza and was immediately launching its product into the market. Other companies are also seeking to introduce generic versions of Lovaza. Each of these competitors has greater resources than we do, including financial, product development, marketing, personnel and other resources.

Amarin currently markets Vascepa®, an ethyl-ester form of EPA, for the treatment of patients with severe hypertriglyceridemia. In February 2013, Amarin submitted a supplemental NDA (sNDA) to the FDA seeking approval of Vascepa for the treatment of patients with high triglyceride levels (TG  $\geq$ 200 mg/dL and  $<$ 500 mg/dL) who are also on statin therapy for elevated LDL-C levels, which has been referred to as Amarin's ANCHOR indication. This indication is also referred to as mixed dyslipidemia. On October 16, 2013, the FDA convened an advisory committee to review Amarin's sNDA for mixed dyslipidemia and the advisory committee voted 9 to 2 against recommending approval of Amarin's sNDA based on the information presented at that meeting. In its decision whether to approve Amarin's sNDA, the FDA will consider the recommendation of the advisory committee, but the final decision will be made by the FDA. Amarin's sNDA for mixed dyslipidemia is subject to a standard review and was assigned a Prescription Drug User Fee Act, or PDUFA, date of December 20, 2013. The PDUFA date is the target date for the FDA to complete its review of the sNDA. On October 29, 2013, the FDA notified Amarin that it rescinded the Special Protocol Assessment, or SPA, agreement entered into between the FDA and Amarin for the ANCHOR indication. On November 7, 2013, Amarin submitted a formal appeal of the FDA's decision to rescind the ANCHOR SPA. On January 17, 2014, the Division of Metabolism and Endocrinology Products, or DMEP, within the FDA notified Amarin in connection with Amarin's request for reconsideration of the October 2013 decision to rescind the ANCHOR SPA that the DMEP did not plan to reinstate the ANCHOR SPA agreement. Amarin has stated that it plans to continue to appeal the decision to higher levels within the FDA. Amarin has still not received a decision from FDA with respect to its sNDA filing for the ANCHOR indication. We also understand that on February 21, 2014, in connection with Amarin's July 26, 2012 approval of Vascepa to treat severe hypertriglyceridemia, the FDA denied a grant of NCE marketing exclusivity to Vascepa and granted three-year marketing exclusivity. Such three-year exclusivity extends through July 25, 2015 and could possibly be supplemented by a 30-month stay triggered after patent infringement litigation initiated by Amarin following a valid notice to Amarin of the filing of an ANDA with the FDA seeking approval of a generic version of Vascepa. Thereafter, on February 27, 2014, Amarin filed a lawsuit against the FDA challenging FDA's denial of its request for five-year exclusivity based on Amarin's interpretation of the relevant statute and that FDA's decision was inconsistent with past FDA actions. On March 14, 2014, Amarin announced that it had received paragraph IV certifications from Apotex and Roxane Laboratories, Inc., or Roxane, on March 10 and 12, 2014, respectively, advising Amarin that such companies have filed ANDAs with the FDA for generic versions of Vascepa.

In addition, we are aware of other companies that are developing products that, if approved and marketed, will compete directly with MAT9001. These companies that are in various stages of clinical development with omega-3 prescription therapies for the treatment of very high triglycerides include a free fatty acid form of omega-3 (comprised of 55% EPA and 20% DHA) developed by Omthera Pharmaceuticals, now owned by AstraZeneca PLC. In July 2013, Omthera submitted an NDA to the FDA seeking approval of this drug candidate for the treatment of severe hypertriglyceridemia and received FDA approval for its NDA on May 5, 2014 with an indication to use its product as an adjunct to diet to reduce triglyceride levels in patients with severe hypertriglyceridemia. We are also aware that in January 2014, Acasti Pharma Inc., a subsidiary of Neptune Technologies and Bioresources Inc., announced that the FDA had accepted its IND submission to conduct a pharmacokinetic, or PK, study of its krill-oil based omega-3 phospholipid product. In addition, we believe Catabasis Pharmaceuticals, or Catabasis, Resolvix Pharmaceuticals, or Resolvix, and Sancilio & Company are developing potential treatments for hypertriglyceridemia based on omega-3 fatty acids and, to our knowledge, Catabasis initiated a Phase II clinical trial of its product in December 2013; Resolvix's compound remains in Phase I clinical testing and Sancilio is preparing to commence Phase III clinical testing. We also understand that another company, Trygg Pharma AS received FDA approval on April 23, 2014 for its NDA for an Omega-3 based drug used as an adjunct to diet to reduce triglyceride levels in patients with severe hypertriglyceridemia.



***MAT9001 is designed to be a prescription-only omega-3 fatty acid based medication. Omega-3 fatty acid based products are also marketed by other companies as dietary supplements, which, unlike drugs, are not subject to FDA approval and therefore do not require a prescription and are not subject to pharmaceutical manufacturing standards. As a result, MAT9001, if approved, would be subject to competition from products for which no prescription is required.***

If approved by the regulatory authorities, MAT9001 will be a prescription-only omega-3 fatty acid based medication. Mixtures of omega-3 fatty acids are naturally occurring substances in various foods, including fatty fish. Omega-3 fatty acids are also marketed as dietary supplements, which may generally be marketed without a lengthy FDA premarket review and approval process and are not subject to prescription. However, unlike prescription drug products, manufacturers of dietary supplements may not make therapeutic claims for their products; dietary supplements may be marketed with claims describing how the product affects the structure or function of the body without premarket approval, but may not expressly or implicitly represent that the dietary supplement will diagnose, cure, mitigate, treat, or prevent disease. We believe the exact omega-3 fatty acid composition and pharmaceutical-grade purity of MAT9001 has a superior therapeutic profile to the omega-3 compositions in commercially available dietary supplements. However, we cannot be sure that physicians or consumers will view MAT9001 as superior. To the extent the price of MAT9001 is significantly higher than the prices of commercially available omega-3 fatty acids marketed by other companies as dietary supplements, physicians may recommend these commercial alternatives instead of MAT9001 or patients may elect on their own to take commercially available non-prescription omega-3 fatty acids. Either of these outcomes may adversely impact our results of operations by limiting product sales and how we price our product, thereby limiting the revenue we receive from sales of MAT9001.

***Even if we obtain marketing approval for MAT9001, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, MAT9001 could be subject to labeling and other restrictions and withdrawal from the market and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with MAT9001.***

Even if we obtain United States regulatory approval of MAT9001, the FDA may still impose significant restrictions on its indicated uses or marketing or the conditions of approval, or impose ongoing requirements for potentially costly and time-consuming post-approval studies, including Phase IV clinical trials, and post-market surveillance to monitor safety and efficacy. MAT9001 will also be subject to ongoing regulatory requirements governing the manufacturing, labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, recordkeeping and reporting of adverse events and other post-market information. These requirements include registration with the FDA, as well as continued compliance with current Good Clinical Practices regulations, or cGCPs, for any clinical trials that we conduct post-approval. In addition, manufacturers of drug products and their facilities are subject to continuous review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, cGMP, requirements relating to quality control, quality assurance and corresponding maintenance of records and documents.

The FDA has the authority to require a REMS, as part of an NDA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria or requiring patient testing, monitoring and/or enrollment in a registry.

With respect to sales and marketing activities by us or any future partner, advertising and promotional materials must comply with FDA rules in addition to other applicable federal, state and local laws in the United States and similar legal requirements in other countries. In the United States, the distribution of product samples to physicians must comply with the requirements of the U.S. Prescription Drug Marketing Act. Application holders must obtain FDA approval for product and manufacturing changes, depending on the nature of the change. We may also be subject, directly or indirectly through our customers and partners, to various fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute, U.S. False Claims Act, and similar state laws, which impact, among other things, our proposed sales, marketing, and scientific/educational grant programs. If we participate in the U.S. Medicaid Drug Rebate Program, the Federal Supply Schedule of the U.S. Department of Veterans Affairs, or other government drug programs, we will be subject to complex laws and regulations regarding reporting and payment obligations. All of these activities are also potentially subject to U.S. federal and state consumer protection and unfair competition laws. Similar requirements exist in many of these areas in other countries.

In addition, our product labeling, advertising and promotion would be subject to regulatory requirements and continuing regulatory review. The FDA strictly regulates the promotional claims that may be made about prescription products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. If we receive marketing approval for MAT9001, physicians may nevertheless legally prescribe our products to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability and government fines. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant sanctions, including revocation of its marketing approval. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees of permanent injunctions under which specified promotional conduct is changed or curtailed.

If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, problems with the facility where the product is manufactured, or we or our manufacturers fail to comply with applicable regulatory requirements, we may be subject to the following administrative or judicial sanctions:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- issuance of warning letters or untitled letters;
- clinical holds;
- injunctions or the imposition of civil or criminal penalties or monetary fines;
- suspension or withdrawal of regulatory approval;
- suspension of any ongoing clinical trials;
- refusal to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product license approvals;
- suspension or imposition of restrictions on operations, including costly new manufacturing requirements; or
- product seizure or detention or refusal to permit the import or export of product.

The occurrence of any event or penalty described above may inhibit our ability to commercialize MAT9001 and generate revenue. Adverse regulatory action, whether pre- or post-approval, can also potentially lead to product liability claims and increase our product liability exposure.

***Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize MAT9001 and affect the prices we may obtain.***

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval for MAT9001, restrict or regulate post-approval activities and affect our ability to profitably sell MAT9001.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We do not know whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of MAT9001, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

In the United States, the Medicare Modernization Act, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for drugs. In addition, this legislation authorized Medicare Part D prescription drug plans to use formularies where they can limit the number of drugs that will be covered in any therapeutic class. As a result of this legislation and the expansion of federal coverage of drug products, we expect that there will be additional pressure to contain and reduce costs. These cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for MAT9001 and could seriously harm our business. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act of 2010 or, collectively, the Health Care Reform Law, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Health Care Reform Law revised the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposed a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may require us to modify our business practices with healthcare practitioners, and incur substantial costs to ensure compliance.

Despite initiatives to invalidate the Health Care Reform Law, the United States Supreme Court has upheld certain key aspects of the legislation, including the requirement that all individuals maintain health insurance coverage or pay a penalty, referred to as the individual mandate. Although there are legal challenges to the Health Care Reform Law in lower courts on other grounds, at this time it appears the implementation of the Health Care Reform Law will continue. We will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law, the new law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

In addition, other legislative changes have been proposed and adopted in the United States since the Health Care Reform Law was enacted. On August 2, 2011, the Budget Control Act of 2011 among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which delayed for another two months the budget cuts mandated by these sequestration provisions of the Budget Control Act of 2011. The ATRA, among other things, also reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. We expect that additional federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, and in turn could significantly reduce the projected value of certain development projects and reduce our profitability.

***Our future growth depends, in part, on our ability to penetrate foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.***

Our future profitability will depend, in part, on our ability to commercialize MAT9001 in foreign markets for which we intend to rely on collaborations with third parties. If we commercialize MAT9001 in foreign markets, we would be subject to additional risks and uncertainties, including:

- our customers' ability to obtain reimbursement for MAT9001 in foreign markets;
- our inability to directly control commercial activities because we are relying on third parties;
- the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements;
- different medical practices and customs in foreign countries affecting acceptance in the marketplace;
- import or export licensing requirements;
- longer accounts receivable collection times;
- longer lead times for shipping;
- language barriers for technical training;
- reduced protection of intellectual property rights in some foreign countries;
- foreign currency exchange rate fluctuations; and
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute.

Foreign sales of MAT9001 could also be adversely affected by the imposition of governmental controls, political and economic instability, trade restrictions and changes in tariffs, any of which may adversely affect our results of operations.

***If we market MAT9001 in a manner that violates healthcare fraud and abuse laws, or if we violate government price reporting laws, we may be subject to civil or criminal penalties.***

The FDA enforces laws and regulations which require that the promotion of pharmaceutical products be consistent with the approved prescribing information. While physicians may prescribe an approved product for a so-called "off label" use, it is unlawful for a pharmaceutical company to promote its products in a manner that is inconsistent with its approved label and any company which engages in such conduct can subject that company to significant liability. Similarly, industry codes in the EU and other foreign jurisdictions prohibit companies from engaging in off-label promotion and regulatory agencies in various countries enforce violations of the code with civil penalties. While we intend to ensure that our promotional materials are consistent with our label, regulatory agencies may disagree with our assessment and may issue untitled letters, warning letters or may institute other civil or criminal enforcement proceedings. In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal healthcare fraud and abuse laws have been applied in recent years to restrict certain marketing practices in the pharmaceutical industry. These laws include the U.S. Anti-Kickback Statute, U.S. False Claims Act and similar state laws. Because of the breadth of these laws and the narrowness of the safe harbors, it is possible that some of our business activities could be subject to challenge under one or more of these laws.

The U.S. Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted broadly to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Although there are several statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not, in all cases, meet all of the criteria for safe harbor protection from anti-kickback liability. Moreover, recent health care reform legislation has strengthened these laws. For example, the Health Care Reform Law, among other things, amends the intent requirement of the U.S. Anti-Kickback Statute and criminal health care fraud statutes; a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Health Care Reform Law provides that the government may assert that a claim including items or services resulting from a violation of the U.S. Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the U.S. False Claims Act. Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, or causing to be made, a false statement to get a false claim paid.

Over the past few years, several pharmaceutical and other healthcare companies have been prosecuted under these laws for a variety of alleged promotional and marketing activities, such as: allegedly providing free trips, free goods, sham consulting fees and grants and other monetary benefits to prescribers; reporting to pricing services inflated average wholesale prices that were then used by federal programs to set reimbursement rates; engaging in off-label promotion that caused claims to be submitted to Medicare or Medicaid for non-covered, off-label uses; and submitting inflated best price information to the Medicaid Rebate Program to reduce liability for Medicaid rebates. Most states also have statutes or regulations similar to the U.S. Anti-Kickback Statute and the U.S. False Claims Act, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Sanctions under these federal and state laws may include substantial civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, substantial criminal fines and imprisonment.

***The import of our fish oils containing omega-3 fatty acids and concentrates thereof is subject to supervision and licensing by the United States Department of Agriculture.***

The import of our fish oils containing Omega-3 fatty acids and concentrates thereof is subject to supervision and licensing by the United States Department of Agriculture ("USDA"). If the USDA were to halt the import of such materials or issuance of licenses for the import of such materials, the development, production, or sale of MAT9001 could be delayed.

***We are, and will be, completely dependent on third parties to manufacture MAT9001, and our commercialization of MAT9001 could be halted, delayed or made less profitable if those third parties fail to obtain manufacturing approval from the FDA or comparable foreign regulatory authorities, fail to provide us with sufficient quantities of MAT9001 or fail to do so at acceptable quality levels or prices.***

We do not currently have, nor do we plan to acquire, the capability or infrastructure to manufacture the active pharmaceutical ingredient, or API, in MAT9001 for use in our clinical trials or for commercial product, if any. In addition, we do not have the capability to encapsulate MAT9001 as a finished drug product for commercial distribution. As a result, we will rely on contract manufacturers throughout the development process and then if and when MAT9001 is approved for commercialization. We have not entered into any agreement with any contract manufacturers for commercial supply and may not be able to engage a contract manufacturer for commercial supply of MAT9001 on favorable terms to us, or at all.

The facilities used by our contract manufacturers to manufacture MAT9001 must be approved by the FDA pursuant to inspections that will be conducted after we submit our NDA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMPs for manufacture of both active drug substances and finished drug products. These cGMP regulations cover all aspects of the manufacturing, testing, quality control and record keeping relating to MAT9001. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of MAT9001 or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market MAT9001, if approved.

Our contract manufacturers will be subject to ongoing periodic unannounced inspections by the FDA and corresponding state and foreign agencies for compliance with cGMPs and similar regulatory requirements. We do not have control over our contract manufacturers' compliance with these regulations and standards. Failure by any of our contract manufacturers to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure to grant approval to market MAT9001, delays, suspensions or withdrawals of approvals, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. Failure by our contract manufacturers to comply with or maintain any of these standards could adversely affect our ability to develop, obtain regulatory approval for or market MAT9001.

If, for any reason, these third parties are unable or unwilling to perform, we may not be able to terminate our agreements with them, and we may not be able to locate alternative manufacturers or formulators or enter into favorable agreements with them and we cannot be certain that any such third parties will have the manufacturing capacity to meet future requirements. If these manufacturers or any alternate manufacturer of finished drug product experiences any significant difficulties in its respective manufacturing processes for our API or finished MAT9001 product or should cease doing business with us, we could experience significant interruptions in the supply of MAT9001 or may not be able to create a supply of MAT9001 at all. Were we to encounter manufacturing issues, our ability to produce a sufficient supply of MAT9001 might be negatively affected. Our inability to coordinate the efforts of our third party manufacturing partners, or the lack of capacity available at our third party manufacturing partners, could impair our ability to supply MAT9001 at required levels. Because of the significant regulatory requirements that we would need to satisfy in order to qualify a new bulk or finished product manufacturer, if we face these or other difficulties with our current manufacturing partners, we could experience significant interruptions in the supply of MAT9001 if we decided to transfer the manufacture of MAT9001 to one or more alternative manufacturers in an effort to deal with the difficulties.

Any manufacturing problem or the loss of a contract manufacturer could be disruptive to our operations and result in lost sales. Additionally, we rely on third parties to supply the raw materials needed to manufacture our potential products. Any reliance on suppliers may involve several risks, including a potential inability to obtain critical materials and reduced control over production costs, delivery schedules, reliability and quality. Any unanticipated disruption to a future contract manufacturer caused by problems at suppliers could delay shipment of MAT9001, increase our cost of goods sold and result in lost sales.

We cannot guarantee that our manufacturing and supply partners will be able to reduce the costs of commercial scale manufacturing of MAT9001 over time. If the commercial-scale manufacturing costs of MAT9001 are higher than expected, these costs may significantly impact our operating results. In order to reduce costs, we may need to develop and implement process improvements. However, in order to do so, we will need, from time to time, to notify or make submissions with regulatory authorities, and the improvements may be subject to approval by such regulatory authorities. We cannot be sure that we will receive these necessary approvals or that these approvals will be granted in a timely fashion. We also cannot guarantee that we will be able to enhance and optimize output in our commercial manufacturing process. If we cannot enhance and optimize output, we may not be able to reduce our costs over time.

***Any termination or suspension of, or delays in the commencement or completion of, any necessary studies of MAT9001 for any additional indications could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.***

We will review our strategy with respect to additional indications for MAT9001. In the event we initiate an outcomes study or another type of study, delays in the commencement or completion of such study could significantly affect our product development costs. We do not know whether such study will begin or will be completed on schedule, if at all. The commencement and completion of clinical studies can be delayed for a number of reasons, including delays related to:

- the FDA failing to grant permission to proceed or placing a clinical study on hold;
- subjects failing to enroll or remain in our trials at the rate we expect;
- subjects choosing an alternative treatment for the indications for which we are developing MAT9001, or participating in competing clinical studies;
- subjects experiencing severe or unexpected drug-related adverse effects;
- reports from clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- third-party clinical investigators losing their license or permits necessary to perform our clinical trials, not performing our clinical trials on our anticipated schedule or employing methods consistent with the clinical trial protocol, good laboratory practices, good clinical practices, or third parties not performing data collection and analysis in a timely or accurate manner;
- inspections of clinical study sites finding regulatory violations that require us to undertake corrective action, result in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study, or that prohibit us from using some or all of the data in support of our marketing applications;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other government or regulatory authorities for violations of regulatory requirements, in which case we may need to find a substitute contractor, and we may not be able to use some or any of the data produced by such contractors in support of our marketing applications;
- one or more IRBs refusing to approve, suspending or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- deviations of the clinical sites from trial protocols or withdrawal from a trial;
- the addition of new clinical trial sites;

- the inability of the CRO to execute any clinical trials for any reason; and
- government or regulatory delays or “clinical holds” requiring suspension or termination of a trial.

Product development costs for MAT9001 in a future indication will increase if we have delays in testing or approval or if we need to perform more or larger clinical studies than planned. Additionally, changes in regulatory requirements and policies may occur and we may need to amend study protocols to reflect these changes. Amendments may require us to resubmit our study protocols to the FDA and IRBs for reexamination, which may impact the costs, timing or successful completion of that study. If we experience delays in completion of, or if we, the FDA or other regulatory authorities, the IRB, or other reviewing entities, or any of our clinical study sites suspend or terminate any of our clinical studies of MAT9001, its commercial prospects may be materially harmed and our ability to generate product revenues will be delayed. Any delays in completing our clinical trials will increase our costs, slow the development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical studies may also ultimately lead to the denial of regulatory approval of MAT9001. In addition, if one or more clinical studies are delayed, our competitors may be able to bring products to market before we do, and the commercial viability of MAT9001 could be significantly reduced.

***Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.***

Since we may be required by the FDA to pursue an outcomes study for an indication for MAT9001 for the reduction of the risk of cardiovascular events and may pursue other clinical studies for other indications, we will continue to be subject to risks related to clinical trials. Pre-clinical and clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the pre-clinical or clinical trial process. The results of pre-clinical studies and early clinical trials may not be predictive of the results of later-stage clinical trials. We cannot assure you that the FDA will view the results as we do or that any future trials of MAT9001 for other indications will achieve positive results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through pre-clinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Likewise, any future clinical trial results for MAT9001 may not be successful.

In addition, a number of factors could contribute to a lack of favorable safety and efficacy results for MAT9001 for other indications. For example, such trials could result in increased variability due to varying site characteristics, such as local standards of care, differences in evaluation period and surgical technique, and varying patient characteristics including demographic factors and health status.

***We expect that we will rely on third parties to conduct clinical trials for MAT9001. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize MAT9001 and our business could be substantially harmed.***

We expect to enter into agreements with third-party CROs to conduct and manage our clinical programs. We would rely heavily on these parties for execution of clinical studies for MAT9001 and would control only certain aspects of their activities. Nevertheless, we would be responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on CROs would not relieve us of our regulatory responsibilities. We and our CROs would be required to comply with cGCPs, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for any products in clinical development. The FDA enforces these cGCP regulations through periodic inspections of trial sponsors, principal investigators and trial sites. If we or our CROs fail to comply with applicable cGCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA will determine that any of our clinical trials comply with cGCPs. In addition, our clinical trials must be conducted with products produced under cGMP regulations and will require a large number of test subjects. Our failure or the failure of our CROs to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process and could also subject us to enforcement action up to and including civil and criminal penalties.

Although we intend to design the clinical trials for MAT9001, we expect that the CROs would actually conduct all of the clinical trials. As a result, many important aspects of our drug development programs would be outside of our direct control. In addition, the CROs may not perform all of their obligations under their arrangements with us or in compliance with regulatory requirements. If the CROs do not perform clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development and commercialization of MAT9001 for the subject indication may be delayed or our development program may be materially and irreversibly harmed. We cannot control the amount and timing of resources these CROs would devote to our program or MAT9001. If we are unable to rely on the clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of our clinical trials, which could significantly delay commercialization and require significantly greater expenditures. If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs. As a result of the foregoing, our financial results and the commercial prospects for MAT9001 would be harmed, our costs could increase and our ability to generate revenue could be delayed.

***Third-party coverage and reimbursement and health care cost containment initiatives and treatment guidelines may constrain our future revenues.***

Our ability to successfully market MAT9001 will depend in part on the level of reimbursement that government health administration authorities, private health coverage insurers and other organizations provide for the cost of our products and related treatments. Countries in which MAT9001 is sold through reimbursement schemes under national health insurance programs frequently require that manufacturers and sellers of pharmaceutical products obtain governmental approval of initial prices and any subsequent price increases. In certain countries, including the United States, government-funded and private medical care plans can exert significant indirect pressure on prices. We may not be able to sell MAT9001 profitably if adequate prices are not approved or coverage and reimbursement is unavailable or limited in scope. Increasingly, third-party payors attempt to contain health care costs in ways that are likely to impact our development of products including:

- failing to approve or challenging the prices charged for health care products;
- introducing reimportation schemes from lower priced jurisdictions;
- limiting both coverage and the amount of reimbursement for new therapeutic products;
- denying or limiting coverage for products that are approved by the regulatory agencies but are considered to be experimental or investigational by third-party payors; and
- refusing to provide coverage when an approved product is used in a way that has not received regulatory marketing approval.

**Risks Relating to Our Intellectual Property Rights and Regulatory Exclusivity**

***It is difficult and costly to protect our intellectual property rights, and we cannot ensure the protection of these rights.***

Our commercial success will depend, in part, on obtaining and maintaining patent protection for our technologies, products and processes, successfully defending these patents against third-party challenges and successfully enforcing these patents against third party competitors. The patent positions of pharmaceutical companies can be highly uncertain and involve complex legal, scientific and factual questions for which important legal principles remain unresolved. Changes in either the patent laws or in interpretations of patent laws may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowable or enforceable in our patents (including patents owned by us). We currently have no issued patents and the pending patent applications for MAT9001 and for the MAT8800 discovery program may never be approved by the United States or foreign patent offices. Furthermore, any patents, which may eventually be issued from existing patent applications relating to MAT9001, MAT8800 or any other technologies, may be challenged, invalidated or circumvented. MAT8800 and related technologies may be challenged, invalidated or circumvented by third parties and might not protect us against competitors with similar products or technologies.

The degree of future protection for our proprietary rights is uncertain, because legal means afford only limited protection and may not adequately protect our rights, permit us to gain or keep our competitive advantage, or provide us with any competitive advantage at all. For example, others have filed, and in the future are likely to file, patent applications covering products and technologies that are similar, identical or competitive to MAT9001, or otherwise important to our business. We cannot be certain that any patent application owned by a third party will not have priority over patent applications filed by us, or that we will not be involved in interference, opposition or invalidity proceedings before the United States or foreign patent offices.

We also rely on trade secrets to protect technology, especially in cases where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. While we require employees, academic collaborators, consultants and other contractors to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary or licensed information. Typically, research collaborators and scientific advisors have rights to publish data and information in which we may have rights. If we cannot maintain the confidentiality of our proprietary technology and other confidential information, our ability to receive patent protection and our ability to protect valuable information owned by us may be imperiled. Enforcing a claim that a third-party entity illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts are sometimes less willing to protect trade secrets than patents. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

If we fail to obtain or maintain patent protection or trade secret protection for MAT9001 or our technologies, third parties could use our proprietary information, which could impair our ability to compete in the market and adversely affect our ability to generate revenues and attain profitability.

We may also develop trademarks to distinguish our products from the products of our competitors. We cannot guarantee that any trademark applications filed by us or our business partners will be approved. Third parties may also oppose such trademark applications, or otherwise challenge our use of the trademarks. In the event that the trademarks we use are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition, and could require us to devote resources to advertising and marketing new brands. Further, we cannot provide assurance that competitors will not infringe the trademarks we use, or that we will have adequate resources to enforce these trademarks.

***MAT9001 may infringe the intellectual property rights of others, which could increase our costs and delay or prevent our development and commercialization efforts.***

Our success depends in part on avoiding infringement of the proprietary technologies of others. The pharmaceutical industry has been characterized by frequent litigation regarding patent and other intellectual property rights. Identification of third party patent rights that may be relevant to our proprietary technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. Additionally, because patent applications are maintained in secrecy until the application is published, we may be unaware of third-party patents that may be infringed by commercialization of MAT9001 or any future product candidate. There may be certain issued patents and patent applications claiming subject matter that we may be required to license in order to research, develop or commercialize MAT9001, and we do not know if such patents and patent applications would be available to license on commercially reasonable terms, or at all. Any claims of patent infringement asserted by third parties against us would be time-consuming and may:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;
- prevent us from commercializing a product until the asserted patent expires or is held finally invalid or not infringed in a court of law;
- require us to cease or modify our use of the technology and/or develop non-infringing technology; or
- require us to enter into royalty or licensing agreements.

Although no third party has asserted a claim of infringement against us, others may hold proprietary rights that could prevent MAT9001 from being marketed. Any patent-related legal action against us claiming damages and seeking to enjoin commercial activities relating to MAT9001 or our processes could subject us to potential liability for damages and require us to obtain a license to continue to manufacture or market MAT9001 or any future product candidates. We cannot predict whether we would prevail in any such actions or that any license required under any of these patents would be made available on commercially acceptable terms, if at all. In addition, we cannot be sure that we could redesign MAT9001 or any future product candidates or processes to avoid infringement, if necessary. Accordingly, an adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing and commercializing MAT9001 or a future product candidate, which could harm our business, financial condition and operating results.

We anticipate that competitors may from time to time oppose our efforts to obtain patent protection for new technologies or to submit patented technologies for regulatory approval. Competitors may seek to oppose our patent applications to delay the approval process or to challenge our granted patents, for example, by requesting a reexamination of our patent at the United States Patent and Trademark Office, or the USPTO, or by filing an opposition in a foreign patent office, even if the opposition or challenge has little or no merit. Such proceedings are generally highly technical, expensive and time consuming, and there can be no assurance that such a challenge would not result in the narrowing or complete revocation of any patent of ours that was so challenged.

A number of companies, including several major pharmaceutical companies, have conducted research on pharmaceutical uses of omega-3 fatty acids, which has resulted in the filing of many patent applications related to this research. We are aware of third-party United States patents/applications, and corresponding foreign counterparts, that contain broad claims related to methods of using these general types of compounds, which may be construed to include potential uses of MAT9001 or any future product candidates. If we were to challenge the validity of these or any issued United States patent in court, we would need to overcome a statutory presumption of validity that attaches to every issued United States patent. This means that, in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent's claims. If we were to challenge the validity of these or any issued United States patent in an administrative trial before the Patent Trial and Appeal Board in the United States Patent and Trademark Office, we would have to prove that the claims are unpatentable by a preponderance of the evidence. There is no assurance that a jury and/or court would find in our favor on questions of infringement, validity or enforceability.

Our intended path for FDA approval of MAT9001 with an indication to treat severe hypertriglyceridemia involves the filing of a Section 505(b)(2) NDA. Section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act was enacted as part of the Drug Price Competition and Patent Term Restoration Act of 1984, otherwise known as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit us to rely upon certain preclinical or clinical studies conducted by third parties for their approved product. As a result, we are allowed under Section 505(b)(2) to file an NDA utilizing information from these studies even though we have not obtained a right of reference. The FDA may require us to perform additional studies or measurements to support any changes in our product as compared to the approved product. Pursuant to an NDA filed under Section 505(b)(2), the FDA may approve our new product for all or some of the label indications for which the referenced product has been approved, as well as for any new indication sought by us.



If a Paragraph I or II certification is filed, FDA may make approval of the application effective immediately upon completion of its review. If a Paragraph III certification is filed the approval may be made effective on the patent expiration date specified in the application, although a tentative approval may be issued before that time. If an application contains a Paragraph IV certification, a series of events will be triggered, the outcome of which will determine the effective date of approval of the 505(b)(2) application. The Section 505(b)(2) application also will not be approved until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the Referenced Listed Drug has expired.

A certification that the new product will not infringe the Reference Listed Drug's listed patents or that such patents are invalid is called a Paragraph IV certification. If the applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders for the Reference Listed Drug once the applicant's NDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a legal challenge to the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of their receipt of a Paragraph IV certification automatically prevents the FDA from approving the Section 505(b)(2) NDA by imposing a 30 month automatic statutory injunction. The court may shorten or lengthen the 30 month stay period in a pending patent case if either party fails to reasonably cooperate in expediting the case. The 30 month stay terminates if a court issues a final order determining that the patent is invalid unenforceable or not infringed. Thus, the Section 505(b)(2) applicant may invest a significant amount of time and expense in the development of its products only to be subject to significant delay and patent litigation before its products may be commercialized. Alternatively, if the listed patent holder does not file a patent infringement lawsuit within the required 45-day period, the applicant's NDA will not be subject to the 30-month stay.

***If MAT9001 is not granted any exclusivity protection from the FDA our business may be materially harmed.***

Under Sections 505(c)(3)(E)(ii) and 505(j)(5)(F)(ii) of the Food Drug and Cosmetic Act, or FDCA, as amended by the Drug Price Competition and Patent Term Restoration Act of 1984, as amended, or the Hatch-Waxman Amendments, a drug that is granted regulatory approval may be eligible for five years of marketing exclusivity in the United States following regulatory approval if that drug is classified as a new chemical entity, or NCE. A drug can be classified as a NCE if the FDA has not previously approved any other drug containing the same active moiety.

The FDA typically publishes a determination on the marketing exclusivity of recently approved products in a cumulative supplement to its Approved Drug Products with Therapeutic Equivalence Evaluations, also known as the Orange Book, mid-month in the month following the drug's approval. NCE marketing exclusivity, if granted, would preclude approval during the five-year exclusivity period of certain 505(b)(2) applications or certain abbreviated new drug applications submitted by another company for another version of the drug. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. If we are not able to gain or exploit the period of marketing exclusivity, we may face significant competitive threats to our commercialization of these compounds from other manufacturers, including the manufacturers of generic alternatives. Further, even if MAT9001 is considered to be a NCE and we are able to gain five-year marketing exclusivity, another company could challenge that decision to seek to overturn the FDA's determination. Another company could also gain such marketing exclusivity under the provisions of the FDCA, as amended by the Hatch-Waxman Amendments, if such company can, under certain circumstances, complete a human clinical trial process and obtain regulatory approval of its product.

If MAT9001 is not granted NCE marketing exclusivity, we expect it will be granted three years of new product exclusivity under the Hatch-Waxman Amendments. Such exclusivity protection would preclude the FDA from approving a marketing application for a duplicate of MAT9001, a product candidate that the FDA views as having the same conditions of approval as MAT9001 (for example, the same indication and/or other conditions of use), or a 505(b)(2) NDA submitted to the FDA with MAT9001 as the reference product, for a period of three years from the date of FDA approval, although the FDA may accept and commence review of such applications during the exclusivity period. Such three-year exclusivity grant would not prevent a company from challenging the validity of our patents at any time. In this case, we may be afforded the benefit of a 30-month stay against the launch of such a competitive product that would extend from the period that we respond to a pending patent challenge. This three-year form of exclusivity may also not prevent the FDA from approving an NDA that relies only on its own data to support the change or innovation.

***We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.***

As is commonplace in our industry, we employ individuals who were previously employed at or retained by other pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject in the future to claims that our employees or prospective employees are subject to a continuing obligation to their former employers (such as non-competition or non-solicitation obligations) or claims that our employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

## General Company-Related Risks

***In order to establish our sales and marketing infrastructure, we will need to grow the size of our organization, and we may experience difficulties in managing this growth.***

We currently have only ten employees. As our development and commercialization plans and strategies develop, we will need to expand the size of our employee base for managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain, motivate and integrate additional employees. In addition, our management may have to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. Our future financial performance and our ability to commercialize MAT9001 and any other future product candidates and our ability to compete effectively will depend, in part, on our ability to effectively manage any future growth.

***If we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy. In addition, the loss of the services of certain key employees, including Roelof Rongen, our President and CEO, Jerome D. Jabbour, our Chief Business Officer and General Counsel, George Bobotas, our Chief Scientific Officer, and Abdel A. Fawzy, our Executive Vice President for Pharmaceutical and Supply Chain Development would adversely impact our business prospects.***

Our ability to compete in the highly competitive pharmaceuticals industry depends in large part upon our ability to attract highly qualified managerial, scientific and medical personnel. In order to induce valuable employees to remain with us, we intend to provide employees with stock options that vest over time. The value to employees of stock options that vest over time will be significantly affected by movements in our stock price that we will not be able to control and may at any time be insufficient to counteract more lucrative offers from other companies.

Our management team has expertise in many different aspects of drug development and commercialization. However, we will need to hire additional personnel as we further develop MAT9001 and any product candidates identified in our MAT8800 discovery program. Competition for skilled personnel in our market is intense and competition for experienced scientists may limit our ability to hire and retain highly qualified personnel on acceptable terms. Despite our efforts to retain valuable employees, members of our management, scientific and medical teams may terminate their employment with us on short notice. We have employment agreements with certain of our executive officers. However, these employment arrangements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. The loss of the services of any of our executive officers or other key employees could potentially harm our business, operating results or financial condition. In particular, we believe that the loss of the services of Roelof Rongen, our President and Chief Executive Officer, Jerome D. Jabbour, our Chief Business Officer and General Counsel, George Bobotas, our Chief Scientific Officer, or Abdel A. Fawzy, our Executive Vice President for Pharmaceutical and Supply Chain Development, would have a material adverse effect on our business. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level, and senior managers as well as junior, mid-level, and senior scientific and medical personnel.

Other pharmaceutical companies with which we compete for qualified personnel have greater financial and other resources, different risk profiles, and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can develop and commercialize product candidates would be limited.

***If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of MAT9001.***

We face a potential risk of product liability as a result of the clinical testing of MAT9001 and will face an even greater risk if we commercialize MAT9001 or any other future product. For example, we may be sued if any product we develop, including MAT9001, or any material that we use in our products allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of MAT9001. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for MAT9001 or any future products that we may develop;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize MAT9001; and
- a decline in our stock price.

Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop. We intend to obtain product liability insurance covering our clinical trials in the amount of greater than or equal to \$1 million in the aggregate. Although we will maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

***We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.***

We may acquire additional businesses or products, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, we will achieve the expected synergies to justify the transaction.

#### **Risks Related to Our Common Stock**

***Our directors and executive officers will continue to have substantial influence over us for the foreseeable future could delay or prevent a change in corporate control.***

Our officers and directors, and their affiliates, collectively, beneficially own approximately 40% of our outstanding shares of common stock, based on the number of shares outstanding on March 31, 2014. These stockholders, acting together, have significant influence over the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, these stockholders, acting together, will continue to have significant influence over our management and affairs. Accordingly, this concentration of ownership might harm the market price of our common stock by:

- delaying, deferring or preventing a change in control;
- impeding a merger, consolidation, takeover or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

***No public market for our common stock currently exists, and an active trading market may not develop or be sustained.***

As we are in our early stages, an investment in our company will likely require a long-term commitment, with no certainty of return. There is no public market for our common stock, and even if we become a publicly-listed company, of which no assurances can be given, we cannot predict whether an active market for our common stock will ever develop in the future. In the absence of an active trading market:

- investors may have difficulty buying and selling or obtaining market quotations;
- market visibility for shares of our common stock may be limited; and

- a lack of visibility for shares of our common stock may have a depressive effect on the market price for shares of our common stock.

Assuming we can find market makers to establish quotations for our common stock, we expect that our common stock will be quoted on the OTC Bulletin Board (known as the OTCBB) or OTCQB market operated by OTC Markets Group, Inc. These markets are relatively unorganized, inter-dealer, over-the-counter markets that provide significantly less liquidity than NASDAQ or the NYSE MKT (formerly known as the NYSE AMEX). No assurances can be given that our common stock, even if quoted on such markets, will ever trade on such markets, much less a senior market like NASDAQ or NYSE MKT. In this event, there would be a highly illiquid market for our common stock and you may be unable to dispose of your common stock at desirable prices or at all. Moreover, there is a risk that our common stock could be delisted from the OTCBB/OTCQB, in which case it might be listed on the so called “Pink Sheets”, which is even more illiquid than the OTC Bulletin Board.

The lack of an active market impairs your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair market value of your shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire additional intellectual property assets by using our shares as consideration.

***We may not qualify for OTC Bulletin Board inclusion, and therefore you may be unable to sell your shares.***

We believe that our common stock will become eligible for quotation on the OTC Bulletin Board and/or OTCQB Market, which we refer to herein as the OTCBB/OTCQB. No assurances can be given, however, that this eligibility will be granted. OTCBB/OTCQB eligible securities include securities not listed on a registered national securities exchange in the U.S. and that are also required to file reports pursuant to Section 13 or 15(d) of the Securities Act of 1933, as amended (which we refer to herein as the Securities Act), and require that we be current in its periodic securities reporting obligations.

Among other matters, in order for our common stock to become OTCBB/OTCQB eligible, a broker/dealer member of FINRA, must file a Form 211 with FINRA and commit to make a market in our securities once the Form 211 is approved by FINRA. As of the date of this prospectus, a Form 211 has been filed with FINRA by a broker/dealer which will act as our market maker. If for any reason our common stock does not become eligible for quotation on the OTCBB/OTCQB or a public trading market does not develop, purchasers of shares of our common stock may have difficulty selling their shares should they desire to do so. If we are unable to satisfy the requirements for quotation on the OTCBB/OTCQB, any quotation of in our common stock would be conducted in the “pink” sheets market. As a result, a purchaser of our common stock may find it more difficult to dispose of, or to obtain accurate quotations as to the price of their shares. The above-described rules may materially adversely affect the liquidity of our securities. See “Plan of Distribution.”

***Even if our common stock becomes publicly-traded and an active trading market develops, the market price our common stock may be significantly volatile.***

Even if our securities become publicly-traded and even if an active market for our common stock develops, of which no assurances can be given, the market price for our common stock may be volatile and subject to wide fluctuations in response to factors including the following:

- actual or anticipated fluctuations in our quarterly or annual operating results;
- changes in financial or operational estimates or projections;
- conditions in markets generally;
- changes in the economic performance or market valuations of companies similar to ours; and
- general economic or political conditions in the United States or elsewhere.

In particular, the market prices of biotechnology companies like ours have been highly volatile due to factors, including, but not limited to:

- any delay or failure to conduct a clinical trial for our product or receive approval from the FDA and other regulatory agents;
- developments or disputes concerning our product’s intellectual property rights;

- our or our competitors' technological innovations;
- changes in market valuations of similar companies;
- announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures, capital commitments, new technologies, or patents; and
- failure to complete significant transactions or collaborate with vendors in manufacturing our product.

The securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of shares of our common stock.

***The registration for resale of a significant portion of our outstanding shares of common stock in this registration statement may have a depressive effect on our stock price.***

We are registering for resale 14,915,000 shares of our common stock plus 10,507,500 shares of common stock underlying outstanding warrants. If our existing stockholders sell substantial amounts of our common stock in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our common stock, even if there is no relationship between such sales and the performance of our business.

***If our shares become subject to the penny stock rules, this may make it more difficult to sell our shares.***

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system). The OTCBB does not meet such requirements and if the price of our common stock is less than \$5.00, our common stock will be deemed penny stocks. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that prior to effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stock holders may have difficulty selling their shares.

***FINRA sales practice requirements may also limit your ability to buy and sell our common stock, which could depress the price of our shares.***

FINRA rules require broker-dealers to have reasonable grounds for believing that an investment is suitable for a customer before recommending that investment to the customer. Prior to recommending speculative low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status and investment objectives, among other things. Under interpretations of these rules, FINRA believes that there is a high probability such speculative low-priced securities will not be suitable for at least some customers. Thus, FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our shares, have an adverse effect on the market for our shares, and thereby depress our share price.

***You may face significant restrictions on the resale of your shares due to state "blue sky" laws.***

Each state has its own securities laws, often called "blue sky" laws, which (1) limit sales of securities to a state's residents unless the securities are registered in that state or qualify for an exemption from registration, and (2) govern the reporting requirements for broker-dealers doing business directly or indirectly in the state. Before a security is sold in a state, there must be a registration in place to cover the transaction, or it must be exempt from registration. The applicable broker-dealer must also be registered in that state.

We do not know whether our securities will be registered or exempt from registration under the laws of any state. A determination regarding registration will be made by those broker-dealers, if any, who agree to serve as market makers for our common stock. We have not yet applied to have our securities registered in any state and will not do so until we receive expressions of interest from investors resident in specific states after they have viewed this prospectus. There may be significant state blue sky law restrictions on the ability of investors to sell, and on purchasers to buy, our securities. You should therefore consider the resale market for our common stock to be limited, as you may be unable to resell your shares without the significant expense of state registration or qualification.

***The shares you purchase in this offering may experience substantial dilution by exercises of outstanding warrants and options.***

As of March 31, 2014, we had outstanding warrants to purchase an aggregate of 15,250,000 shares of our common stock at a weighted average exercise price of \$1.90 and options to purchase an aggregate of 3,160,000 shares of our common stock at an exercise price of \$0.94 per share. The exercise of such outstanding options and warrants will result in substantial dilution of your investment. In addition, you may experience additional dilution if we issue common stock in the future. As a result of this dilution, you may receive significantly less than the full purchase price you paid for the shares in the event of liquidation.

***We are an “emerging growth company,” and will be able take advantage of reduced disclosure requirements applicable to “emerging growth companies,” which could make our common stock less attractive to investors.***

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act, and, for as long as we continue to be an “emerging growth company,” we intend to take advantage of certain exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies,” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an “emerging growth company” for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1 billion, (ii) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three year period. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

***We will incur significantly increased costs and devote substantial management time as a result of operating as a public company particularly after we are no longer an “emerging growth company.”***

As a public company, we will incur significant legal, accounting and other expenses. For example, we are required to comply with certain of the requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as rules and regulations subsequently implemented by the Securities and Exchange Commission, or the SEC, including the establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. We expect that compliance with these requirements will increase our legal and financial compliance costs and will make some activities more time consuming and costly. In addition, we expect that our management and other personnel will need to divert attention from operational and other business matters to devote substantial time to these public company requirements. In particular, we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act. We are just beginning the process of compiling the system and processing documentation needed to comply with such requirements. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. In that regard, we currently do not have an internal audit function, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge.

However, for as long as we remain an “emerging growth company” as defined in the JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We intend to take advantage of these reporting exemptions until we are no longer an “emerging growth company.”

Under the JOBS Act, “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.”

After we are no longer an “emerging growth company,” we expect to incur additional management time and cost to comply with the more stringent reporting requirements applicable to companies that are deemed accelerated filers or large accelerated filers, including complying with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act.

We cannot predict or estimate the amount of additional costs we may incur as a result of becoming a public company or the timing of such costs

***We have had material weaknesses in our internal control over financial reporting.***

Prior to February 2014, we had not been a public reporting company and have had limited accounting personnel and systems to adequately execute accounting processes and limited other supervisory resources with which to address internal control over financial reporting. We and our independent registered public accounting firm identified material weaknesses in internal control over financial reporting for the years ended December 31, 2013 and 2012 related (i) financial closing procedures and lack of sufficient resources to maintain financial records and account for significant accounting transactions, particularly related to equity transactions and restricted stock and stock options for employees and non-employees and (ii) lack of proper segregation of duties. We have implemented and are continuing to implement procedures and controls designed to remediate these material weaknesses and underlying deficiencies. Amongst other actions, we have recently added a senior accountant to our finance team; commenced implementation of enhanced review procedures; and begun a comprehensive documentation of our accounting policies and our internal controls and procedures. We have also hired an accounting firm to provide technical accounting support and an additional level of review.

Under standards established by the Public Company Accounting Oversight Board, a deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or personnel, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected and corrected on a timely basis. We are in the process of remediating the material weaknesses identified by us and our independent registered public accounting firm; however, we cannot assure that there will not be additional material weaknesses and significant deficiencies that our independent registered public accounting firm or we will identify. If we identify such issues or if we are unable to produce accurate and timely financial statements, our stock price may be adversely affected and we may be unable to maintain compliance with applicable securities laws and listing requirements.

***Failure to build our finance infrastructure and improve our accounting systems and controls could impair our ability to comply with the financial reporting and internal control requirements for publicly traded companies.***

As a public company, we will operate in an increasingly demanding regulatory environment, which requires us to comply with applicable provisions of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act, and the related rules and regulations of the Securities and Exchange Commission, expanded disclosure requirements, accelerated reporting requirements and more complex accounting rules. Company responsibilities required by the Sarbanes-Oxley Act include establishing corporate oversight and adequate internal control over financial reporting and disclosure controls and procedures. Effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent financial fraud.

We rely on consultants to perform certain of our accounting and financial reporting functions. We will need to hire additional finance personnel and build our financial infrastructure as we transition to operating as a public company, including complying with the applicable requirements of Section 404 of the Sarbanes-Oxley Act. We may be unable to do so on a timely basis.

Moreover, we do not expect that disclosure controls or internal control over financial reporting, even if established, will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Failure of our control systems to prevent error or fraud could materially adversely impact us.

***We may be unable to complete our analysis of our internal controls over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.***

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by our management on, among other things, the effectiveness of our internal control over financial reporting for our annual report for the fiscal ended December 31, 2015. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting, as well as a statement that our independent registered public accounting firm has issued an opinion on our internal control over financial reporting.

We are in the very early stages of the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective.

If we are unable to assert that our internal control over financial reporting is effective, or, if applicable, our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline, and we may be subject to investigation or sanctions by the SEC. We will also be required to disclose changes made in our internal controls and procedures on a quarterly basis.

However, our independent registered public accounting firm will not be required to formally attest to the effectiveness of our internal

control over financial reporting pursuant to Section 404 until the later of the year following our first annual report required to be filed with the SEC, or the date we are no longer an “emerging growth company” as defined in the recently enacted JOBS Act, if we take advantage (as we expect to do) of the exemptions contained in the JOBS Act. We could be an “emerging growth company” for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1 billion, (ii) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, amended, or the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period..

At such time that we no longer qualify as an emerging growth company, our independent registered public accounting firm may issue a report that is adverse to us in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in our internal control over financial reporting in the future. Any of the foregoing occurrences, should they come to pass, could negatively impact the public perception of our company, which could have a negative impact on our stock price.

***We do not currently intend to pay dividends on our common stock in the foreseeable future, and consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.***

We have never declared or paid cash dividends on our common stock and do not anticipate paying any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.



***Upon dissolution of our company, you may not recoup all or any portion of your investment.***

In the event of a liquidation, dissolution or winding-up of our company, whether voluntary or involuntary, the proceeds and/or assets of our company remaining after giving effect to such transaction, and the payment of all of our debts and liabilities will be distributed to the stockholders of common stock on a pro rata basis. There can be no assurance that we will have available assets to pay to the holders of common stock, or any amounts, upon such a liquidation, dissolution or winding-up of our Company. In this event, you could lose some or all of your investment.

***Our certificate of incorporation allows for our board to create new series of preferred stock without further approval by our stockholders, which could adversely affect the rights of the holders of our common stock.***

Our board of directors has the authority to fix and determine the relative rights and preferences of preferred stock. We anticipate that our board of directors will have the authority to issue up to 10,000,000 shares of our preferred stock without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock. In addition, our board of directors could authorize the issuance of a series of preferred stock that has greater voting power than our common stock or that is convertible into our common stock, which could decrease the relative voting power of our common stock or result in dilution to our existing stockholders.

***Anti-takeover provisions of our certificate of incorporation, our bylaws and Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove the current members of our board and management.***

Certain provisions of our amended and restated certificate of incorporation and bylaws could discourage, delay or prevent a merger, acquisition or other change of control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove members of our board of directors. These provisions also could limit the price that investors might be willing to pay in the future for our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. These provisions, among other things:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- authorize our board of directors to issue, without stockholder approval, preferred stock, the rights of which will be determined at the discretion of the board of directors and that, if issued, could operate as a “poison pill” to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition of which our board of directors does not approve;
- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings; and
- limit who may call a stockholder meeting.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of the voting rights on our common stock, from merging or combining with us for a prescribed period of time.

***Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.***

As a result of the Merger, our ability to utilize our federal net operating loss, carryforwards and federal tax credit may be limited under Sections 382 of the Internal Revenue Code of 1986, as amended. The limitations apply if an “ownership change,” as defined by Section 382, occurs. Generally, an ownership change occurs if the percentage of the value of the stock that is owned by one or more direct or indirect “five percent shareholders” increases by more than 50 percentage points over their lowest ownership percentage at any time during the applicable testing period (typically three years). In addition, future changes in our stock ownership, which may be outside of our control, may trigger an “ownership change” and, consequently, Section 382 limitations. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards and other tax attributes to offset United States federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains “forward-looking statements,” which include information relating to future events, future financial performance, financial projections, strategies, expectations, the competitive environment and regulation. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “could,” “would,” “predicts,” “potential,” “continue,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” and similar expressions, as well as statements in future tense. Forward-looking statements should not be read as a guarantee of future performance or results and may not be accurate indications of when such performance or results will be achieved, if at all. Forward-looking statements are based on information we have available to us when such statements are made or on management’s good faith belief as of that time with respect to such future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- 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 current and future capital requirements to support our development and commercialization efforts for MAT9001 and any product candidates under our MAT8800 discovery program and our ability to satisfy our capital needs;
- our dependence on MAT9001, our lead product candidate, which is still in an early development stage;
- our ability to manufacture GMP batches of MAT9001 as required for pre-clinical and clinical trials and, subsequently, our ability to manufacture commercial quantities of MAT9001;
- our ability to complete required clinical trials for MAT9001 and obtain approval from the FDA or other regulatory agents in different jurisdictions;
- our lack of a sales and marketing organization and our ability to commercialize MAT9001, if we obtain regulatory approval;
- our dependence on third-parties, including third-parties to manufacture MAT9001 and third-party CROs to conduct our clinical trials for MAT9001;
- our ability to obtain, 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;
- acceptance of our business model by investors;
- the accuracy of our estimates regarding expenses and capital requirements; and
- our ability to adequately support growth.

The foregoing does not represent an exhaustive list of matters that may cause actual performance or results to differ materially from those expressed in or suggested by forward-looking statements contained herein. Please see “Risk Factors” for additional risks which could adversely impact our business and financial performance.

Moreover, new risks regularly emerge and it is not possible for our management to predict or articulate all of the risks we face, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. All forward-looking statements included in this prospectus are based on information available to us on the date of this prospectus. Except to the extent required by applicable laws or rules, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained above and throughout this prospectus.

## **USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of the common stock by the selling stockholders named in this prospectus. All proceeds from the sale of the common stock will be paid directly to the selling stockholders.

We would, however, receive proceeds upon the exercise of the warrants held by the selling stockholders which, if such warrants are exercised in full (and assuming no “cashless” exercise features are utilized), would be approximately \$21,015,000. Proceeds, if any, received from the exercise of such warrants will be used for working capital and general corporate purposes. No assurances can be given that any of such warrants will be exercised.

## **DIVIDEND POLICY**

We have never paid any cash dividends on our common stock. We anticipate that we will retain funds and future earnings to support operations and to finance the growth and development of our business. Therefore, we do not expect to pay cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors that our board of directors deems relevant. In addition, the terms of any future debt or credit financings may preclude us from paying dividends.

## 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 prospectus. 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 prospectus, particularly those under "Risk Factors." Dollars in tabular format are presented in thousands, except per share data, or otherwise indicated.*

### Overview

We are a development stage biopharmaceutical company, founded in 2011, with a focus on identifying and developing novel pharmaceutical products for the treatment of abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular and metabolic diseases. By capitalizing on our management's experience working on pharmacological formulation, evaluation and clinical development in the field of lipid science and the therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop our lead product candidate, MAT9001, with a focus on cardiovascular disease. Our Chief Executive Officer, Chief Scientific Officer and Executive Vice President for Pharmaceutical and Supply Chain Development were all colleagues at Reliant Pharmaceuticals, Inc., where they were directly responsible for the in-licensing, development, manufacturing optimization and commercialization of various dyslipidemia therapies, including Lovaza<sup>®</sup>, the first prescription omega-3 drug approved in the United States, Antara<sup>®</sup>, a fenofibrate, and Lescol<sup>®</sup>, more commonly known by its generic name fluvastatin. With respect to our lead product candidate, MAT9001, our goal is to establish significant differentiation over existing available therapies by demonstrating significant reductions in triglyceride levels, lowering of cholesterol levels, and improving other important physiological parameters thereby addressing what we believe is currently a significant unmet medical need. In addition, our MAT8800 discovery program is seeking to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions available. We believe that our unique ability to produce and isolate highly concentrated omega-3 fatty acids which have demonstrated effects on liver enzyme levels and histology could yield product candidates which are particularly well suited to treat these diseases.

Our lead product candidate, MAT9001, is a proprietary prescription-only omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid, or EPA, docosapentaenoic acid, or DPA, a potent but less prevalent omega-3 fatty acid, several other omega-3 fatty acids, and relatively nominal amounts of docosahexaenoic acid, or DHA, and non-omega-3 fatty acids. We have initiated the good manufacturing practice, or GMP, manufacturing process for our complex composition and have initiated animal studies. To date, we have been optimizing the manufacturing process for the MAT9001 active pharmaceutical ingredient and working toward our Investigational New Drug, or IND, filing with the United States Food and Drug Administration, or FDA.

In addition to MAT9001, we have established a discovery program called MAT8800 to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions. Our development work indicated that certain omega-3 fatty acids may yield improvement in liver enzyme levels and liver histology. Accordingly, we have identified potential omega-3 fatty acid compositions to study in preclinical settings. This discovery program is focused on identifying and optimizing product candidates comprising omega-3 fatty acids as potential treatments for nonalcoholic fatty liver disease (NAFLD), nonalcoholic steatohepatitis (NASH) or other hepatic conditions.

We are primarily focused on developing and commercializing MAT9001 through approval by the FDA, with an initial indication for the treatment of severe hypertriglyceridemia. Severe hypertriglyceridemia refers to a condition in which patients have high blood levels of triglycerides (TG  $\geq$ 500 mg/dl) and is recognized as an independent risk factor for pancreatitis and cardiovascular disease. Based on information provided by the National Heart, Lung and Blood Institute and National Cholesterol Education Program, or NCEP ATP III Guidelines (collectively, the "NCEP Guidelines"), we estimate that more than four million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for treating severe hypertriglyceridemia, we may seek approval for use of MAT9001 in additional indications, including the treatment of patients with mixed dyslipidemia who may already be undergoing treatment with a statin, a commonly used class of cholesterol lowering medication. Mixed dyslipidemia refers to a condition in which patients have a combination of both elevated triglycerides ( $\geq$ 200mg/dl), and elevated cholesterol levels. Based on the NCEP Guidelines, we estimate that approximately 30 to 35 million Americans have mixed dyslipidemia.

We are a development stage company and have not generated any revenues. We have never been profitable and, from inception through March 31, 2014, our losses from operations have been approximately \$6.0 million. Our net loss was approximately \$2.1 million and \$0.1 million for the three months ended March 31, 2014 and 2013, 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 MAT9001. Furthermore, we expect to incur additional costs associated with operating as a public company. 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 have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenues to achieve profitability, and we may never do so.



We believe we have optimized the manufacturing process for the active pharmaceutical ingredient of MAT9001 and have initiated preclinical studies with the MAT9001 active ingredient. We completed the first preclinical studies of MAT9001 during the fourth quarter of 2013. We commenced manufacturing of GMP batches of MAT9001 late in the first quarter of 2014 and expect to file our IND with the U.S. FDA and commence a human study of MAT9001 during the middle of 2014. Thereafter we are considering initiating a Special Protocol Assessment Review with the FDA during the second half of 2014 and expect to commence the first pivotal Phase III study of MAT9001 in patients with severe hypertriglyceridemia in late 2014, complete our Phase III program and plan to submit an NDA with the FDA during late 2016, and to commercialize MAT9001 in the United States for the treatment of patients with triglyceride levels greater than or equal to 500 mg/dl, or severe hypertriglyceridemia, during 2017.

The continued development of MAT9001 is subject to a number of risks including, but not limited to:

- the uncertainty of the outcome of preclinical studies with MAT9001;
- the uncertainty of the timing and outcome of regulatory IND submissions for MAT9001 and subsequent FDA review thereof;
- the uncertainty of the timing and outcome of the manufacturing of GMP batches of MAT9001;
- the uncertainty of the timing and outcome of initial human studies with MAT9001;
- the possibility of changes to existing treatment guidelines for dyslipidemia and cardiovascular disease;
- the uncertainty of the timing and outcome of regulatory review of the potential Special Protocol Assessment for the pivotal Phase III program for MAT9001;
- the uncertainty of the timing and outcome of our Phase III program for MAT9001;
- the uncertainty of the timing and outcome of an NDA submission for MAT9001 and subsequent FDA review thereof;
- the uncertainty of the timing and outcome of the prosecution of patents covering MAT9001, within the U.S. or abroad;
- the possibility that the emergence of competing technologies and products and other adverse market developments could impede our fund raising and commercial efforts; and
- the requirement that the facilities used by our contract manufacturers to manufacture MAT9001 must be approved by the FDA pursuant to inspections that will be conducted after we submit our NDA to the FDA.

The estimated costs expected to be incurred for the research and development activities prior to the initiation of Phase III pivotal studies are between \$5.0 million and \$7.0 million, which we expect to fund from the proceeds of the 2013 Private Placement. The estimated additional costs expected to be incurred for research and development activities thereafter through the filing of our first NDA with the U.S. FDA are between \$20.0 million and \$60.0 million, which we expect to fund through future capital raising activities.

#### ***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.

We anticipate that our general and administrative expenses will increase in 2014 and 2015 due to many factors, the most significant of which include:

- increased personnel as we expand our operations to prepare for and execute upon our Phase III pivotal studies of MAT9001, which we expect to commence late in 2014;
- increased expenses related to becoming a publicly-traded company, including increased legal and accounting services, stock registration and printing fees, expenses in support of compliance and communication needs, and increased insurance premiums;
- increased compensation costs since 2013 is only a partial year (approximately 5 months vs. full year compensation costs of existing staff moving forward in 2014 and 2015; and
- Increased infrastructure costs related to rent expense, office infrastructure expenses, and Information Technology/Communication costs.

#### ***Other Expense, net***

Other Expense, net for the three months ended March 31, 2014 and year ended December 31, 2013 is comprised of miscellaneous tax payments partially offset by interest income earned on cash balances.

### ***Net Operating Losses and Tax Carryforwards***

As of December 31, 2013, we had approximately \$3.3 million of federal and state net operating loss carryforwards. We also potentially have federal and state research and development tax credits which would offset future taxable income. We have not completed a study to assess whether an ownership change has occurred, or whether there have been multiple ownership changes since our inception, due to the significant costs and complexities associated with such studies. Accordingly, our ability to utilize the aforementioned carryforwards may be limited. Additionally, U.S. tax laws limit the time during which these carryforwards may be utilized against future taxes. As a result, we may not be able to take full advantage of these carryforwards for federal and state tax purposes. Through December 31, 2013, all of our deferred tax assets (derived from net operating losses and research and development credits) were fully offset by a valuation allowance.

### ***Application of Critical Accounting Policies***

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in more detail in the notes to our financial statements appearing elsewhere in this prospectus. We believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements.

### ***Accrued Research and Development Expenses***

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

- fees paid to contractors in connection with the development of manufacturing processes for MAT9001;
- fees paid to CROs in connection with preclinical development activities;
- fees paid to contractors in connection with preparation of regulatory submissions; and
- fees paid to vendors related to product manufacturing, development and distribution of clinical study supplies.

We base our expenses related to pre-clinical and human studies on our estimates of the services received and efforts expended pursuant to contracts with multiple development contractors that conduct and manage development work and studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the clinical expense. Payments under some of these contracts may depend on factors such as the successful enrollment of subjects and the completion of specific study milestones. In accruing service fees, we will estimate the time period over which services will be performed, the completion of certain tasks, enrollment of subjects, study center activation and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we will adjust the accrual or prepayment accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting amounts that are too high or too low in any particular period. Based on limited historical experience, actual results have not been materially different from our estimates.

### ***Research and Development expenses***

Research and development expenses are charged to operations as they are incurred.

## 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 remeasure 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, the risk free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. As a privately-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 utilize a dividend yield of zero based on the fact that we have never paid cash dividends and have no current intention to pay cash dividends. The risk-free interest rate used for each grant is based on the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

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. We also recognized a charge to operations for the 250,000 warrants sold to Mr. Adam Stern. The following weighted-average assumptions were used to calculate share based compensation for the year ended December 31, 2013 and to re-measure stock based compensation for stock options issued to consultants for the three months ended March 31, 2014:

	Three Months Ended March 31,		Years Ended December 31,	
	2013	2014	2013	2012
Weighted-average exercise price of options granted	—	\$ 0.94	\$ 0.94	-
Expected volatility	—	69.12	81.06	-
Risk-free interest rate	—	1.93%	1.85% - 2.15%	-
Expected life of options (years)	—	5.54years	5-6years	-
Expected annual dividend per share	—	\$ 0.00	\$ 0.00	-

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 we did not have any trading history for our common stock. 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.

Share-based compensation expense associated with stock options and restricted stock granted to employees and non-employees was \$0 for the year ended December 31, 2012 and \$0.2 million for the year ended December 31, 2013 and \$0 for the three months ended March 31, 2013 and \$274,000 for the three months ended March 31, 2014. As of March 31, 2014, we had \$1.9 million of total unrecognized share-based compensation expense, which we expect to recognize over a weighted-average remaining vesting period of approximately 2.5 years. While our share-based compensation for stock options granted to employees and non-employees to date has not been material to our financial results, 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 period ended March 31, 2014 and the year ended December 31, 2013. We did not incur stock based compensation for the year ended December 31, 2012. Our stock based compensation is broken down as follows:

	Three Months ended March		For Years ended December	
	31,		31,	
	2014	2013	2013	2012
General and administrative	\$ 219,211	-	\$ 135,000	-
Research and development	\$ 54,613	-	\$ 82,000	-
Total	\$ 273,824	-	\$ 217,000	-

Described below is the methodology we utilized in measuring stock-based compensation. Management had for financial reporting purposes determined the estimated per share fair value of our common stock and redeemable convertible preferred stock using valuation consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation," also known as the Practice Aid. This valuation was performed as of September 1, 2013 with the assistance of a third-party valuation specialist. In conducting the valuation, management considered all objective and subjective factors that it believed to be relevant, including management's best estimate of our business condition, prospects and operating performance at the valuation date. Within the valuation performed, a range of factors, assumptions and methodologies were used as previously described in this section.

The significant factors included;

- external market conditions affecting the biotechnology industry;
- trends within the biotechnology industry;
- the prices at which we sold shares of preferred stock;
- the superior rights and preferences of the preferred stock relative to common stock at the time of each grant;
- the prices at which we sold units of common stock and warrants;
- the results of operations and financial position;
- status of research and development efforts;
- stage of development and business strategy;
- the lack of an active public market for the common stock; and

- the likelihood of achieving a liquidity event such as a sale of the company in light of prevailing market conditions.

We estimated the forfeiture rate at the time of grant and, if necessary, revised in subsequent periods if actual forfeitures differed from those estimates. Forfeitures were estimated based on management's expectation through industry knowledge and historical data.

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 March 31, 2014, there were approximately 5,090,000 shares of our common stock available for issuance under the Plan.

As of March 31, 2014, we had outstanding options to purchase an aggregate of 3,160,000 shares of our common stock with an exercise price of \$0.94. At March 31, 2014, 565,055 options vested at a weighted average exercise price of \$0.94 per share. 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 March 31, 2014. The total intrinsic value of options outstanding and vested at March 31, 2014 was de minimis.

The per share estimated fair market value of common stock in the table below represents the determination by our board of directors of the fair market value of our common stock as of the date of grant, taking into consideration the various objective and subjective factors described above, including the conclusions, if applicable, of contemporaneous valuations of our common stock as discussed below. We computed the per share weighted average estimated fair value for stock option grants based on the Black-Scholes option pricing model.

Date of Grant/Termination	# of options granted	# options vested as of 03/31/2014	Exercise Price Per Share	Common Stock Fair Value on Date Per Share of Grant
<b>Third Quarter</b>				
8/1/2013	1,835,000	N/A	\$ 0.79	\$ 0.94
<b>Fourth Quarter</b>				
October 3, 2013 (cancellation)	(1,835,000)	N/A	\$ 0.79	\$ 0.94
October 3, 2013 (reissuance) *	1,835,000	407,778	\$ 0.94	\$ 0.94
10/4/2013	200,000	33,333	\$ 0.94	\$ 0.94
10/15/2013	375,000	23,250	\$ 0.94	\$ 0.94
11/1/2013	475,000	65,972	\$ 0.94	\$ 0.94
11/15/2013	150,000	20,833	\$ 0.94	\$ 0.94
12/2/2013	125,000	13,889	\$ 0.94	\$ 0.94
<b>Total as of March 31, 2014 **</b>	<b>3,160,000</b>	<b>565,055</b>		

\*All grants outstanding as of September 30, 2013 (1,835,000 shares) were terminated and reissued at an exercise price of \$ 0.94 on October 3, 2013, to reflect the independent valuation contracted by the Company on September 1, 2013. The \$0.79 exercise price initially set was based upon management's estimate of the fair value of the underlying shares in July 2013. We received a subsequent valuation report from a third party valuation firm, whose valuation report was finalized as of September 16, 2013. Pursuant to that report and consistent with the value of the Company's shares sold in transactions in the time period around the issuance of the stock options, the fair value of the securities was determined to be \$0.94 per share. Given that the exercise price was below the previously estimated fair value for the underlying shares, we obtained Board approval on October 3, 2013 to cancel the existing stock options and reissue them with a strike price of \$0.94 per share. The cancellation and reissuance of the shares did not result in additional total compensation cost to be amortized over the options requisite service period because the strike price increased from \$0.79 to \$0.94.

\*\* All options expire ten years from the date of grant. Except for options granted on October 15, 2013, all remaining options vest entirely and evenly over three years. The October 15, 2013 options had been granted to non-employee consultants. A portion of each of these consultant options vests over four years, with the remaining vesting being based upon the achievement of performance milestones, which are tied to either financing or drug development initiatives. No new options have been granted in 2014 to date.

## *September 1, 2013 Valuation*

On September 1, 2013, a valuation report was submitted by an independent third party valuation firm. The results of this analysis indicated the estimated fair value of our common stock to be \$ 0.94 per share. Such report further indicated the estimated fair value of common stock warrants with an exercise price of \$2.00 per share to be \$0.11 per warrant. Such valuations were utilized to set the exercise price of the stock options issued in October 2013, and for recognition of accounting charges related to options and warrants issued in the third quarter of 2013.

The valuation was conducted by applying measures that the IRS has identified in Revenue Ruling 59-60 and IRC Section 409A as reasonable to employ in determining fair market value. Since the IRS has indicated that all available information must be taken into account in establishing fair market value, each measure was considered in calculating fair market value. The sanctioned IRS methodology was employed in a manner consistent with the AICPA Statement on Standards for Valuation Services (“SSVS”), which governs valuations of businesses, business ownership interests, securities, or intangible assets. Interpretive guidance was obtained from the AICPA practice aid titled Valuation of Privately-Held-Company Equity Securities Issued as Compensation (“AICPA Practice Guide”). Methodology contained in the Uniform Standards of Professional Appraisal Practice (“USPAP”) and other appraisal industry guidelines was also employed in performing the valuation. The final appraised fair market value reflects results yielded by these methods, with subjective adjustment made as necessary and appropriate.

The AICPA Practice Aid identifies three ways of allocating value to separate classes of shares. These include: (a) the probability-weighted expected return method; (b) the option-pricing method; and (c) the current-value method.

The probability-weighted expected return method estimates the value of an enterprise’s stock based upon an analysis of future values assuming various possible future liquidity events. Share value is based upon the probability-weighted present value of expected future net cash flows (distributions to shareholders), considering each of the possible future events, as well as the rights and preferences of each share class.

The option-pricing method establishes the fair market value of the stock by treating the different classes of shares as a series of call options, representing the future returns to the common stockholders. The rights of the common stockholders are equivalent to a call option on any value of the Company above the respective preferred stockholders’ liquidation preferences, with adjustment to account for the rights retained by the preferred stockholders related to their share in any value above the values at which their preferred shares would convert to common shares. Thus, the common stock can be valued by estimating the value of our shares in each of these call option rights.

The current-value method is based on allocating the enterprise value of the Company to the preferred stock based on the greater of the preferred stock’s liquidation preference or conversion value. An assumption underlying this method is that each preferred stockholder will, at the valuation date, exercise its conversion rights in the manner most beneficial to such preferred stockholder. In general, use of the current-value method is limited to two types of circumstances. The first is when a liquidity event in the form of an acquisition or dissolution of the enterprise is imminent, and expectations about the future of the enterprise as a going concern are virtually irrelevant. The second occurs when an enterprise is at such an early stage of development that (a) no material progress has been made on the enterprise’s business plan, (b) no significant common equity value has been created in the business above the liquidation preference on the preferred shares, and (c) there is no reasonable basis for estimating the amount and timing of any such common equity value above the liquidation preference that might be created in the future.

As of March 31, 2014, we had only one class of issued shares, common stock. Therefore, differences in shareholders’ rights have no effect on the fair value of the common stock.

Additional consideration was given by us to measures expressly identified in SSVS-1 and IRC Section 409A as sanctioned methodology for establishing fair market value. Summarized below are other factors considered in determining the valuation:

**Asset-Based Approach:** We had a book value of approximately \$15.0 million as of the valuation date. However, we are beyond the stage that an asset-based approach is the preferred method of establishing fair market value. We have built significant value in our intellectual property that is not recorded on the balance sheet, but attempting to value these assets is problematic since their value is meaningful only as part of the overall enterprise. For this reasons, an asset-based approach is not the most appropriate method of determining the fair market value to our common stock and common stock warrants.

**Income-Based Approach:** We have prepared projections through the end of 2017. Earnings and cash flow over the forecast period are projected to remain negative. Application of an income-based approach would therefore result in a zero value for our common stock and common stock warrants. However, we have established significant value in our intellectual property. Also, we have raised significant capital through an arm’s-length financing round that involved outside, accredited investors. For these reasons, an income-based approach does not provide an appropriate method of establishing the fair market value of our common stock and common stock warrants.

**Market-Based Approach – Market Multiples:** We had no revenue and had negative earnings as of the valuation date. Application of the market-based approach to revenue or earnings for comparable public and private companies would therefore result in a zero value for our common stock and common stock warrants. However, we have established significant value in our intellectual property. Also, we have raised significant capital through an arm's-length financing round that involved outside, accredited investors. For these reasons, referencing market multiples does not provide an appropriate method of establishing the fair market value of our common stock and common stock warrants.

In July and August 2013, we raised \$15.0 million by selling 15,000,000 shares of our common stock and issuing warrants to purchase 7,500,000 shares of our common stock at \$2.00 per share. That is, an investment of \$2.00 resulted in the investor receiving two shares of common stock and a warrant to purchase one share of common stock for \$2.00 that is subject to a call option by us to repurchase the warrant for \$5.00 per share. Because this financing was a material arm's-length transaction that involved informed venture capital and individual investors, the purchase price of \$1.00 may be regarded as indicative of the fair market value of the combined value of our common stock and common stock warrants. In view of these considerations, the fair market value of our common stock can be estimated by employing real-options analysis, whereby the value of the Company implied by the most recent financing is estimated as the net value of a series of call options, representing the future returns to various classes of stockholders such that the combined value of the common stock and the warrants is equal to \$1.00.

As part of our analysis, it was necessary to establish a most likely date for the liquidity event. In this case, we assumed five years from the valuation date is a reasonable estimate of the time to exit.

Based on our analysis, and because our situation did not change materially between the July and August private placements and the valuation date, we believe the fair value of our common stock, on a closely-held basis, can be reasonably established at \$0.94 per share and the fair value of our common stock warrants can be reasonably estimated at \$0.11 per share.

Based on a review of the September 1, 2013 valuation and because our situation did not change materially between September 1, 2013 and December 31, 2013, the board determined that the fair value of our common stock can be reasonably established at \$0.94 per share and the fair value of our common stock warrants can be reasonably estimated at \$0.11 per share.

#### Restricted Stock Grant

In addition to the shared based expenses related to options detailed above, the Company has also granted a stock award to a consultant, as compensation for services. The grant of 500,000 common shares took place on December 26, 2013 and was valued at \$ .94 per share based on the valuation detailed above, for a total of \$ 470,000. Since this contractual arrangement is similar to a cash-based arrangement whereby the Consultant would earn a monthly fee, the Company will recognize the stock-based compensation expense related to this restricted stock grant ratably over the period this Consultant is expected to render service, which is one year. Consequently, total compensation will be deferred on the balance sheet until such time as it is earned through service rendered and will be recognized on a monthly basis.

#### ***Basic and Diluted Net Loss Per Share of Common Stock***

We compute basic net loss per share of common stock by dividing net loss applicable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, excluding the dilutive effects stock options. We compute diluted net loss per share of common stock by dividing the net loss applicable to common stockholders by the sum of the weighted-average number of shares of common stock outstanding during the period plus the potential dilutive effects stock options outstanding during the period calculated in accordance with the treasury stock method, but such items are excluded if their effect is anti-dilutive. Because the impact of these items is anti-dilutive during periods of net loss, there was no difference between our basic and diluted net loss per share of common stock for the years ended December 31, 2012 and 2013.

#### **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

### COMPARISON OF THREE MONTHS ENDED MARCH 31, 2014 AND 2013

	Three months ended March 31,		Increase (Decrease)
	2014	2013	
	(In thousands)		
<b>Expenses:</b>			
Research and development	\$ 1,073	\$ 50	\$ 1,023
General and administrative	<u>1,055</u>	<u>62</u>	<u>993</u>
Net loss	<u>\$ (2,139)</u>	<u>\$ (112)</u>	<u>\$ 2,027</u>

**Research and Development expenses.** Research and development expense for the three months ended March 31, 2014 was \$1.1 million, compared to \$50,000 for the three months ended March 31, 2013, an increase of \$1.0 million. The increase in research and development expense was primarily due to an increase in activities for the development of the manufacturing process for MAT9001, preclinical studies and build out of our corporate infrastructure.

**General and Administrative expenses.** General and administrative expense for the three months ended March 31, 2014 was \$1.1 million compared to \$62,000 for the three months ended March 31, 2013, an increase of \$993,000. The increase in general and administrative expense was primarily due to compensation expenses, particularly associated with new employee compensation, ongoing accounting and legal services, including those legal services associated with the registration statement for resale of common stock for our private placement investors, compliance and intellectual property filings.

As noted previously, in terms of operating expenses (particularly compensation expenses), 2013 represents a partial year (i.e. start-up year), hence 2014 will show increased expenses due to a full year of operations in both Research and Development, and General and Administrative expenses.

### Comparison of Years Ended December 31, 2013 and 2012

	Years Ended December 31,		Increase (Decrease)
	2013	2012	
	(In thousands)		
<b>Expenses:</b>			
Research and development	\$ 1,761	\$ 79	\$ 1,682
General and administrative	<u>1,951</u>	<u>37</u>	<u>1,914</u>
Net loss	<u>\$ (3,712)</u>	<u>\$ (116)</u>	<u>\$ 3,596</u>

**Research and Development expenses.** Research and development expense for the year ended December 31, 2013 was \$1,761,000, compared to \$79,000 for the year ended December 31, 2012, an increase of \$1,682,000. The increase in research and development expense was primarily due to an increase in activities for the development of the manufacturing process for MAT9001, preclinical studies and build out of our corporate infrastructure.

**General and Administrative expenses.** General and administrative expense for the year ended December 31, 2013 was \$1,951,000 compared to \$37,000 for the year ended December 31, 2012, an increase of \$1,914,000. The increase in general and administrative expense was primarily due to compensation expenses, particularly associated with new employee compensation, ongoing accounting and legal services, including those legal services associated with the registration statement for resale of common stock for our private placement investors, compliance and intellectual property filings.

As noted previously, in terms of operating expenses (particularly compensation expenses), 2013 represents a partial year (i.e. start-up year), hence 2014 will show increased expenses due to a full year of operations in both Research and Development, and General and Administrative expenses.

## Liquidity and Capital Resources

### Sources of Liquidity

We have funded our operations since inception through private placements of preferred stock and our common stock and common stock warrants. As of March 31, 2014, we raised a total of \$14.0 million in net proceeds.

As of March 31, 2014, we had cash and cash equivalents totaling \$8.6 million.

### 2013 Private Placement

In July and August 2013, we completed the 2013 Private Placement, under which we sold an aggregate of 15,000,000 shares of our

common stock and warrants to purchase an aggregate of 7,500,000 shares of our common stock with an exercise price of \$2.00 per share, which warrants are exercisable for a period of five years from the initial closing date. Aegis Capital Corp. acted as the Placement Agent for the 2013 Private Placement (the "Placement Agent"). The gross proceeds to us from the 2013 Private Placement were \$15 million.

#### ***Warrant Private Placement***

Contemporaneously with the initial closing of the 2013 Private Placement, we sold 500,000 Private Placement Warrants to Herbert Conrad, our chairman of the board, for a purchase price of \$0.04 per warrant. The Private Placement Warrants have an exercise price of \$2.00 per share. The Private Placement Warrants were offered to all preferred stockholders of Matinas BioPharma prior to the Merger, and only Mr. Conrad exercised the offer. See the section entitled "Description of Capital Stock – Warrants" for a discussion of the terms of the Private Placement Warrants.

#### ***Cash Flows***

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

	<b>Three months ended</b>		<b>Years Ended</b>		<b>From August</b>
	<b>March 31,</b>		<b>December 31,</b>		<b>11, 2011 (date</b>
	<b>2014</b>	<b>2013</b>	<b>2013</b>	<b>2012</b>	<b>of inception)</b>
					<b>to March 31,</b>
					<b>2014</b>
Cash used in operating activities	\$ (2,089)	\$ (150)	\$ (2,988)	\$ (57)	\$ (5,134)
Cash used in investing activities	(193)	-	(94)	-	(287)
Cash provided by financing activities	-	385	13,498	479	13,980
Net increase in cash and cash equivalents	\$ (2,282)	\$ 235	\$ 10,416	\$ 422	\$ 8,558

### ***Operating Activities***

We have incurred significant costs in the area of research and development, including manufacturing, analytical, regulatory and other development costs, as the manufacturing process for our product was being developed. However, we will have significantly increased development costs in conducting preclinical and human studies, regulatory filing activities, preparation of the IND and NDA for MAT9001 as well as costs for continued development and validation of the manufacturing process for MAT9001. We also expect significantly increased development costs associated with our MAT8800 discovery program. We also expect our general and administrative expenses to increase as we expand our administrative, compliance, legal and investor relations activities, increase our activities in developing and maintaining our intellectual property and establish our company as a publicly traded company. Net cash used in operating activities was approximately \$2.1 million for the three months ended March 31, 2014 and \$150,000 for the three months ended March 31, 2013. The increase in cash used in operating activities for the three months ended March 31, 2014 compared to the three months ended March 31, 2013 was primarily due to higher development costs in connection with development of the manufacturing process and the costs in connection with fund raising activities and compliance. Net cash used in operating activities was approximately \$3.0 million for the year ended December 31, 2013 and \$57,000 for the year ended December 31, 2012. The increase in cash used in operating activities for the year ended December 31, 2013 compared to the year ended December 31, 2012 was primarily due to higher development costs in connection with development of the manufacturing process and the costs in connection with fund raising activities and compliance. We expect that there will be a significant increase in cash used in our operating activities during 2014, as we move MAT9001 forward as well as incur full year costs associated with our compensation expenses and corporate infrastructure.

### ***Investing Activities***

Net cash used in investing activities was \$193,000 for the three months ended March 31, 2014 and \$0 for the three months ended March 31, 2013. The cash used in investing activities for the three months ended March 31, 2014 was primarily the purchase of scientific laboratory equipment. For the year ended December 31, 2013 net cash used in investing activities was \$94,000 for purchase of equipment.

### ***Financing Activities***

Net cash provided by financing activities was \$0 for the three months ended March 31, 2014 and net cash provided by financing activities was \$385,000 for the three months ended March 31, 2013. The cash provided by financing activities for the three months ended March 31, 2013 was primarily due to proceeds received from issuance of redeemable convertible preferred stock. Net cash provided by financing activities was \$13.5 million for the year ended December 31, 2013 and net cash used in financing activities was \$479,000 for the year ended December 31, 2012. The cash provided by financing activities for the year ended December 31, 2013 was primarily due to the sale and issuance of 15 million shares of our common stock in the 2013 Private Placement for net proceeds of \$12.6 million, inclusive of legal costs and placement agent fees associated with the transaction.

### ***Funding Requirements and Other Liquidity Matters***

MAT9001 is still in a development stage and our MAT8800 discovery program is in a very early stage. 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:

- receive acceptance by the FDA of our IND for MAT9001 in patients with severe hypertriglyceridemia;
- initiate human trials of MAT9001;
- commence non-clinical studies of MAT9001;
- initiate our Phase III clinical program for MAT9001;
- enter into manufacturing and supply agreements for MAT9001;
- seek to identify additional indications for MAT9001;
- seek to identify product candidates under our MAT8800 discovery program;
- maintain, leverage and expand our intellectual property portfolio for MAT9001 and MAT8800;
- acquire or in-license other products and technologies;
- add operational, financial and management information systems and personnel, including personnel to support our product development and future compliance and/or commercialization efforts;
- seek marketing approval for MAT9001 for the currently planned or any additional indication;
- commence non-clinical and preclinical studies of product candidates in our MAT8800 discovery program; and
- establish a sales and marketing infrastructure to commercialize MAT9001 in the United States.

We expect that our existing cash and cash equivalents will enable us to fund our operating expenses and capital expenditures requirements through January 2015 and will allow us to file our IND for MAT9001 and potentially initiate a special protocol assessment with the FDA for our MAT9001 Phase III clinical program for MAT9001. We will need additional financing to initiate and conduct our intended Phase III clinical program for MAT9001, file additional patent applications and enhance our intellectual property position for MAT9001 and MAT8800, validate the manufacturing processes at our various suppliers and prepare for submission of an NDA for MAT9001, and conduct preclinical work in order to identify product candidates under our MAT8800 discovery program. We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Significant additional funds may be required to initiate and complete our Phase III clinical program for MAT9001 if the FDA does not agree with our intended regulatory pathway under Section 505(b)(2) of the Food and Drug Act and to initiate and complete those preclinical and human trials deemed necessary or advisable for product candidates selected pursuant to our MAT8800 discovery program. If the FDA does not agree with our streamlined regulatory and clinical approach for our intended Phase III trial to support a NDA filing for MAT9001 under Section 505(b)(2) of the Food and Drug Act, we believe that we will need at least \$20.0 to \$60.0 million of additional capital to complete our Phase III clinical program and submit a NDA under Section 505(b)(1) of the Food and Drug Act if so required by the FDA.

Until the time we can generate substantial product revenues from commercializing MAT9001, 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, MAT9001, product candidates emerging from MAT8800 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 MAT9001 and any product candidates under MAT8800 that we would otherwise prefer to develop and market ourselves.

#### ***Contractual Obligations and Commitments***

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 is June 2014, with annual rent beginning at approximately \$152,000 per year, increasing to \$ 174,000 in the final year.

In December 2013, we entered into an agreement to lease laboratory space for one year commencing January 1, 2014 in Monmouth Junction, New Jersey. Base rent for the year will be approximately \$25,000.

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. As of March 31, 2014, we had no material Contractual Obligations or Commitments that will affect our future liquidity.

#### ***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.

#### ***Quantitative and Qualitative Disclosures about Market Risk***

Our exposure to market risk is limited to our cash and cash equivalents, all of which have maturities of one year or less. The primary objectives of our investment activities are to preserve principal, provide liquidity and maximize income without significantly increasing risk. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on our financial condition and/or results of operation. We do not have any foreign currency or other derivative financial instruments.



## BUSINESS

### Overview

We are a development stage biopharmaceutical company, founded in 2011, with a focus on identifying and developing novel pharmaceutical products for the treatment of abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular and metabolic diseases. By capitalizing on our management's experience working on pharmacological formulation, evaluation and clinical development in the field of lipid science and the therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop our lead product candidate, MAT9001, with a focus on cardiovascular disease. Our Chief Executive Officer, Chief Scientific Officer and Executive Vice President for Pharmaceutical and Supply Chain Development were all colleagues at Reliant Pharmaceuticals, Inc., where they were directly responsible for the in-licensing, development, manufacturing optimization and commercialization of various dyslipidemia therapies, including Lovaza<sup>®</sup>, the first prescription omega-3 drug approved in the United States, Antara<sup>®</sup>, a fenofibrate, and Lescol<sup>®</sup>, more commonly known by its generic name fluvastatin. With respect to our lead product candidate, MAT9001, our goal is to establish significant differentiation over existing available therapies by demonstrating significant reductions in triglyceride levels, lowering of cholesterol levels, and improving other important physiological parameters thereby addressing what we believe is currently a significant unmet medical need.

We are primarily focused on developing and commercializing MAT9001 through approval by the FDA, with an initial indication for the treatment of severe hypertriglyceridemia. Severe hypertriglyceridemia refers to a condition in which patients have high blood levels of triglycerides (TG  $\geq$ 500 mg/dl) and is recognized as an independent risk factor for pancreatitis and cardiovascular disease. Based on information provided by the National Heart, Lung and Blood Institute and National Cholesterol Education Program, or NCEP ATP III Guidelines (collectively, the "NCEP Guidelines"), we estimate that more than four million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for treating severe hypertriglyceridemia, we may seek approval for use of MAT9001 in additional indications, including the treatment of patients with mixed dyslipidemia who may already be undergoing treatment with a statin, a commonly used class of cholesterol lowering medication. Mixed dyslipidemia refers to a condition in which patients have a combination of both elevated triglycerides ( $\geq$ 200mg/dl), and elevated cholesterol levels. Based on the NCEP Guidelines, we estimate that approximately 30 to 35 million Americans have mixed dyslipidemia.

In addition, our MAT8800 discovery program is seeking to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions available. We believe that our unique ability to produce and isolate highly concentrated omega-3 fatty acids which have demonstrated effects on liver enzyme levels and histology could yield product candidates which are particularly well suited to treat these diseases.

### Our Lead Product Candidate: MAT9001 for Severe Hypertriglyceridemia

Our lead product candidate, MAT9001, is a proprietary prescription-only omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid, or EPA, docosapentaenoic acid, or DPA, a potent but less prevalent omega-3 fatty acid, several other omega-3 fatty acids, and relatively nominal amounts of docosahexaenoic acid, or DHA, and non-omega-3 fatty acids. We have initiated the good manufacturing practice, or GMP, manufacturing process for our complex composition and have initiated animal studies. To date, we have been optimizing the manufacturing process for the MAT9001 active pharmaceutical ingredient and working toward our Investigational New Drug, or IND, filing with the United States Food and Drug Administration, or FDA.

We believe that based upon MAT9001's unique composition, it will prove to be differentiated from other existing therapies for the treatment of high triglycerides, or hypertriglyceridemia, and dyslipidemia. Triglycerides are fats that are carried in the blood, together with cholesterol, within lipoproteins. High levels of triglyceride-rich lipoproteins are associated with an increased risk of atherosclerotic cardiovascular disease and in the case of severe hypertriglyceridemia (defined below), acute pancreatitis. High levels of triglyceride-rich lipoproteins are due to both genetic and environmental factors and are associated with comorbid conditions such as diabetes, chronic renal failure and nephrotic syndrome. Unlike the current approved therapies in this product category, many of which have been repurposed following clinical failures in their originally intended indications, we have specifically designed and developed MAT9001 to treat hypertriglyceridemia and dyslipidemia. We believe that the results of these targeted development activities and related clinical investigations may yield an improved therapeutic profile compared to the currently-existing therapies, characterized most importantly by MAT9001's differentiating mechanistic features associated with its unique composition and enhanced potency.

## Currently Available Treatment Options and Market Opportunity For MAT9001

The dramatic rise in obesity over the last few decades has led to a concomitant increase in cholesterol and triglyceride levels among the population. The collective term for high blood lipid levels such as high cholesterol and high triglyceride levels often used is “dyslipidemia.” Observational studies, such as the Framingham and PROCAM studies, have resulted in an increased awareness of the critical role that high cholesterol and high triglyceride levels have as a predictor of cardiovascular events. Accordingly, the introduction of new drugs and novel mechanisms of action to lower the risk of cardiovascular events has become a priority. The initial treatment recommendation for patients with dyslipidemia is typically a low-fat diet. If that is not effective, dyslipidemia is then often treated with statins, which account for approximately 80% of all dyslipidemia prescriptions. Statins became a highly successful class of medications for the treatment of dyslipidemia due to their ability to reduce cardiovascular risk in patients at high risk for heart attacks, strokes, and other adverse cardiovascular events. Because of these outcome benefits, the statin utilization rate as compared to the incidence and prevalence of dyslipidemia in the general population, which we refer to as the epidemiology, has risen to almost 40% in the United States. However, the primary activity of statins is in the reduction of low-density lipoproteins, or LDL cholesterol levels and they have only modest effects on triglyceride levels. Recognizing that statins alone are not very effective triglyceride lowering drugs, the National Cholesterol Education Program panel recommends the use of more focused therapies to lower triglyceride levels in patients with severe hypertriglyceridemia. Fibrates (a class of amphipathic carboxylic acids), omega-3 fatty acid-based medications and niacin have all been utilized to lower triglycerides levels. In patients with severe hypertriglyceridemia, first-line drug therapy is often a prescription omega-3 or fibrate. According to the National Center for Biotechnology Information’s (“NCBI”) publication, entitled the “*Role of prescription omega-3 fatty acids in the treatment of hypertriglyceridemia,*” prescription omega-3 based products have been shown to reduce triglyceride levels in the range of 20% to 45%.

The treatment rate of hypertriglyceridemia has remained relatively low – below ten percent – compared to the adult population with hypertriglyceridemia according to the NCEP Guidelines and data released by IMS Health. Historically, fibrates such as gemfibrozil (Lopid) and fenofibrate (Tricor or Trilipix) have led the class of treatments of hypertriglyceridemia. However, due to their inability to establish clinical outcome benefits and their limited compatibility with statin therapy, the fibrate utilization rate has remained relatively low and is currently declining. Other products used to treat severe hypertriglyceridemia incorporating niacin as the active pharmaceutical ingredient have not been able to establish additional outcome benefits as compared to statin treatment alone, and are also encountering declining utilization according to data released by IMS Health and a recent article published by the NCBI, entitled “*Utilization patterns of extended-release niacin in Canada: Analysis of an administrative claims database.*” Because of their lack of outcome benefits, fibrate and niacin use has been mostly concentrated in severe hypertriglyceridemia.

A National Health and Nutrition Examination Survey analysis of dyslipidemia in the United States in 2010 indicated that while LDL-cholesterol levels have actually declined since its last analysis, the percentage of patients with hypertriglyceridemia has risen by 6% along with the dramatic increases in obesity. The National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation and Treatment of High Blood Cholesterol recommends that the first priority for the management of hypertriglyceridemia is triglyceride reduction to decrease the risk of pancreatitis. In addition, severe hypertriglyceridemia is also associated with a markedly increased risk for cardiovascular disease and a recent report released by the NCEP Expert Panel has claimed that elevated triglyceride levels can be regarded as an independent risk factor for cardiovascular disease-related events such as myocardial infarction, ischemic heart disease and ischemic stroke.

Many omega-3 fatty acid based products have anti-thrombotic and anti-inflammatory effects that suggest effectiveness in inhibiting atherosclerosis in animal models as well as reducing the rate of adverse cardiovascular events in humans at high risk for such events as demonstrated in the Japan EPA Lipid Intervention Study (“JELIS”) and the GISSI Prevenzione trial in Italy. Furthermore, omega-3 fatty acid based products, either concentrates of both EPA and DHA or EPA alone, have been demonstrated in multiple clinical trials to lower serum concentrations in patients with hypertriglyceridemia. In a study published in the New England Journal of Medicine in July 2012 entitled “*n-3 Fatty Acids and Cardiovascular Outcomes in Patients with Dysglycemia,*” increased levels of EPA and DHA in red blood cells directly correlated with significant reductions in cardiovascular health risks. However, omega-3 fatty acid based medications with significant levels of DHA have been shown to increase LDL-cholesterol levels, which is a negative side effect.

The global prescription omega-3 market has been growing steadily over the last two decades and we estimate the market currently is approaching \$2 billion in global sales. The leading omega-3 prescription pharmaceutical products currently approved for the treatment of hypertriglyceridemia are GlaxoSmithKline’s Lovaza (omega-3-acid ethyl esters, an omega-3 mixture containing mostly EPA and DHA, branded as Omacor in the rest of the world), Omacor and Seacor, very similar to Lovaza and marketed in Europe; and Mochida Pharmaceutical Co., Ltd’s (“Mochida”) Epadel (98% ethyl eicosapentaenoate), the leading Japanese omega-3 product. Recently, a new omega-3 based medication, Amarin’s Vascepa (97% ethyl eicosapentaenoate), was approved and launched in the United States.

### Differentiation Strategy For MAT9001

In contrast to certain other omega-3 based prescription products, MAT9001 is not a product repurposed from a previous development program aimed at treating another disease or condition, but was instead specifically designed and optimized for the treatment of severe hypertriglyceridemia and dyslipidemia. Specifically, we are pursuing two avenues of differentiation:

- MAT9001 has unique mechanistic features due to its proprietary composition of omega-3 fatty acids, including DPA, which we believe is a key differentiating omega-3 fatty acid component ( *i.e.*, DPA has different properties than EPA or DHA); and

- MAT9001 is designed to have a highly concentrated potency versus other omega-3 products due to its optimized formulation.

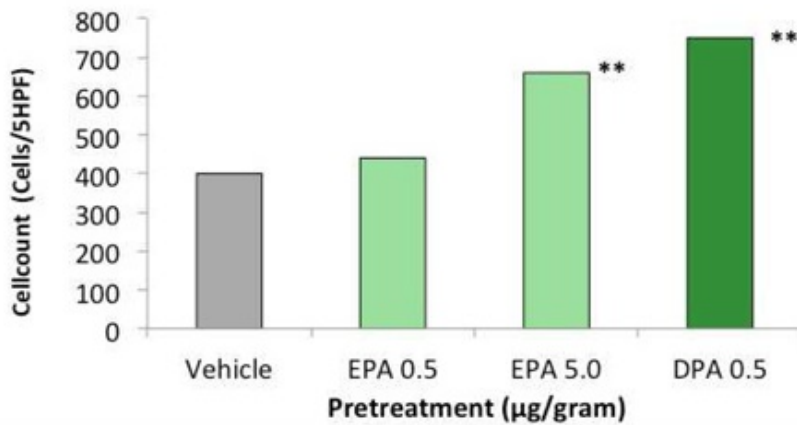
We believe that based upon both publicly available pre-clinical and human data associated with the DPA component contained in MAT9001, our product will likely:

- Better control triglyceride levels;
- Better control cholesterol, and may decrease low-density lipoproteins, or LDL, cholesterol levels; and
- Produce aspirin-like anti-coagulatory effects.

Omega-3 fatty acids other than EPA and DHA, such as DPA, are significantly less prevalent in nature. We have found that these rare omega-3 fatty acids are often very potent as compared to EPA and DHA and have unique biological properties in the metabolism of humans and other mammals. From our research and preclinical work, we have observed certain characteristics of DPA which we believe will be a driver of significant differentiation for MAT9001. These characteristics are discussed below and are supported by our clinical work to date. Though limited, we believe these data include promising suggestions of MAT9001's significant effect on cardiovascular conditions. While traditionally it has been very difficult to isolate the rare omega-3 fatty acids in a highly pure form, we have developed the proprietary technology to isolate these rare omega-3 fatty acids, allowing us to produce highly pure DPA concentrates.

Although much less prevalent in natural lipid sources as compared to EPA and DHA, the relevance of DPA in human biological processes can best be understood in light of its relative potency. Japanese researchers studying the motility of endothelial cells (the cells lining the inner side of our blood vessels), have demonstrated that omega-3 fatty acids stimulate the motility of these types of cells. This mechanism may have biological significance as endothelial cell migration appears to play an important role in the repair of damaged/inflamed walls of arteries and blood vessels. Such blood vessel wall damage is the hallmark of atherosclerosis. It was found that both EPA and DPA stimulate the mobility of endothelial cells, however, DPA appears about ten times more potent than EPA in this respect.

**Relative Potency of Omega-3s in Stimulating Cell Mobility**

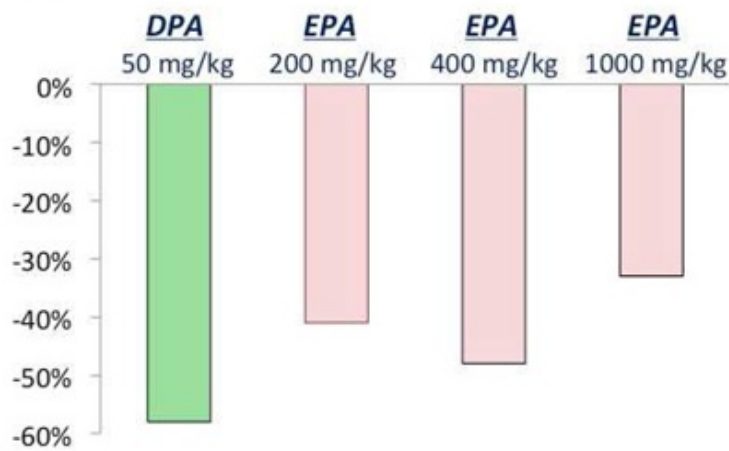


Number of endothelial cells traveled to other chamber of two chamber container  
 \*\* Significant difference ( $p < 0.01$ ) from Vehicle

Source: Kanayasu-Toyoda et al.; PLEFA (1996) 54(5), 319-325

Our research has shown that DPA also has a very potent effect in reducing fasting triglyceride levels. In studies of omega-3 fatty acids in the “Fatty Zucker” rat model, we have found that a dose of 50 mg DPA/kg was at least as effective as 400 mg EPA/kg (the equivalent dose to about 4 grams EPA/day in humans).

### Triglyceride Percent Reduction From Baseline – In Vivo

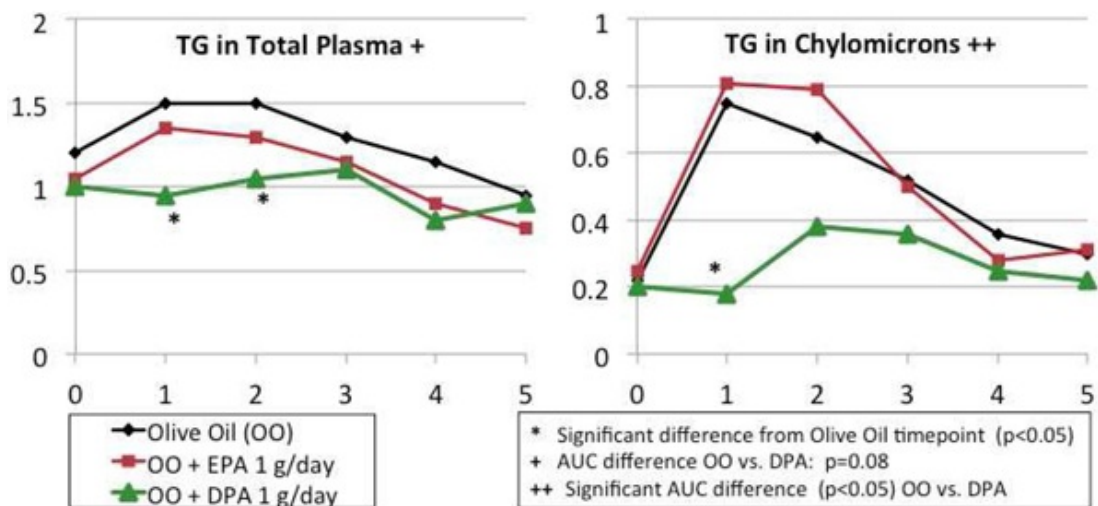


Percent reduction from baseline in “Fatty Zucker” rats after one week of dosing (n=8 per treatment group).

Source: Matinas BioPharma research; unpublished

How this efficacy of DPA in the “Fatty Zucker” model translates into DPA’s ability in reducing fasting triglyceride levels in humans has not yet been established. However, work by Australian researchers in a related field suggests that DPA may have significant effects in humans. In a 3-way cross-over study of 10 healthy women, they established that DPA stabilizes post-meal (post-prandial) triglycerides levels, to a greater extent than EPA. Most of this effect seems to originate from a reduction in the production of chylomicrons (lipid particles produced by the intestines to capture and transport fats from nutrition).

### Human Postprandial TG Levels (mmol/L) over 5 hours (3-way cross-over, N=10)

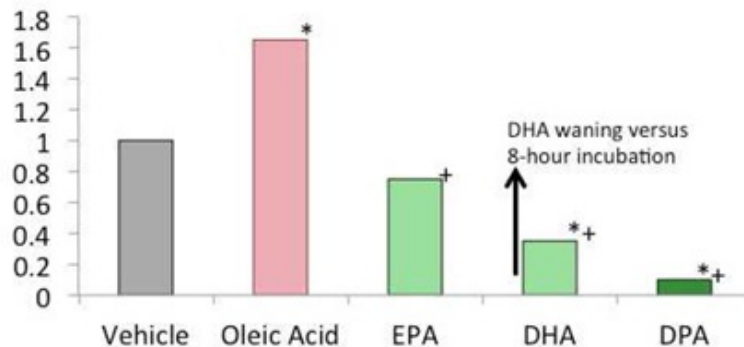


Source: Linderborg et al.; PLEFA (2013) 88, 313-319

For many years it was believed that the efficacy of omega-3 fatty acids in the reduction of triglycerides was mostly due to an inhibitory effect on enzymes such as DGAT. Recent work has established that omega-3 fatty acids have a direct effect on the regulation of many genes involved in lipogenesis. This research indicates that DPA may have significant and therapeutically useful effects.

The gene regulatory effects of DPA in rat liver cells do not only include the down regulation of the genes for SREBP-1c, Acetyl Coenzyme-A Carboxylase, ChREBP, and Fatty Acid Synthetase, but also the reduction in expression of the mRNA for HMG-CoA Reductase (the same enzyme that is targeted by a class of medications known as “statins”).

### Relative levels of mRNA Expressed for HMG-CoA Reductase

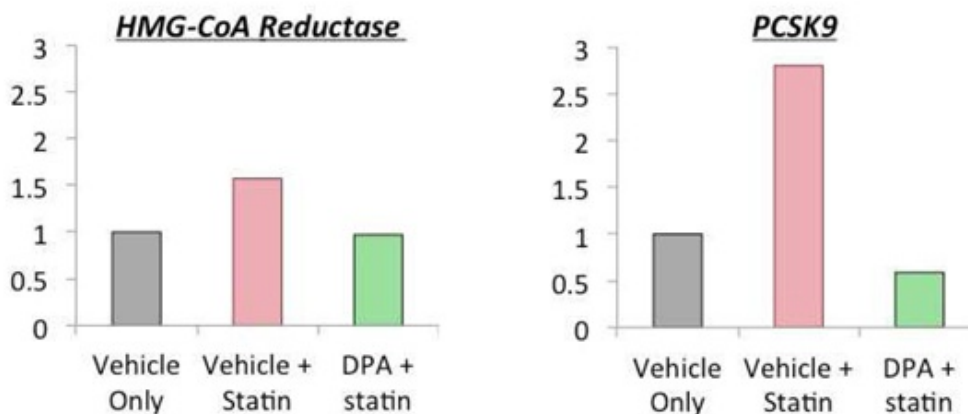


Relative mRNA expression levels after 48 hour incubation of Rat Liver Cells with FA  
 \* Significant difference (p<0.05) from Control (EC)  
 + Significant difference (p<0.05) from Oleic Acid (OAC)

Source: Kaur et al.; PLEFA (2011) 85, 155-161

Our own in vivo research in the “Fatty Zucker” rats has confirmed many of the gene regulatory effects described above. In addition to demonstrating such direct regulatory effects on genes, our work is also exploring how DPA may work together with other medications such as statins. Our research indicates that statin therapy may induce an up-regulation of certain lipogenic genes to compensate for the presence of statin therapy (such as HMG-CoA Reductase and PCSK9, a protein that increases LDL, or “bad cholesterol”), thereby potentially “undoing” some of the statin effect. Our work suggests that DPA may mitigate some of these compensatory effects.

### Relative levels of mRNA for HMG-CoA Reductase and PCSK9 in Rat Liver – In Vivo



Relative mRNA expression levels in Rat liver after 4 weeks dosing (400 mg DPA/kg\*day)

Source: Matinas BioPharma research; unpublished

In addition to the effects described above, DPA has several other types of activity. These include an aspirin-like platelet inhibitory effect and an anti-angiogenic effect through the suppression of the expression of the gene for the VEGF-2 receptor.

Importantly, MAT9001 contains a much lower concentration of DHA than certain competitive omega 3 products, such as Lovaza or Epanova (products with mixtures of mostly EPA and DHA). As described above, these products reduce triglycerides as the main desired effect but also have the negative side effect of increasing LDL-cholesterol levels. This side effect is observed with the use of Lovaza and Epanova in patients with severe hypertriglyceridemia as well as in patients with mixed dyslipidemia. In contrast, products with very low concentrations of DHA, such as Vascepa, have not shown the increase in LDL-cholesterol levels relative to placebo in either the severe hypertriglyceridemia or mixed dyslipidemia patient populations. Omega-3 products containing low DHA levels have also demonstrated reductions in LDL-cholesterol and non-HDL-cholesterol levels. We believe MAT9001's unique composition will produce differentiating results in reducing both cholesterol and triglyceride levels. Further, based on our product design, we believe that MAT9001 is well positioned to become a leading treatment for severe hypertriglyceridemia if approved by the FDA.

### **MAT9001 Development Program**

Our MAT9001 development and regulatory program for severe hypertriglyceridemia has been designed to be similar to the clinical trial programs used by other pharmaceutical companies for FDA approval of omega-3 fatty acid-based products in this indication. These companies performed Phase III trials only, as they were not required to perform Phase I and II trials. By designing the MAT9001 program in a manner consistent with the established FDA guidance for obtaining approval of an indication to treat severe hypertriglyceridemia, we believe the required clinical development program and regulatory approval pathway for MAT9001 for severe hypertriglyceridemia is somewhat predictable and may be relatively lower in risk compared to other typical clinical development programs in the cardiovascular field. We intend to initiate the following:

#### **Anticipated Development Timeline**

<b>Activity</b>	<b>Description</b>	<b>Planned Commencement</b>
Pre-clinical Studies	<ul style="list-style-type: none"> <li>• Initiate additional safety and toxicology animal studies of MAT9001.</li> <li>• Conduct our first human bioavailability studies for MAT9001.</li> </ul>	<ul style="list-style-type: none"> <li>• Mid 2014</li> <li>• Mid 2014</li> </ul>
IND Application Filing	<ul style="list-style-type: none"> <li>• Request pre-IND meeting with the FDA</li> <li>• Submit an IND to the FDA seeking to initiate our first clinical trial in humans in the United States.</li> </ul>	<ul style="list-style-type: none"> <li>• Second quarter of 2014</li> <li>• Mid 2014</li> </ul>
Pivotal Registration Study	<ul style="list-style-type: none"> <li>• Commence a Phase III study in patients with severe hypertriglyceridemia (TG <math>\geq</math> 500 mg/dL).</li> </ul>	<ul style="list-style-type: none"> <li>• Late 2014</li> </ul>
Explore requirements for potential NDA Filing - Europe	<ul style="list-style-type: none"> <li>• We plan to initiate detailed exploration and planning for filing the NDA or its equivalent in countries within the European Union and/or other potentially viable countries as a targeted secondary potential filing geography in addition to the United States.</li> </ul>	<ul style="list-style-type: none"> <li>• 2015</li> </ul>
NDA Filing – U.S.	<ul style="list-style-type: none"> <li>• Following results from our Phase III program, we expect to file an NDA pursuant to the Prescription Drug User Fee Act, or PDUFA for the treatment of severe hypertriglyceridemia in patients with TG <math>\geq</math> 500 mg/dL.</li> </ul>	<ul style="list-style-type: none"> <li>• Late 2016</li> </ul>

**Pre-clinical Studies**. Pre-clinical acute safety and long term toxicology studies are required for approval of drug products under Section 505(b)(1) of the Food and Drug Act and may be required for approval pursuant to Section 505(b)(2) of the Food and Drug Act. We plan to conduct such studies as may be agreed to with the FDA upon our IND filing. Such studies may include safety and toxicology animal studies of MAT9001 involving one or two species, genotox studies (the effect of a medication on DNA and chromosomal integrity as measured by Ames, Chromosomal Abberation, and Mouse Lymphoma tests), critical function studies and long term animal safety and toxicology studies. Section 505(b)(1) and Section 505(b)(2) of the Food and Drug Act are the provisions governing the type of NDA filings that may be submitted under the Food and Drug Act.

**IND Application Filing**. We plan to file an IND in the middle of 2014, which is required prior to initiating any significant clinical trials in the United States. Our IND will include analytical methods, specifications, manufacturing and testing site information, plus active pharmaceutical ingredient ("API") and product release/stability data. Formal pharmaceutical development reports will be submitted later to the IND as well as literature and public domain safety and efficacy evaluations of omega-3 based products. We may also file non-clinical and clinical study protocols as well as the results from these studies as additions to the IND on an ongoing basis.

**Pharmacokinetic (“PK”) Studies.** During the middle of 2014, we will also commence a PK study, which we believe may demonstrate MAT9001’s potency advantage due to its formulation on a comparative basis. The first study will involve an open label 4-way cross-over PK study assessing comparative bioavailability of MAT9001 under fed and fasting drug administration conditions. Other endpoints will be assessed to substantiate the differentiation potential of MAT9001. Following interaction with the FDA, we may also elect to conduct drug interaction PK studies concurrently with our pivotal Phase III study to document the interaction of MAT9001 with selected likely concomitant therapies in clinical practice.

**Pivotal Registration Study.** The safety and efficacy in reducing triglycerides by omega-3 fatty acid based products is well understood by the FDA. For instance, the FDA-approved Lovaza and Vascepa for the treatment of severe hypertriglyceridemia. Under established regulatory pathways, pharmaceutical products with active ingredients equal or similar to those known by the FDA often enter more streamlined development programs than compounds entirely new to the FDA. Omega-3 based products fall into this category of known active ingredients, and both Amarin and Omthera were not required to conduct Phase I and II studies for Vascepa and Epanova, respectively, prior to their pivotal Phase III registration studies in patients with severe hypertriglyceridemia. Based on this pathway, we believe we will be able to follow the same approval process for this indication.

We are planning a Phase III study in order to meet the requirements for FDA approval for the primary indication, severe hypertriglyceridemia, or the reduction of very high triglycerides (>500 mg/dL). This study is planned to start late in 2014. This trial will study multiple doses of MAT9001, and first results are expected in 2016.

Following interaction and discussion with the FDA, we will explore the viability of, and requirements for, additional indications for MAT9001 and their associated clinical development pathways.

**NDA Preparation.** We intend to initiate the NDA compilation in fiscal 2015 and we expect to file the NDA for MAT9001 for its first indication (treatment of hypertriglyceridemia in patients with TG  $\geq$  500 mg/dL) under the PDUFA during late 2016. PDUFA allows us to qualify for a 10-month review period by the FDA. In addition, we plan to initiate detailed exploration and planning to assess a potential filing of an NDA or its equivalent in countries within the European Union as the targeted secondary filing geography in addition to the United States. Other countries may be considered as well in this evaluation.

We estimate that the cost of the MAT9001 development program as outlined above through the filing of the first NDA in the U.S., will be approximately \$18.0 million to \$25.0 million assuming that the FDA agrees with and accepts our intended regulatory pathway under Section 505(b)(2) of the Food and Drug Act. If the FDA does not agree with our streamlined development program or requires additional clinical development work, the timelines and expenses discussed above will change dramatically. . Furthermore, we will likely need to raise significant additional capital to complete our development of MAT9001. See, e.g., “Risk Factors – We will need to raise significant additional capital to support our development and commercialization efforts for MAT9001.”

### **Manufacturing and Supply for MAT9001**

The production of MAT9001 is a multi-step process and involves a complex supply chain. We do not own or operate manufacturing facilities for the production of MAT9001, nor do we have plans to develop our own manufacturing operations for the commercial manufacture of MAT9001 in the foreseeable future. We depend on third-party suppliers and manufacturing organizations for all of our required raw materials and drug substance and to manufacture, encapsulate, bottle and package clinical trial quantities of MAT9001.

One of our potential suppliers has developed the process for manufacturing MAT9001’s active pharmaceutical ingredient and is preparing to manufacture good manufacturing practice (GMP) clinical batches during the second quarter of 2014 and for some time thereafter. We have also entered into an agreement with another company for encapsulation of MAT9001 clinical trial materials according to our specifications.

The main raw material for manufacturing MAT9001 is a naturally occurring substance which is sourced from fish oil that is readily available for purchase on global commodities markets. We are aware that certain other manufacturers have the ability to produce such raw materials to our specification. We have taken deliveries from several suppliers of such raw materials for our development program.

We plan to secure supply sources and contract with these or other parties to manufacture commercial quantities of any products we successfully develop. Among the conditions for FDA approval of a pharmaceutical product is the requirement that the manufacturer’s quality control and manufacturing procedures conform to current Good Manufacturing Practice (cGMP), which must be followed at all times. The FDA typically inspects manufacturing facilities on an ongoing basis. In complying with cGMP regulations, pharmaceutical manufacturers must expend resources and time to ensure compliance with product specifications as well as production, record keeping, quality control, reporting, and other requirements.



## **Additional Pipeline Opportunities: MAT8800 Discovery Program**

We have established a discovery program called MAT8800 to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions. Our development work indicated that certain omega-3 fatty acids may yield improvement in liver enzyme levels and liver histology. Accordingly, we have identified potential omega-3 fatty acid compositions to study in preclinical settings. This discovery program is focused on identifying and optimizing product candidates comprising omega-3 fatty acids as potential treatments for nonalcoholic fatty liver disease (NAFLD), nonalcoholic steatohepatitis (NASH) or other hepatic conditions.

### **Currently Available Treatment Options and Market Opportunity for MAT8800**

Nonalcoholic fatty liver disease, or NAFLD, is believed to be the most common chronic liver disease worldwide, affecting between 15 to 30% of the population. In the United States, the current prevalence rate is estimated at 24%, translating to roughly 75 million patients. The rate for NAFLD is higher in Hispanics than both European-origin and Afro-American origin genotypes. The disease is associated with the Western diet, which is rich in processed foods with high fat and sugar content. NAFLD is characterized by abnormally high levels of fat, primarily in the form of triglycerides, cholesterol and fatty acids, leading to excessive fat accumulation in the liver, resulting in an increased risk for developing insulin resistance, metabolic syndrome, type 2 diabetes, cardiovascular disease and liver cancer. Of the cardiovascular events resulting in death, NAFLD co-morbidity is thought to occur in 24% of all cases.

A subset of approximately 30% of NAFLD patients develop NASH, which is a more serious liver disease. In these patients, for reasons that are still not completely understood, the fat build-up in the liver induces chronic inflammation which leads to progressive fibrosis that can lead to cirrhosis, liver failure or death. NASH is currently diagnosed by liver biopsy. Other non-invasive methods for determining fibrosis, such as determination of liver stiffness by specific ultrasound techniques and blood-based biomarker diagnostic panels, are being evaluated as replacement treatments for performing liver biopsies.

Studies have shown that at least 15% of NASH patients will develop liver cirrhosis over a ten to 15 year period. In the United States, the most recent epidemiological studies have concluded that more than 12% of the general population has NASH, while approximately 2.7%, or more than eight million patients, have advanced liver fibrosis or cirrhosis due to the disease. In the past decade, the proportion of liver transplants attributed to NASH increased from 1% to 10%, establishing NASH as the third leading and a rapidly increasing indication for liver transplant in the United States. The epidemiological data from other developed countries in Europe and Japan are similar. NASH has also become a highly prevalent liver disease in developing countries such as India and China.

There are currently no drugs approved for the treatment of NAFLD or NASH. Lifestyle changes and exercise to reduce body weight and treatment of concomitant diabetes and dyslipidemia are accepted as the standard of care as first-line treatment, but have not conclusively been shown to prevent disease progression, especially for NASH. It has been reported that in 2010, there were approximately \$615 million in off-label sales of various therapeutics for the treatment of NASH, such as insulin sensitizers (e.g., metformin, pioglitazone), antihyperlipidemic agents (e.g., gemfibrozil), pentoxifylline, vitamin E and ursodiol.

### **Sales and Marketing**

We currently have very minimal marketing, sales or distribution capabilities. In order to commercialize products that are approved for commercial sale, we must either develop our own sales, marketing and distribution infrastructure or collaborate with third parties that have such commercial infrastructure and relevant marketing and sales experience. With respect to MAT9001 for the treatment of dyslipidemia and cardiovascular indications, we plan to pursue partnership opportunities with other pharmaceutical companies for the launch, marketing and sale of MAT9001 outside the United States and potentially within the United States. In addition, we will consider the merits of developing our own sales, marketing and distribution infrastructure for the United States market. If we elect to develop our own sales and marketing personnel, we do not intend to establish our own sales organization in the United States until shortly prior to FDA approval of MAT9001. Therefore, at the time of our anticipated commercial launch of MAT9001, assuming regulatory approval of the drug by the FDA, our sales and marketing team, if we decide to have one, will have worked together for only a limited period of time.

### **Competition**

The biotechnology and pharmaceutical industry is highly competitive. There are many public and private biopharmaceutical companies, universities, governmental agencies and other research organizations actively engaged in the research and development of products that may be similar to our products or address similar medical conditions. It is expected that the number of companies seeking to develop products and therapies similar to our products will increase. Many of these and other existing or potential competitors have substantially greater financial, technical and human resources than us and may be better equipped to develop, manufacture and market products. These competitors may develop and market products comparable or superior to ours.



## *Competition on MAT9001*

We are positioning our lead product candidate, MAT9001, to gain approval in the hypertriglyceridemia market with an initial indication to treat patients with severe hypertriglyceridemia, which is characterized by triglyceride levels at >500 mg/dL. The current market for hypertriglyceridemia treatments is dominated by three therapeutic classes: fibrates, extended release niacin, and omega-3 fatty acid based products. Abbvie, Inc. (previously Abbott Laboratories), which currently markets Tricor® and Trilipix® (both fibrates) and Niaspan® (niacin) for the treatment of high triglycerides and severe hypertriglyceridemia in the United States and Omacor (the equivalent of Lovaza) in Europe and Asia. According to IMS Health's market database, MIDAS, Tricor and Niaspan both reached over \$1 billion in U.S. sales in 2012. In addition, several generic formulations of fenofibrate and gemfibrozil (brand name: Lopid) are available for sales in the United States and other major markets. Bezafibrate is another fibrate available in Europe and other markets, although it was never approved in the United States. GlaxoSmithKline plc currently markets in the United States Lovaza, a prescription omega-3 fatty acid for patients with severe hypertriglyceridemia, which reached \$1 billion in US sales in 2012 as reported by IMS Health. In Europe, Omacor, Zodin and Seacor (all essentially equivalents of Lovaza) are marketed by several local, European or global pharmaceutical companies. In the United States, Amarin recently launched Vascepa, an ethyl-ester form of EPA, for the treatment of patients with severe hypertriglyceridemia. In Japan, Mochida has been selling Epadel, an ethyl-ester form of EPA, for the treatment of patients with dyslipidemia, while Takeda Pharmaceutical Company Limited recently received approval of its version of Omacor in its home market.

In March 2011, Pronova BioPharma Norge AS, now owned by BASF, which owns the patents for Lovaza, entered into an agreement with Apotex Corp. and Apotex Inc., or Apotex, to settle their patent litigation in the United States related to Lovaza. Pursuant to the terms of the settlement agreement, Pronova granted Apotex a license to enter the U.S. market with a generic version of Lovaza in the first quarter of 2015, or earlier depending on circumstances. In addition, Pronova recently lost an appeal in its patent infringement lawsuit against Teva Pharmaceuticals USA, Inc., or Teva, and Par Pharmaceutical Inc., or Par, which would have prevented Teva and Par from launching generic versions of Lovaza. Apotex, Teva and Par must obtain FDA approval of generic versions of Lovaza before they are permitted to sell such products in the United States. On April 8, 2014, Teva announced that it had received FDA approval of its abbreviated new drug application, or ANDA, to sell a generic equivalent of Lovaza and was immediately launching its product into the market. Other companies are also seeking to introduce generic versions of Lovaza. Each of these competitors has greater resources than we do, including financial, product development, marketing, personnel and other resources.

In February 2013, Amarin submitted a supplemental NDA (sNDA) to the FDA seeking approval of Vascepa for the treatment of patients with high triglyceride levels (TG  $\geq$ 200 mg/dL and <500 mg/dL) who are also on statin therapy for elevated LDL-C levels, which has been referred to as Amarin's ANCHOR indication. This indication is also referred to as mixed dyslipidemia. On October 16, 2013, the FDA convened an advisory committee to review Amarin's sNDA for mixed dyslipidemia and the advisory committee voted 9 to 2 against recommending approval of Amarin's sNDA based on the information presented at that meeting. In its decision whether to approve Amarin's sNDA, the FDA will consider the recommendation of the advisory committee, but the final decision will be made by the FDA. Amarin's sNDA for mixed dyslipidemia is subject to a standard review and was assigned a Prescription Drug User Fee Act, or PDUFA, date of December 20, 2013. The PDUFA date is the target date for the FDA to complete its review of the sNDA. On October 29, 2013, the FDA notified Amarin that it rescinded the Special Protocol Assessment, or SPA, agreement entered into between the FDA and Amarin for the ANCHOR indication. On November 7, 2013, Amarin submitted a formal appeal of the FDA's decision to rescind the ANCHOR SPA. On January 17, 2014, the Division of Metabolism and Endocrinology Products, or DMEP, within the FDA notified Amarin in connection with Amarin's request for reconsideration of the October 2013 decision to rescind the ANCHOR SPA that the DMEP did not plan to reinstate the ANCHOR SPA agreement. Amarin has stated that it plans to continue to appeal the decision to higher levels within the FDA. Amarin has still not received a decision from FDA with respect to its sNDA filing for the ANCHOR indication. We also understand that on February 21, 2014, in connection with Amarin's July 26, 2012 approval of Vascepa to treat severe hypertriglyceridemia, the FDA denied a grant of NCE marketing exclusivity to Vascepa and granted three-year marketing exclusivity. Such three-year exclusivity extends through July 25, 2015 and could possibly be supplemented by a 30-month stay triggered after patent infringement litigation initiated by Amarin following a valid notice to Amarin of the filing of an ANDA with the FDA seeking approval of a generic version of Vascepa. Thereafter, on February 27, 2014, Amarin filed a lawsuit against the FDA challenging FDA's denial of its request for five-year exclusivity based on Amarin's interpretation of the relevant statute and that FDA's decision was inconsistent with past FDA actions. On March 14, 2014, Amarin announced that it had received paragraph IV certifications from Apotex and Roxane Laboratories, Inc., or Roxane, on March 10 and 12, 2014, respectively, advising Amarin that such companies have filed ANDAs with the FDA for generic versions of Vascepa.

In addition, we are aware of other companies that are developing products that, if approved and marketed, will compete directly with MAT9001. These companies that are in various stages of clinical development with omega-3 prescription therapies for the treatment of very high triglycerides include a free fatty acid form of omega-3 (comprised of 55% EPA and 20% DHA) developed by Omthera Pharmaceuticals, now owned by AstraZeneca PLC. In July 2013, Omthera submitted an NDA to the FDA seeking approval of this drug candidate for the treatment of severe hypertriglyceridemia and received FDA approval for its NDA on May 5, 2014 with an indication to use its product as an adjunct to diet to reduce triglyceride levels in patients with severe hypertriglyceridemia. We are also aware that in January 2014, Acasti Pharma Inc., a subsidiary of Neptune Technologies and Bioresources Inc., announced that the FDA had accepted its IND submission to conduct a pharmacokinetic, or PK, study of its krill-oil based omega-3 phospholipid product. In addition, we believe Catabasis Pharmaceuticals, or Catabasis, Resolvix Pharmaceuticals, or Resolvix, and Sancilio & Company are developing potential treatments for hypertriglyceridemia based on omega-3 fatty acids and, to our knowledge, Catabasis initiated a Phase II clinical trial of its product in December 2013; Resolvix's compound remains in Phase I clinical testing and Sancilio is preparing to commence Phase III clinical testing. We also understand that another company, Trygg Pharma AS received FDA approval on April 23, 2014 for its NDA for an omega-3 based drug used as an adjunct to diet to reduce triglyceride levels in adult patients with severe (> or = 500 mg/dL) hypertriglyceridemia.

MAT9001, along with currently-marketed prescription-only omega-3 products, may also compete with a multitude of omega-3 dietary supplements that are available over-the-counter without a prescription. We believe that the advantages of FDA-approved omega-3 products as compared with dietary supplement products include that a dietary supplement that is not required to be approved by the FDA (i) may contain different levels of active ingredients per capsule or different active ingredients than an Rx product; and (iii) may utilize a manufacturing process that may not be as controlled and consistent as an FDA-approved manufacturing process, particularly with respect to cholesterol and pollutant (PCBs, dioxins, furans, pesticides, etc.) levels. Most importantly, a dietary supplement omega-3 is not licensed for the treatment of any medical condition, and promotion or encouragement of such use is considered misbranding under the Food and Drug Act and thus punishable by law. Nevertheless, given the cost advantage of dietary supplement omega-3 products, we anticipate that they may be a category offering significant competition to MAT9001 at such time as it has become FDA-approved. Further, Euromonitor's global market research database, Passport, reports that the total sales of all omega-3 dietary supplements in the United States have steadily increased from \$424 million in 2007 up to \$1.04 billion in 2012.

### **Competition on MAT8800**

Our MAT8800 discovery program is seeking to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions. This discovery program is focused on identifying and optimizing product candidates comprising omega-3 fatty acids as potential treatments for nonalcoholic fatty liver disease (NAFLD), nonalcoholic steatohepatitis (NASH) or other hepatic conditions. There are currently no therapeutic products approved for the treatment of NASH or NAFLD.

There are several marketed therapeutics that are currently used off label for the treatment of NASH, such as insulin sensitizers (e.g., metformin), antihyperlipidemic agents (e.g., gemfibrozil, pioglitazone), pentoxifylline and ursodiol, but none has been clearly shown in clinical trials to alter the course of the disease. We are aware of several companies that have product candidates in Phase 2 clinical development or earlier preclinical development for the treatment of NASH, including Intercept Pharmaceuticals, Inc., Gilead Sciences, Inc., Dr. Falk Pharma GmbH, Galmed Medical Research Ltd., Immuron Ltd., Mochida Pharmaceutical Co., Ltd., NasVax Ltd. and Raptor Pharmaceutical Corp., and there are other companies with candidates in earlier stage programs.

### **Research and Development**

For the year ended December 31, 2013, we spent approximately \$1.8 million on research and development activities. For the three months ended March 31, 2014, we spent approximately \$1.1 million for research and development activities. These expenses include cash and non-cash expenses relating to the development of our clinical and pre-clinical programs.

### **Intellectual Property**

The proprietary nature of, and protection for, our product candidates and our discovery programs, processes and know-how are important to our business. We will seek to protect our products and associated technologies for their manufacturing and development through a combination of patents, trade secrets, proprietary know-how, FDA exclusivity and contractual restrictions on disclosure. Our policy is to pursue, maintain and defend patent rights and to protect the technology, inventions and improvements that are commercially important to the development of our business. We have sought patent protection in the United States and internationally for MAT9001 and our MAT8800 discovery program, and any other inventions to which we have rights, where available and when appropriate. Our policy is to pursue, maintain and defend patent rights, whether developed internally or licensed from third parties, and to protect the technology, inventions and improvements that are commercially important to the development of our business.

Our current patent portfolio is comprised of twenty-two patent applications across four patent families covering the oil composition for MAT9001 and potential compositions under evaluation in our MAT8800 discovery program, other omega-3 fatty acid compositions, as well as formulations of MAT9001 and similar formulations. All of these filed patent applications also comprise methods of use of such oil compositions and formulations. Any patents that may issue from these filed United States patent applications and their counterpart international application covering the MAT9001 drug substance, formulation, and methods for use in treatment would extend protection until at least 2033.

Our success will depend on the ability to obtain and maintain patent and other proprietary rights in commercially important technology, inventions and know-how related to our business, the validity and enforceability of our patents, the continued confidentiality of our trade secrets as well as our ability to operate without infringing the valid and enforceable patents and proprietary rights of third parties. We also rely on continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications we may own or license in the future, nor can we be sure that any of our existing patents or any patents we may own or license in the future will be useful in protecting our technology. For this and more comprehensive risks related to our intellectual property, please see “Risk Factors—Risks Relating to Our Intellectual Property.”

In addition to patents, we rely on trade secrets and know-how to develop and maintain our competitive position. For example, significant aspects of our proprietary technology platform are based on unpatented trade secrets and know-how. Trade secrets and know-how can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and commercial partners. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

We also plan to seek trademark protection in the United States and outside of the United States where available and when appropriate. We intend to use these registered marks in connection with our pharmaceutical research and development as well as our product candidates.

## **Regulatory Matters**

### ***Government Regulation***

Any product development activities related to MAT9001, our MAT8800 discovery program or products that we may develop or acquire in the future will be subject to extensive regulation by various government authorities, including the FDA and other federal, state and local statutes and regulations and comparable regulatory authorities in other countries, which regulate the design, research, clinical and non-clinical development, testing, manufacturing, storage, distribution, import, export, labeling, advertising and marketing of pharmaceutical products and devices. Generally, before a new drug can be sold, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific to each regulatory authority, submitted for review and approved by the regulatory authority. The data is often generated in two distinct development states: pre-clinical and clinical. MAT9001, product candidates resulting from our MAT8800 discovery program or other products that we may develop or acquire in the future must be approved by the FDA through the NDA process before they may be legally marketed in the United States. For new chemical entities, the pre-clinical development stage generally involves synthesizing the active component, developing the formulation and determining the manufacturing process, as well as carrying out non-human toxicology, pharmacology and drug metabolism studies which support subsequent clinical testing.

The clinical stage of development can generally be divided into three sequential phases that may overlap, Phase I, Phase II and Phase III clinical trials. In Phase I, generally, small numbers of healthy volunteers are initially exposed to single escalating doses and then multiple escalating doses of the product candidate. The primary purpose of these studies is to assess the metabolism, pharmacologic action, side effect tolerability and safety of the drug. Phase II trials typically involve studies in disease-affected patients to determine the dose required to produce the desired benefits. At the same time, safety and further pharmacokinetic and pharmacodynamic information is collected. In some instances, formal Phase I and Phase II trials may not be deemed necessary or required by the FDA. Such is often the case when the safety and efficacy of an active ingredient is considered to be well understood by the FDA. Under established regulatory pathways, pharmaceutical products with active ingredients equal or similar to those known by the FDA often enter more streamlined development programs than compounds entirely new to the agency.

Post-approval studies, sometime referred to as Phase IV clinical trials, may be conducted after initial marketing approval. Sometimes, these studies are used to gain additional experience from the treatment of patients in the intended therapeutic condition, then often referred to as Phase IV clinical trials. In certain instances, the FDA may mandate the performance of Phase IV studies. In other situation, post-approval studies aim to gain additional indications for a medication, then often indicated as Phase IIIb studies.

### ***Development of Drugs in the United States***

In the United States, the process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA’s refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement, or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Prior to the start of human clinical studies for a new drug in the United States, pre-clinical laboratory and animal tests are often performed under the FDA's Good laboratory Practices regulations. The sponsor must submit the result of the pre-clinical tests, together with manufacturing information, analytical data and any available clinical data or literature and a proposed clinical protocol to the FDA as part of the IND. Similar filings are required in other countries. The amount of data that must be supplied in the IND depends on the phase of the study. Phase I studies typically require less data than larger Phase III studies. A clinical plan must be submitted to the FDA prior to commencement of a clinical trial. If the FDA has concerns about the clinical plan or the safety of the proposed studies, they may suspend or terminate the study at any time. Studies must be conducted in accordance with good clinical practice and regulator reporting of study progress and any adverse experiences is required. Studies are also subject to review by independent institutional review boards responsible for overseeing studies at particular sites and protecting human research study subjects. An independent institutional review board may also suspend or terminate a study once initiated. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that once begun, issues will not arise that could cause the trial to be suspended or terminated.

#### *Review and Approval in the United States*

Following pivotal or Phase III trial completion, data is analyzed to determine safety and efficacy. Data is then filed with the FDA in an NDA along with proposed labeling for the product and information about the manufacturing and testing processes and facilities that will be used to ensure product quality. In the United States, FDA approval of an NDA must be obtained before marketing a product. The NDA must contain proof of safety, purity, potency and efficacy, which entails extensive pre-clinical and clinical testing.

The FDA will likely re-analyze the clinical trial data, which could result in extensive discussions between the FDA and us during the review process. The review and evaluation of applications by the FDA is extensive and time consuming and may take several years to complete. The FDA may conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with current good manufacturing practice requirements and may also audit data from clinical and pre-clinical trials.

There is no assurance that the FDA will act favorably or quickly in making such reviews and significant difficulties or costs may be encountered in our efforts to obtain FDA approvals. The FDA may require that certain contraindications, warning or precautions be including in the product labeling, or may condition the approval of the NDA on other changes to the proposed labeling, development of adequate controls and specifications, or a commitment to conduct post-marketing testing or clinical trials and surveillance programs to monitor the safety of approved products that have been commercialized. Further, the FDA may place conditions on approvals including the requirement for a risk evaluation and mitigation strategy ("REMS") to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without an approved REMS, if required. A REMS could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals maybe withdrawn for non-compliance with regulatory standards or if problems occur following the initial marketing of the product.

#### *Section 505(b)(2) New Drug Applications*

As an alternate path to FDA approval for new or improved formulations of previously approved products, a company may file a Section 505(b)(2) NDA. Section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act was enacted as part of the Drug Price Competition and Patent Term Restoration Act of 1984, otherwise known as the Hatch-Waxman Amendments. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. The Hatch-Waxman Amendments permit the applicant to rely upon certain preclinical or clinical studies conducted for an approved product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new product for all or some of the label indications for which the referenced product has been approved, as well as for any new indication sought by the Section 505(b)(2) applicant.

To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, which is referred to as the Reference Listed Drug, the applicant is required to certify to the FDA concerning any listed patents in the FDA's Orange Book publication that relate to the Reference Listed Drug. Specifically, the applicant must certify for all listed patents one of the following certifications: (i) the required patent information has not been filed by the original applicant; (ii) the listed patent already has expired; (iii) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (iv) the listed patent is invalid or will not be infringed by the manufacture, use or sale of the new product.

If a Paragraph I or II certification is filed FDA may make approval of the application effective immediately upon completion of its review. If a Paragraph III certification is filed the approval may be made effective on the patent expiration date specified in the application, although a tentative approval may be issued before that time. If an application contains a Paragraph IV certification, a series of events will be triggered, the outcome of which will determine the effective date of approval of the 505(b)(2) application. The Section 505(b)(2) application also will not be approved until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the Referenced Listed Drug has expired.

A certification that the new product will not infringe the Reference Listed Drug's listed patents or that such patents are invalid is called a Paragraph IV certification. If the applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders for the Reference Listed Drug once the applicant's NDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a legal challenge to the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of their receipt of a Paragraph IV certification automatically prevents the FDA from approving the Section 505(b)(2) NDA by imposing a 30 month automatic statutory injunction. The court may shorten or lengthen the 30 month stay period in a pending patent case if either party fails to reasonably cooperate in expediting the case. The 30 month stay terminates if a court issues a final order determining that the patent is invalid unenforceable or not infringed. Thus, the Section 505(b)(2) applicant may invest a significant amount of time and expense in the development of its products only to be subject to significant delay and patent litigation before its products may be commercialized. Alternatively, if the listed patent holder does not file a patent infringement lawsuit within the required 45-day period, the applicant's NDA will not be subject to the 30-month stay.

#### *Drug Development in Europe*

In the European Union, or E.U., our future products may also be subject to extensive regulatory requirements. Similar to the United States, the marketing of medicinal products has been subject to the granting of marketing authorizations by regulatory agencies. Particular emphasis is also being placed on more sophisticated and faster procedures for reporting of adverse events to the competent authorities.

As in the United States, the various phases of pre-clinical and clinical research in the European Union are subject to significant regulatory controls. Although the regulatory controls on clinical research are currently undergoing a harmonization process following the adoption of the Clinical Trials Directive 2001/20/EC, there are currently significant variations in the member state regimes. All member states, however, currently require independent institutional review board approval of interventional clinical trials. Except for the United Kingdom Phase I studies in health volunteers, all clinical trials require either prior governmental notification or approval. Most regulators also require the submission of adverse event reports during a study and a copy of the final study report.

#### *Review and Approval in the European Union*

In the European Union, approval of new medicinal products can be obtained through one of three processes: the mutual recognition procedure, the centralized procedure and the decentralized procedure. We intend to determine which process we will follow, if any, in the future.

Mutual Recognition Procedure: An applicant submits an application in one European Union member state, known as the reference member state. Once the reference member state has granted the marketing authorization, the applicant may choose to submit applications in other concerned member states, requesting them to mutually recognize the marketing authorizations already granted. Under this mutual recognition process, authorities in other concerned member states have 55 days to raise objections, which must then be resolved by discussion among the concerned member states, the reference member state and the applicant within 90 days of the commencement of the mutual recognition procedure. If any disagreement remains, all considerations by authorities in the concerned member states are suspended and the disagreement is resolved through an arbitration process. The mutual recognition procedure results in separate national marketing authorizations in the reference

Centralized Procedure: This procedure is currently mandatory for products developed by means of a biotechnological process and optional for new active substances and other "innovative medicinal products with novel characteristics." Under this procedure, an application is submitted to the European Agency for the Evaluation of Medical Products. Two European Union member states are appointed to conduct an initial evaluation of each application. These countries each prepare an assessment report that is then used as the basis of a scientific opinion of the Committee on Proprietary Medical Products. If this opinion is favorable, it is sent to the European Commission, which drafts a decision. After consulting with the member states, the European Commission adopts a decision and grants a marketing authorization, which is valid throughout the European Union and confers the same rights and obligations in each of the member states as a marketing authorization granted by that member state.

Decentralized Procedure: The most recently introduced of the three processes for obtaining approval of new medicinal processes in the European Union, the decentralized procedure is similar to the mutual recognition procedure described above, but with differences in the timing that key documents are provided to concerned member states by the reference member state, the overall timing of the procedure and the possibility of, among other things, “clock stops” during the procedure.

#### *Post-Marketing Requirements*

Following approval of a new product, a pharmaceutical company and the approved product are subject to continuing regulation by the FDA and other federal and state regulatory authorities, including, among other things, monitoring and recordkeeping activities, reporting to applicable regulatory authorities of adverse experiences with the product, providing the regulatory authorities with updated safety and efficacy information, product sampling and distribution requirements, and complying with promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting drugs for uses or in patient populations not described in the drug’s approved labeling (known as “off-label use”), limitations on industry-sponsored scientific and educational activities, and requirements for promotional activities involving the internet. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses. Modifications or enhancements to the products or labeling or changes of site of manufacture are often subject to the approval of the FDA and other regulators, which may or may not be received or may result in a lengthy review process.

Prescription drug advertising is subject to federal, state and foreign regulations. In the United States, the FDA regulates prescription drug promotion, including direct-to-consumer advertising. Prescription drug promotion materials must be submitted to the FDA in conjunction with their first use. Any distribution of prescription drug products and pharmaceutical samples must comply with the U.S. Prescription Drug Marketing Act (“PDMA”), a part of the U.S. Federal Food, Drug and Cosmetic Act. Once a product is approved, its manufacture is subject to comprehensive and continuing regulations by the FDA. The FDA regulations require the products be manufactured in specific approved facilities and in accordance with current good manufacturing practices, and NDA holders must list their products and register their manufacturing establishments with the FDA. These regulations also impose certain organizational, procedural and documentation requirements with respect to manufacturing and quality assurance activities. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with current good manufacturing practice and other laws. NDA holders using contract manufacturers, laboratories or packagers are responsible for the selection and monitoring of qualified firms. These firms are subject to inspections by the FDA at any time, and the discovery of violative conditions could result in enforcement actions that interrupt the operation of any such facilities or the ability to distribute products manufactured, processed or tested by them.

#### *Special Protocol Assessment*

The Federal Food, Drug and Cosmetic Act directs the FDA to meet with sponsors, pursuant to a sponsor’s written request, for the purpose of reaching agreement on the design and size of clinical trials intended to form the primary basis of an efficacy claim in an NDA. If an agreement is reached, the FDA will reduce the agreement to writing and make it part of the administrative record. This agreement is called a special protocol assessment. While the FDA’s guidance on SPAs states that documented SPAs should be considered binding on the review division, the FDA has latitude to change its assessment if certain exceptions apply. Exceptions include public health concerns emerge that were unrecognized at the time of the protocol assessment, identification of a substantial scientific issue essential to the safety or efficacy testing that later comes to light, a sponsor’s failure to follow the protocol agreed upon, or the FDA’s reliance on data, assumptions or information that are determined to be wrong.

#### *Other Regulatory Matters*

Manufacturing, sales, promotion and other activities following product approval are also subject to regulation by numerous regulatory authorities in addition to the FDA, including, in the United States, the Centers for Medicare & Medicaid Services (“CMS”), other divisions of the Department of Health and Human Services, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency, and state and local governments. Sales, marketing and scientific/educational programs must also comply with federal and state fraud and abuse laws. Pricing and rebate programs must comply with the Medicaid rebate requirements of the U.S. Omnibus Budget Reconciliation Act of 1990. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. The handling of any controlled substances must comply with the U.S. Controlled Substances Act and Controlled Substances Import and Export Act. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. Manufacturing, sales, promotion and other activities are also potentially subject to federal and state consumer protection and unfair completion laws.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The failure to comply with regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of product approvals, or refusal to allow a firm to enter into supply contracts, including government contracts. In addition, even if a firm complies with FDA and other requirements, new information regarding safety or effectiveness of a product could lead the FDA to modify or withdraw a product approval. Prohibitions or restrictions on sales or withdrawal of future products marketed by us could materially affect our business in an adverse way.

Changes in regulations or statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

#### *FDA Marketing Exclusivity*

The Food Drug and Cosmetic Act, or FDCA, as amended by the Drug Price Competition and Patent Term Restoration Act of 1984, as amended, or the Hatch-Waxman Amendments, provides for market exclusivity provisions that can help protect the exclusivity of new drugs by delaying the acceptance and final approval of certain competitive drug applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity, or NCE. A drug is an NCE if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement.

The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application (for example, for new indications, dosages, or strengths of an existing drug). Such three-year exclusivity protection would preclude the FDA from approving a marketing application for a duplicate of a pioneer drug, a product candidate that the FDA views as having the same conditions of approval as the pioneer drug (for example, the same indication and/or other conditions of use), or a 505(b)(2) NDA submitted to the FDA with the pioneer drug as the reference product, for a period of three years from the date of FDA approval, although the FDA may accept and commence review of such applications during the exclusivity period. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Such three-year exclusivity grant would also not prevent a company from challenging the validity of patents covering the pioneer drug at any time. In this case, the pioneer drug company may be afforded the benefit of a 30-month stay against the launch of such a competitive product that would extend from the period that it responds to a pending patent challenge, and may also be afforded other extensions under applicable regulations, including a six-month pediatric exclusivity extension or a judicial extension if applicable requirements are met. This three-year form of exclusivity may also not prevent the FDA from approving an NDA that relies only on its own data to support the change or innovation.

Five-year and three-year exclusivity will not delay the submission or tentative approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

The FDA typically makes a determination on marketing exclusivity in connection with, or soon after, an NDA approval of a drug for a new indication. There can be no assurance that we will be successful in securing marketing approval or obtaining any regulatory exclusivity in the United States.

FDA marketing exclusivity is separate from, and in addition to, patent protection, trade secrets and manufacturing barriers to entry which also help protect pharmaceutical products against generic competition.

### *Third-Party Payor Coverage and Reimbursement*

Significant uncertainty exists as to the coverage and reimbursement status of any of our drug candidates for which we obtain regulatory approval. In both the United States and foreign markets, our ability to commercialize our product candidates successfully, and to attract commercialization partners for our product candidates, depends in significant part on the availability of adequate financial coverage and reimbursement from third-party payors, including, in the United States, governmental payors such as the Medicare and Medicaid programs, managed care organizations, and private health insurers. Medicare is a federally funded program managed by the CMS, through local fiscal intermediaries and carriers that administer coverage and reimbursement for certain healthcare items and services furnished to the elderly and disabled. Medicaid is an insurance program for certain categories of patients whose income and assets fall below state defined levels and who are otherwise uninsured that is both federally and state funded and managed by each state. The federal government sets general guidelines for Medicaid and each state creates specific regulations that govern its individual program. Each payor has its own process and standards for determining whether it will cover and reimburse a procedure or particular product. Private payors often rely on the lead of the governmental payors in rendering coverage and reimbursement determinations. Therefore, achieving favorable CMS coverage and reimbursement is usually a significant gating issue for successful introduction of a new product. The competitive position of some of our products will depend, in part, upon the extent of coverage and adequate reimbursement for such products and for the procedures in which such products are used. Prices at which we or our customers seek reimbursement for our product candidates can be subject to challenge, reduction or denial by the government and other payors.

Currently, Lovaza and Vascepa are covered by the majority of health insurance plans in the United States, either available under a preferred reimbursement tier or a lower tier. Many insurance plans may require evidence that the patient has a medical condition consistent with the indication of the prescribed medication.

The United States Congress and state legislatures may, from time to time, propose and adopt initiatives aimed at cost containment, which could impact our ability to sell our product candidates profitably. For example, in March 2010, President Obama signed into law the Patient Protection and Affordable Care Act and the associated reconciliation bill, which we refer to collectively as the Health Care Reform Law, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Health Care Reform Law revised the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states once the provision is effective. Further, the law imposes a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may require us to modify our business practices with healthcare practitioners. We will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law, the new law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs. Moreover, in the coming years, additional changes could be made to governmental healthcare programs that could significantly impact the success of our product candidates.

The cost of pharmaceuticals continues to generate substantial governmental and third-party payor interest. We expect that the pharmaceutical industry will experience pricing pressures due to the trend toward managed healthcare, the increasing influence of managed care organizations and additional legislative proposals. Our results of operations could be adversely affected by current and future healthcare reforms.

Some third-party payors also require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers that use such therapies. While we cannot predict whether any proposed cost-containment measures will be adopted or otherwise implemented in the future, the announcement or adoption of these proposals could have a material adverse effect on our ability to obtain adequate prices for our product candidates and operate profitably.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal product for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally tend to be significantly lower.

### *Other Healthcare Laws and Compliance Requirements*

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the CMS, other divisions of the United States Department of Health and Human Services (e.g., the Office of Inspector General), the United States Department of Justice and individual United States Attorney offices within the Department of Justice, and state and local governments. These regulations include:

- the federal healthcare program anti-kickback law which prohibits, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;





- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other government reimbursement programs that are false or fraudulent. The government may assert that a claim including items or services resulting from a violation of the federal healthcare program anti-kickback law or related to off-label promotion constitutes a false or fraudulent claim for purposes of the federal false claims laws;
- the federal Health Insurance Portability and Accountability Act of 1996 which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- the federal transparency requirements under the Health Care Reform Law requires manufacturers of drugs, devices, biologics, and medical supplies to report to the Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third party payor, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by federal laws, thus complicating compliance efforts.

## **Employees**

We have ten employees. All of our employees are engaged in administration, finance, pharmaceutical, clinical, legal, regulatory and business development functions. We believe our relations with our employees are good. We anticipate that the number of employees will grow as we continue to develop our product candidates. In addition, we utilize and will continue to utilize consultants, clinical research organizations and third parties to perform our pre-clinical studies, clinical studies and manufacturing.

## **Facilities**

On November 1, 2013, we entered into a seven year lease for approximately 5,872 square feet of office space in Bedminster, New Jersey. The commencement date and our first obligation to pay rent is expected to occur in June 2014, with annual rent beginning at approximately \$152,000, increasing to \$174,000 in the final year.

In December 2013, we entered into an agreement to lease laboratory space for one year commencing January 1, 2014 in Monmouth Junction, New Jersey. The base rent for the year will be approximately \$25,000.

## **Legal Matters**

We are not currently subject to any material legal proceedings. However, we may from time to time become a party to various legal proceedings arising in the ordinary course of our business.

## MANAGEMENT

All directors hold office for one-year terms until the election and qualification of their successors. Officers are appointed by our board of directors and serve at the discretion of the board, subject to applicable employment agreements. The following table sets forth information regarding our executive officers and the members of our board of directors.

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
Herbert Conrad	81	Chairman of the Board, Director
Roelof Rongen	48	President and Chief Executive Officer, Director
Jerome D. Jabbour	40	Executive Vice President Chief Business Officer, General Counsel and Secretary
George Bobotas	66	Executive Vice President and Chief Scientific Officer
Abdel A. Fawzy	63	Executive Vice President, Pharmaceutical Development and Supply Chain
Gary Gaglione	62	Vice President of Finance and Accounting and Interim Chief Financial Officer
Stefano Ferrari	53	Director
Adam Stern	50	Director
James S. Scibetta	49	Director

### Management

**Roelof Rongen** has served as our President and Chief Executive Officer and one of our directors since the Merger and as President, Chief Executive Officer a co-founder and a director of Matinas BioPharma since April 2012. He is also the Founder and Chairman of Essential Fatty Acid Therapeutics LLC, a biotech company focused on the development of innovative fatty acid derivatives. Prior to Matinas BioPharma, Mr. Rongen was Executive Vice President North American Operations for Trygg Pharma AS (subsequently named EPAX AS) (2009-2012) and Vice President of Life Cycle Management and Intellectual Property at Reliant Pharmaceuticals, Inc., or Reliant (2000-2008). While at Reliant, Mr. Rongen held various earlier positions, including head of the Omacor®/Lovaza® launch team, Executive Director of Marketing for Lescol® and Executive Director of Business Development. Prior to Reliant, Mr. Rongen was also Global Product Director for Humira® at BASF Pharma (1998-2000), later acquired by Abbott Laboratories; a consultant at The Wilkerson Group in New York (1995-1998) and Arthur D. Little in Amsterdam (1990-1993), and a Research Fellow in biochemistry at Baylor University in Texas (1989-1990). Mr. Rongen earned an MBA from Kellogg GSM at Northwestern University in Evanston, IL, and a graduate degree in Molecular Sciences from Wageningen University in the Netherlands.

**Jerome D. Jabbour, JD** has served as our Executive Vice President, Chief Business Officer, General Counsel and Secretary since October 2013 and as one of our directors from the Merger until November 2013. Mr. Jabbour is also a Co-Founder of Matinas BioPharma. Prior to joining our management team, he was the Executive Vice President and General Counsel of MediMedia USA, or MediMedia from 2012 to October 2013, a privately held/ diversified health care services company. Prior to MediMedia, he was the Senior Vice President, head of Global Legal Affairs and US General Counsel of Wockhardt Limited (2008-2012) and Senior Counsel at Reliant (2004-2008). Earlier in his career, he held positions as Commercial Counsel at Alpharma, Inc. (2003-2004) and as a Corporate Associate at Lowenstein Sandler LLP (1999-2003). Mr. Jabbour earned his J.D. from Seton Hall University School of Law in New Jersey and a B.A. in Psychology from Loyola University in Baltimore.

**George Bobotas, PhD** has served as our Executive Vice President and Chief Scientific Officer since the Merger and as Executive Vice President and Chief Scientific Officer of Matinas BioPharma since August 2011. Dr. Bobotas is a Co-Founder of Matinas BioPharma. Prior to Matinas BioPharma, Dr. Bobotas was a founder of Demelle BioPharma, LLC DeMelle BioPharma, a consulting firm (2008-2012) and Vice President Scientific Affairs at Reliant (2000-2008). Prior to Reliant, he was the founder and Executive Director of the Covance Center for CNS Research (1997-2000). Earlier in his career, Dr. Bobotas held senior positions at Somerset Pharmaceuticals, Inc. (1994-1997), Mylan Laboratories Limited (1988-1994), and Forest Laboratories Inc. (1981-1988). He is the inventor on 22 published patents and patent applications all related to health and pharmaceutical development and manufacturing processes. Dr. Bobotas received his Ph.D. in Biochemistry from the City University of New York, an M.A. in Physical Chemistry from Smith College, Northampton, Massachusetts, and a B.A. in Chemistry from Windham College, Vermont.

**Abdel A. Fawzy, PhD** has served as our Executive Vice President for Pharmaceutical and Supply Chain Development since the Merger and as Executive Vice President for Pharmaceutical and Supply Chain Development of Matinas BioPharma since August 2011. Dr. Fawzy is a Co-Founder of Matinas BioPharma. Prior to Matinas BioPharma, Dr. Fawzy was a founder of expert consulting firm DeMelle BioPharma (2008-2012) and Executive Director Pharmaceutical Development at Reliant, from 2000 to 2008. Earlier in his career, Dr. Fawzy held pharmaceutical development positions at Ascent Pharmaceuticals, Inc. (1994-2000), DuPont (1990-1994) and Squibb Marsam Pharmaceuticals (1989-1990). He is the inventor on 15 published patents and patent applications all related to the health and pharmaceutical development and manufacturing processes. Dr. Fawzy received his Ph.D. in Pharmaceutical Technology from Tuebingen University in Germany, a Pharmacy degree from Temple University in Philadelphia, PA, and a MS in Pharmaceutical Technology from the Cairo School of Pharmacy in Egypt.

**Gary Gaglione, CPA** has served as our Interim Chief Financial Officer, Vice President of Finance & Accounting since April 2013. Prior to joining us as a full time employee, Mr. Gaglione was President of MCM Consulting LLC From 2011 until October 2013. Prior to MCM Consulting, Mr. Gaglione was Senior Director of Finance at Shionogi USA, Inc., responsible for budgeting and planning (2011). In 2009 and 2010, he was Vice President of Finance and Controller for Phytomedics, Inc., a start-up botanical pharmaceutical company. Prior to Phytomedics, he was Controller for ProStrakan Inc.'s U.S. operations (2008-2009). From 2001 to 2008, Mr. Gaglione was an Executive Director at Reliant, initially as head of Planning, Budgets and Analysis, then, from 2006 on, as head of Internal Audit and Sarbanes Oxley Compliance in preparation for a potential Reliant initial public offering. Before Reliant, he held numerous finance positions of increasing responsibility at the U.S. subsidiary of Hoffmann-La Roche Inc. (1976-2001), including Vice President of R&D Finance (1997-2001), Director of Compensation with responsibility for executive payroll, payroll, benefits, and exempt/non-exempt compensation systems (1995-1997), and Controller for the US pharmaceutical division and sites (1985-1997). He started his finance career at KPMG LLP (1974-1976). Mr. Gaglione earned a B.S. degree in Business Administration with a major in Accounting from Villanova University, Villanova, Pennsylvania, and an MBA in Finance from Seton Hall University, West Orange, New Jersey.

## **Directors**

**Herbert Conrad** has served as our Chairman of the Board since the Merger and as Chairman of the Board of Matinas BioPharma since October 2012. He also serves on the board of directors of Celldex Therapeutics, Inc. (Nasdaq: CLDX) and as an Advisor to the Seaver Autism Center at Mount Sinai Hospital. Mr. Conrad was the President of the U.S. Pharmaceuticals Division of Hoffmann-La Roche, Inc. from 1982 until his retirement in 1993. Prior to that, he held many positions of increasing responsibility at Roche Pharmaceuticals in the United States. Since his retirement from Roche he has served on the boards of Pharmasset, Inc. (chairman), Savient Pharmaceuticals, Inc., (NASDAQ: SVNT) Dura Pharmaceuticals, Inc., UroCor, Inc., GenVec, Inc. (NASDAQ: GNVC) (chairman), Sicor, Inc., Bone Care International, Inc. (chairman), Sapphire Therapeutics, Inc. (chairman), the medical advisory board of Henry Schein Inc. (NASDAQ: HSIC), and he was a Director and Co-Founder of Reliant. Pharmasset was acquired by Gilead Sciences, Inc. for \$11 billion in 2011. He received B.S. and M.S. degrees from the Brooklyn College of Pharmacy and an honorary Doctorate in Humane Letters from Long Island University. We believe Mr. Conrad is qualified to serve on our board of directors due to his extensive expertise and experience in the life sciences industry and his extensive board experience.

**Roelof Rongen.** See description under "Management." We believe Mr. Rongen is qualified to serve on our board of directors due to his status as one of our founders and his extensive expertise and experience in the development and commercialization of omega-3 based medications and other pharmaceutical/biotechnology products.

**Stefano Ferrari** has served on our board of directors since the Merger and as a director of Matinas BioPharma since October 2012. He is the founder and managing member of Chestnut Hill Sciences, LLC (2004), a human and animal health care company dedicated to the development of dietary supplements, including omega-3 based products. He is the founder of Murami Pharma, Inc. (“Murami”) and has served as its CEO since its inception in 2011. Murami is a biopharmaceutical development stage company focusing on small-peptide therapeutics. Prior to Murami, Mr. Ferrari was the CEO of Bioseutica B.V. (2008-2011), a multinational holding company comprising KD-Pharma, a leading manufacturer of omega-3-concentrates, and the leading lysozyme manufacturers Fordras and Neova Technologies, amongst others. Over the last 17 years, Mr. Ferrari was founder, common shareholder and senior executive of several multinational companies operating in the pharmaceutical, food and ingredients industries. Besides Bioseutica, these companies include Prospa B.V. (1995-2002), a multinational holding company in the pharmaceutical industry, Fordras S.A. (2002-2008), ProAparts Lda (2001-2012), and Societa Prodotti Antibiotici S.p.A., the Italian pharmaceutical company that developed the first omega-3-based medication. Mr. Ferrari has served on several boards, including Ikonisys Inc., Carigent Therapeutics, Inc., The Richard B. Fisher Center for Performing Arts, and St. Simeon Lda, a private family fund. He has 25 years of experience in investing in diverse industries, including real estate, pharmaceuticals, and media and entertainment. Mr. Ferrari earned his B.A. degree in International Business Administration from the University of San Francisco. We believe Mr. Ferrari is qualified to serve on our board of directors due to his extensive expertise and experience in the development and marketing of omega-3 based drugs and dietary supplements, his extensive contacts in the manufacturing industry related to omega-3 based products and also his M&A experience.

**Adam Stern** has served as a member of our board of directors since July 2013. Mr. Stern has been the head Private Equity Banking at Aegis Capital Corp. and CEO of SternAegis Ventures since 2012 and became one of our directors following the Merger. Prior to Aegis, from 1997 to November 2012, he was with Spencer Trask Ventures, Inc., most recently as a Senior Managing Director, where he managed the structured finance group focusing primarily on the technology and life science sectors. Mr. Stern held increasingly responsible positions from 1989 to 1997 with Josephthal & Co., Inc., members of the New York Stock Exchange, where he served as Senior Vice President and Managing Director of Private Equity Marketing. He has been a FINRA licensed securities broker since 1987 and a General Securities Principal since 1991. Mr. Stern is a former Director of InVivo Therapeutics Holdings Corp. (OTCBB: NVIV) and Organovo Holdings, Inc. (OTCQX: ONVO). He currently serves as a Director of LabStyle Innovations Corporation (OTCBB: DRIO) and, since 2012, PROLOR Biotech (NYSE MKT: PBTH) where he previously served as a Director from 2007 to 2011. PROLOR recently announced its agreement to be acquired by OPKO Health, Inc. (NYSE: OPK). Mr. Stern holds a Bachelor of Arts degree with honors from The University of South Florida in Tampa. We believe Mr. Stern is qualified to serve on our board of directors because of his extensive experience in corporate finance and experience in the life science industries.

**James S. Scibetta** has served as a member of our board of directors since November 2013. He is currently Chief Financial Officer of Pacira Pharmaceuticals, Inc. (NASDAQ: PCRX), a position he has held since August 2008. Prior to joining Pacira in August 2008, he served as a consultant to Genzyme Corporation following the sale of Bioenvision Inc. (NASDAQ: BIVN) to Genzyme in 2007. From 2006 to 2007 Mr. Scibetta was CFO of Bioenvision. From 2001 to 2006, he was Executive Vice President and Chief Financial Officer of Merrimack Pharmaceuticals Inc. (NASDAQ: MACK). Mr. Scibetta has previously served on the board of directors at the following life sciences companies: Nephros Inc. (NASDAQ: NEPH), Merrimack Pharmaceuticals and Labopharm Inc. Prior to his executive management experience, Mr. Scibetta spent over a decade in investment banking where he was responsible for sourcing and executing transactions for a broad base of public and private healthcare and life sciences companies. Mr. Scibetta received his Bachelor of Science in Physics from Wake Forest University and an MBA from the University of Michigan. We believe Mr. Scibetta is qualified to serve on our board of directors because of his extensive management experience in the pharmaceutical industry, his investment banking experience and his experience as a chief financial officer and audit committee member of several publicly traded companies.

## **Scientific Advisory Board**

We believe in seeking and attracting scientific and clinical leaders in the field of cardiovascular medicine and their underlying physiology/biology to provide counsel and support our growth. We are in the process of developing a formal Scientific Advisory Board which will consist of individuals who are experts in their chosen fields and recipients of many academic honors and awards. We expect that our Scientific Advisory Board will ultimately have between four and seven members.

## **Committees of the Board**

Our board of directors has three standing committees — an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee.

**Audit Committee**. The Audit Committee will oversee and monitor our financial reporting process and internal control system, review and evaluate the audit performed by our registered independent public accountants and report to the Board any substantive issues found during the audit. The Audit Committee will be directly responsible for the appointment, compensation and oversight of the work of our registered independent public accountants. The Audit Committee will review and approve all transactions with affiliated parties. The Board will adopt a written charter for the Audit Committee, which will be available on our website. James Scibetta, Herbert Conrad and Stefano Ferrari serve as members of the Audit Committee with James Scibetta, serving as its chairman. All of the members of the Audit Committee have been determined to be financially literate and are considered independent directors as defined under The NYSE MKT’S listing standards and applicable SEC rules and regulations. Mr. Scibetta qualifies as an audit committee “financial expert” as that term is defined by Commission regulations.

**Compensation Committee** . The Compensation Committee will provide advice and make recommendations to the Board in the areas of employee salaries, benefit programs and director compensation. The Compensation Committee will also review the compensation of our President and Chief Executive Officer and make recommendations in that regard to the Board as a whole. The Board will adopt a written charter for the Compensation Committee, which will be available on our website. Stefano Ferrari, Herbert Conrad, and James Scibetta serve as members of the Compensation Committee, with Stefano Ferrari serving as its chairman. All of the members of the Compensation Committee are considered independent directors as defined under The NYSE MKT's Nasdaq's listing standards.

**Nominating and Corporate Governance Committee** . The Nominating and Corporate Governance Committee will nominate individuals to be elected to the full Board by our stockholders. The Nominating and Corporate Governance Committee will consider recommendations from stockholders if submitted in a timely manner in accordance with the procedures set forth in our Bylaws and will apply the same criteria to all persons being considered. The Board will adopt a written charter for the Nominating and Corporate Governance Committee, which will be available on our website. Herbert Conrad, Stefano Ferrari and James Scibetta serve as members of the Nominating and Corporate Governance Committee, with Herbert Conrad serving as its chairman. All of the members of the Nominating and Corporate Governance Committee are considered independent directors as defined under The NYSE MKT's listing standards.

### **Director Independence**

Based on information requested from and provided by each of our directors, our board of directors has determined that Messrs. Herbert Conrad, Stefano Ferrari and James Scibetta are "independent directors" as such term is defined in the rules of The NYSE MKT's corporate governance requirements and Rule 10A-3 promulgated under the Securities Exchange Act of 1934, as amended.

### **Code of Business Conduct and Ethics**

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial and accounting officer, or persons performing similar functions. A copy of the code is posted on the corporate governance section of our website, which is located at [www.matinasbiopharma.com](http://www.matinasbiopharma.com). If we make any substantive amendments to, or grant waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website.

## EXECUTIVE COMPENSATION

### Summary Compensation Table – 2013

The following table presents information regarding the total compensation awarded to, earned by, or paid to our chief executive officer and the two most highly-compensated executive officers (other than the chief executive officer) who were serving as executive officers as of December 31, 2013 for services rendered in all capacities to us for the year ended December 31, 2013. These individuals are our named executive officers for 2013.

Name and Principal Position <sup>(1)</sup>	Year	Salary (\$)	Bonus (\$)	Option Awards(1) (\$)	All Other Compensation (\$)	Total (\$)
Roelof Rongen <i>President and Chief Executive Officer</i>	2013	127,308(2)	150,000(3)	31,961	1,926(4)	311,195
George Bobotas <i>Executive Vice President and Chief Scientific Officer</i>	2013	106,090(2)	125,000(3)	31,961	-	263,051
Abdel A. Fawzy <i>Executive Vice President, Supply Chain Development</i>	2013	106,090(2)	125,000(3)	31,961	-	263,051

- (1) Amounts reflect the grant date fair value of option awards granted and vested in 2013 in accordance with Accounting Standards Codification Topic 718. These amounts do not correspond to the actual value that will be recognized by the named executive officers.
- (2) Each of the named executive officers began receiving salary on July 30, 2013.
- (3) Represents signing bonuses paid to each of the named executive officers.
- (4) Represents medical insurance premiums paid by us.

### Employment and Consulting Agreements

On July 30, 2013 and in connection with the Merger, we entered into an employment agreement with Mr. Rongen for a period of three years. Under the terms of Mr. Rongen's employment agreement, he received a signing bonus of \$150,000 and will receive a base salary of \$300,000 per year. In addition, Mr. Rongen will also be eligible to receive an annual bonus, which is targeted at 40% of his base salary but which may be adjusted by our Compensation Committee based on his individual performance and our performance as a whole. Mr. Rongen may also be eligible to receive option grants at the discretion of our Compensation Committee. In October 2013, Mr. Rongen received a grant of 350,000 options at an exercise price of \$0.94 per share. The options vest in equal monthly installments over three years from August 1, 2013. If we terminate Mr. Rongen's employment without cause or Mr. Rongen resigns with good reason, we are required to pay him a severance of up to twelve months of his base salary plus benefits. In addition, the vesting of his outstanding options will be accelerated by six months upon such termination. If we terminate Mr. Rongen's employment without cause during the 24 month period immediately following a change of control or Mr. Rongen resigns with good reason during the 24 month period immediately following a change of control, we are required to pay him a severance of up to eighteen months of his base salary and his target annual bonus plus benefits. In addition, his outstanding options would vest in full upon such termination. Mr. Rongen's employment agreement provides for an increase in base salary of \$50,000 annually, upon a future closing of an additional round of financing of at least \$15 million and the initiation of the first Phase III study of MAT9001. Mr. Rongen will also be subject to a customary non-disclosure agreement, pursuant to which Mr. Rongen has agreed to be subject to a non-compete during the term of his employment and for a period of eighteen months following termination of his employment.

On July 30, 2013 and in connection with the Merger, we entered into an employment agreement with Mr. Bobotas for a period of three years. Under the terms of Dr. Bobotas' employment agreement, he received a signing bonus of \$125,000 and he will receive a base salary of \$250,000 per year. In addition, Dr. Bobotas will also be eligible to receive an annual bonus, which is targeted at 30% of his base salary but which may be adjusted by our Compensation Committee based on his individual performance and our performance as a whole. Dr. Bobotas will also be eligible to receive option grants at the discretion of our Compensation Committee. In October 2013, Mr. Bobotas received a grant of 350,000 options at an exercise price of \$0.94 per share. The options vest in equal monthly installments over three years from August 1, 2013. If we terminate Dr. Bobotas's employment without cause or Dr. Bobotas resigns with good reason, we are required to pay him a severance of up to nine months of his base salary plus benefits. In addition, the vesting of his outstanding options will be accelerated by six months upon such termination. If we terminate Dr. Bobotas's employment without cause during the 24 month period immediately following a change of control or Dr. Bobotas resigns with good reason during the 24 month period immediately following a change of control, we are required to pay him a severance of up to eighteen months of his base salary and his target annual bonus plus benefits. In addition, his outstanding options would vest in full upon such termination. Dr. Bobotas' employment agreement provides for an increase in base salary of \$50,000 annually, upon a future closing of an additional round of financing of at least \$15 million and the initiation of the first Phase III study of MAT9001. Mr. Bobotas will also be subject to a customary non-disclosure agreement, pursuant to which Mr. Bobotas has agreed to be subject to a non-compete during the term of his employment and for a period of eighteen months following termination of his employment.

On July 30, 2013 and in connection with the Merger, we entered into an employment agreement with Dr. Fawzy for a period of three years. Under the terms of Dr. Fawzy's employment agreement, he received a signing bonus of \$125,000 and he will receive a base salary of \$250,000 per year. In addition, Dr. Fawzy will also be eligible to receive an annual bonus, which is targeted at 30% of his base salary but which may be adjusted by our Compensation Committee based on his individual performance and our performance as a whole. Dr. Fawzy will also be eligible to receive option grants at the discretion of our Compensation Committee. In October 2013, Dr. Fawzy received a grant of 350,000 options at an exercise price of \$0.94 per share. The options vest in equal monthly installments over three years from August 1, 2013. If we terminate Dr. Fawzy's employment without cause or Mr. Dr. Fawzy resigns with good reason, we are required to pay him a severance of up to nine months of his base salary plus benefits. In addition, the vesting of his outstanding options will be accelerated by six months upon such termination. If we terminate Dr. Fawzy's employment without cause during the 24 month period immediately following a change of control or Dr. Fawzy resigns with good reason during the 24 month period immediately following a change of control, we are required to pay him a severance of up to eighteen months of his base salary and his target annual bonus plus benefits. In addition, his outstanding options would vest in full upon such termination. Dr. Fawzy's employment agreement provides for an increase in base salary of \$50,000 annually, upon a future closing of an additional round of financing of at least \$15 million and the initiation of the first Phase III study of MAT9001. Dr. Fawzy will also be subject to a customary non-disclosure agreement, pursuant to which Dr. Fawzy has agreed to be subject to a non-compete during the term of his employment and for a period of eighteen months following termination of his employment.

On April 8, 2013, we entered into a consulting agreement with Mr. Gaglione. From April 8, 2013 until October 31, 2013, Mr. Gaglione received an aggregate of \$45,964 for providing services as a consultant. On October 31, 2013, Mr. Gaglione became a full time employee and entered into an employment letter with us. Under the terms of the letter, Mr. Gaglione serves as our Vice President of Finance and Accounting and Interim Chief Financial Officer, and receives a base salary of \$210,000. In addition, Mr. Gaglione will be eligible to receive an annual bonus, which is targeted at 20% of his salary but which may be adjusted by our Compensation Committee based on his individual performance and our performance as a whole. Mr. Gaglione will be eligible to receive option grants at the discretion of our Compensation Committee. On November 1, 2013, Mr. Gaglione received a grant of 200,000 options at an exercise price of \$0.94 per share. The options will vest in equal monthly installments over three years from the date of grant. Mr. Gaglione's employment is at will; however, we have agreed to provide advance written notice and eight (8) months of his then-current base salary as severance in the event of termination without cause (as defined in our equity compensation plan).

On September 3, 2013, we entered into an employment agreement with Mr. Jabbour for a period of three years, which will be effective as of October 4, 2013. Under the terms of Mr. Jabbour's employment agreement, Mr. Jabbour received a signing bonus of \$75,000 and will receive a base salary of \$275,000 per year. In addition, Mr. Jabbour will also be eligible to receive an annual bonus, which is targeted at 30% of his base salary but which may be adjusted by our Compensation Committee based on his individual performance and our performance as a whole. Mr. Jabbour will also be eligible to receive option grants at the discretion of our Compensation Committee. On October 4, 2013, Mr. Jabbour received a grant of 200,000 options at an exercise of \$0.94 per share. The options will vest in equal monthly installments over three years from the date of grant. Mr. Jabbour also received a grant of 150,000 at an exercise price of \$0.94 per share, which vests in equal monthly installments over three years beginning on August 1, 2013. If we terminate Mr. Jabbour's employment without cause or Mr. Jabbour resigns with good reason, we are required to pay him a severance of up to nine months of his base salary plus benefits. In addition, the vesting of his outstanding options will be accelerated by six months upon such termination. If we terminate Mr. Jabbour's employment without cause during the 24 month period immediately following a change of control or Mr. Jabbour resigns with good reason during the 24 month period immediately following a change of control, we are required to pay him a severance of up to eighteen months of his base salary and his target annual bonus plus benefits. In addition, his outstanding options would vest in full upon such termination. Mr. Jabbour's employment agreement provides for an increase in base salary of \$50,000 annually, upon the closing of an additional round of financing of at least \$15 million and the initiation of the first Phase III study of MAT9001. Mr. Jabbour will also be subject to a customary non-disclosure agreement, pursuant to which Mr. Jabbour has agreed to be subject to a non-compete during the term of his employment and for a period of eighteen months following termination of his employment.

From time to time, as needed, we will employ other consultants to support our various business and research and development activities. Our consulting agreements typically provide for 14 to 30 days termination notice.

### Outstanding Equity Awards at Fiscal Year-End Table – 2013

The following table summarizes, for each of the named executive officers, the number of shares of common stock underlying outstanding stock options held as of December 31, 2013.

Name	Option Awards			
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date
Roelof Rongen	48,611	301,389	\$ 0.94	October 2, 2023
George Bobotas	48,611	301,389	\$ 0.94	October 2, 2023
Abdel A. Fawzy	48,611	301,389	\$ 0.94	October 2, 2023

### Director Compensation

In October 2013, we adopted a compensation policy pursuant to which our non-employee directors receive annualized compensation of \$20,000 per year, with an additional \$10,000 per year for the Chairman of the Board and the Chair of the Audit Committee, as well as an



additional \$5,000 per year for the Chairs of the Compensation and Nomination & Governance Committees. In addition, our independent board members will receive an option grant of 150,000 options, with the exception of the Chairman of the Board, who will be granted 200,000 options.

**Director Compensation Table – 2013**

The following table summarizes the annual compensation for our non-employee directors during 2013.

Name	Fees		Total (\$)
	Earned or Paid in Cash (\$)	Option Awards (\$) (1)	
Herbert Conrad	18,750	26,059	44,809
Stefano Ferrari	12,500	19,900	32,400
Jerome Jabbour (2)	6,250	-	6,250
James S. Scibetta	7,500	4,264	11,764
Adam Stern	10,000	14,214	24,214

(1) Amounts reflect the grant date fair value of option awards granted in 2013 in accordance with Accounting Standards Codification Topic 718. These amounts do not correspond to the actual value that will be recognized by the directors.

(2) Mr. Jabbour served as an independent director through October 4, 2013.

## 2013 Equity Compensation Plan

### General

On August 2, 2013, our Board of Directors adopted an Equity Compensation Plan (the "2013 Plan") pursuant to the terms described herein in connection with the closing of the Merger. The 2013 Plan was approved by the stockholders on August 7, 2013

The general purpose of the 2013 Plan is to provide an incentive to our employees, directors, consultants and advisors by enabling them to share in the future growth of our business. Our Board of Directors believes that the granting of stock options, restricted stock awards, unrestricted stock awards and similar kinds of equity-based compensation promotes continuity of management and increases incentive and personal interest in the welfare of our Company by those who are primarily responsible for shaping and carrying out our long range plans and securing our growth and financial success.

Our Board of Directors believes that the 2013 Plan will advance our interests by enhancing our ability to (a) attract and retain employees, consultants, directors and advisors who are in a position to make significant contributions to our success; (b) reward our employees, consultants, directors and advisors for these contributions; and (c) encourage employees, consultants, directors and advisors to take into account our long-term interests through ownership of our shares.

### Description of the 2013 Equity Compensation Plan

The following description of the principal terms of the 2013 Plan is a summary and is qualified in its entirety by the full text of the 2013 Plan, which is attached as Exhibit 10.6 hereto.

**Administration.** The 2013 Plan will be administered by the Compensation Committee of our Board of Directors. The Compensation Committee may grant options to purchase shares of our common stock, stock appreciation rights, restricted stock units, restricted or unrestricted shares of our common stock, performance shares, performance units, other cash-based awards and other stock-based awards. The Compensation Committee also has broad authority to determine the terms and conditions of each option or other kind of equity award, adopt, amend and rescind rules and regulations for the administration of the 2013 Plan and amend or modify outstanding options, grants and awards. The Compensation Committee may delegate authority to the chief executive officer and/or other executive officers to grant options and other awards to employees (other than themselves), subject to applicable law and the 2013 Plan. No options, stock purchase rights or awards may be made under the Plan on or after the ten year anniversary of the adoption of the 2013 Plan by our Board of Directors, but the 2013 Plan will continue thereafter while previously granted options, stock appreciation rights or awards remain subject to the 2013 Plan.

**Eligibility.** Persons eligible to receive options, stock appreciation rights or other awards under the 2013 Plan are those employees, consultants, advisors and directors of our Company and our subsidiaries who, in the opinion of the Compensation Committee, are in a position to contribute to our success.

**Shares Subject to the 2013 Plan.** The aggregate number of shares of common stock available for issuance in connection with options and awards granted under the 2013 Plan will be a number of shares of common stock equal to fifteen percent (15%) of the shares of Holdings common stock outstanding, on a fully diluted basis as of the date the 2013 Plan was adopted, or 8,250,000 shares, subject to customary adjustments for stock splits, stock dividends or similar transactions. Incentive Stock Options may be granted under the 2013 Plan with respect to all of those shares. If any option or stock appreciation right granted under the 2013 Plan terminates without having been exercised in full or if any award is forfeited, or if shares of common stock are withheld to cover withholding taxes on options or other awards, the number of shares of common stock as to which such option or award was forfeited, or which were withheld, will be available for future grants under the 2013 Plan. No employee, consultant, advisor or director may receive options or stock appreciation rights relating to more than 1,500,000 shares of our common stock in the aggregate in any calendar year.

**Terms and Conditions of Options.** Options granted under the 2013 Plan may be either “incentive stock options” that are intended to meet the requirements of Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”) or “nonstatutory stock options” that do not meet the requirements of Section 422 of the Code. The Compensation Committee will determine the exercise price of options granted under the 2013 Plan. The exercise price of stock options may not be less than the fair market value, on the date of grant, per share of our common stock issuable upon exercise of the option (or 110% of fair market value in the case of incentive options granted to a ten-percent stockholder).

If on the date of grant the common stock is listed on a stock exchange or is quoted on the automated quotation system of Nasdaq, the fair market value shall generally be the closing sale price on the last trading day before the date of grant. If no such prices are available, the fair market value shall be determined in good faith by the Compensation Committee based on the reasonable application of a reasonable valuation method.

No option may be exercisable for more than ten years (five years in the case of an incentive stock option granted to a ten-percent stockholder) from the date of grant. Options granted under the 2013 Plan will be exercisable at such time or times as the Compensation Committee prescribes at the time of grant. No employee may receive incentive stock options that first become exercisable in any calendar year in an amount exceeding \$100,000. The Compensation Committee may, in its discretion, permit a holder of an option to exercise the option before it has otherwise become exercisable, in which case the shares of our common stock issued to the recipient will continue to be subject to the vesting requirements that applied to the option before exercise.

Generally, the option price may be paid (a) in cash or by certified bank check, (b) through delivery of shares of our common stock having a fair market value equal to the purchase price, or (c) a combination of these methods. The Compensation Committee is also authorized to establish a cashless exercise program and to permit the exercise price (or tax withholding obligations) to be satisfied by reducing from the shares otherwise issuable upon exercise a number of shares having a fair market value equal to the exercise price.

No option may be transferred other than by will or by the laws of descent and distribution, and during a recipient’s lifetime an option may be exercised only by the recipient. However, the Compensation Committee may permit the holder of an option, stock appreciation right or other award to transfer the option, right or other award to immediate family members or a family trust for estate planning purposes. The Compensation Committee will determine the extent to which a holder of a stock option may exercise the option following termination of service with us.

**Stock Appreciation Rights.** The Compensation Committee may grant stock appreciation rights independent of or in connection with an option. The Compensation Committee will determine the other terms applicable to stock appreciation rights. The exercise price per share of a stock appreciation right will be determined by the Compensation Committee, but will not be less than 100% of the fair market value of a share of our common stock on the date of grant, as determined by the Compensation Committee. The maximum term of any SAR granted under the 2013 Plan is ten years from the date of grant. Generally, each SAR stock appreciation right will entitle a participant upon exercise to an amount equal to:

- the excess of the fair market value on the exercise date of one share of our common stock over the exercise price, *multiplied by*
- the number of shares of common stock covered by the stock appreciation right.

Payment may be made in shares of our common stock, in cash, or partly in common stock and partly in cash, all as determined by the Compensation Committee.

**Restricted Stock and Restricted Stock Units.** The Compensation Committee may award restricted common stock and/or restricted stock units under the 2013 Plan. Restricted stock awards consist of shares of stock that are transferred to a participant subject to restrictions that may result in forfeiture if specified conditions are not satisfied. Restricted stock units confer the right to receive shares of our common stock, cash, or a combination of shares and cash, at a future date upon or following the attainment of certain conditions specified by the Compensation Committee. The Compensation Committee will determine the restrictions and conditions applicable to each award of restricted stock or restricted stock units, which may include performance-based conditions. Dividends with respect to restricted stock may be paid to the holder of the shares as and when dividends are paid to stockholders or at the time that the restricted stock vests, as determined by the Compensation Committee. Dividend equivalent amounts may be paid with respect to restricted stock units either when cash dividends are paid to stockholders or when the units vest. Unless the Compensation Committee determines otherwise, holders of restricted stock will have the right to vote the shares.

**Performance Shares and Performance Units.** The Compensation Committee may award performance shares and/or performance units under the 2013 Plan. Performance shares and performance units are awards, denominated in either shares or U.S. dollars, which are earned during a specified performance period subject to the attainment of performance criteria, as established by the Compensation Committee. The Compensation Committee will determine the restrictions and conditions applicable to each award of performance shares and performance units.

**Other Stock-Based and Cash-Based Awards.** The Compensation Committee may award other types of equity-based or cash-based awards under the 2013 Plan, including the grant or offer for sale of shares of our common stock that do not have vesting requirements and the right to receive one or more cash payments subject to satisfaction of such conditions as the Compensation Committee may impose.

**Section 162(m) Compliance.** If stock or cash-based awards are intended to satisfy the conditions for deductibility under Section 162(m) of the Code as “performance-based compensation,” the performance criteria will be selected from among the following, which may be applied to our Company as a whole, or to an individual recipient, or to a department, unit, division or function within the Company or an affiliate, and they may apply on a pre- or post-tax basis, either alone or relative to the performance of other businesses or individuals (including industry or general market indices): (a) earnings (either in the aggregate or on a per-share basis, reflecting dilution of shares as the Compensation Committee deems appropriate and, if the Compensation Committee so determines, net of or including dividends) before or after interest and taxes (“EBIT”) or before or after interest, taxes, depreciation, and amortization (“EBITDA”); (b) gross or net revenue or changes in annual revenues; (c) cash flow(s) (including either operating or net cash flows); (d) financial return ratios; (e) return on invested capital or assets, total stockholder return, stockholder return based on growth measures or the attainment by the shares of a specified value for a specified period of time, share price, or share price appreciation; (f) earnings growth or growth in earnings per share; (g) return measures, including return or net return on assets, net assets, equity, capital, investment, or gross sales; (h) adjusted pre-tax margin; (i) pre-tax profits; (j) operating margins; (k) operating profits; (l) operating expenses; (m) dividends; (n) net income or net operating income; (o) growth in operating earnings or growth in earnings per share; (p) value of assets; (q) market share or market penetration with respect to specific designated products or product groups and/or specific geographic areas; (r) aggregate product price and other product measures; (s) expense or cost levels, in each case, where applicable, determined either on a company-wide basis or in respect of any one or more specified divisions; (t) reduction of losses, loss ratios or expense ratios; (u) reduction in fixed costs; (v) operating cost management; (w) cost of capital; (x) debt reduction; (y) productivity improvements; (z) average inventory turnover; or (aa) satisfaction of specified business expansion goals or goals relating to acquisitions or divestitures.

At the end of the performance period established in connection with any award, the Compensation Committee will determine the extent to which the performance goal or goals established for such award have been attained, and shall determine, on that basis, the number of performance shares or performance units included in such award that have been earned and as to which payment will be made. The Compensation Committee will certify in writing the extent to which it has determined that the performance goal or goals established by it for such award have been attained.

With respect to awards intended to be performance-based compensation under Section 162(m) of the Code, no participant of the 2013 Plan may receive restricted stock units, restricted shares, performance shares, performance units or other stock-based awards relating to more than 1,500,000 shares of our common stock in the aggregate in any fiscal year of the Company and the maximum dollar value payable to any participant for a fiscal year of the Company with respect to any awards under the 2013 Plan payable in cash is \$500,000.

***Effect of Certain Corporate Transactions.*** The Compensation Committee may, at the time of the grant of an award, provide for the effect of a change in control (as defined in the 2013 Plan) on any award, including (i) accelerating or extending the time periods for exercising, vesting in, or realizing gain from any award, (ii) eliminating or modifying the performance or other conditions of an award, or (iii) providing for the cash settlement of an award for an equivalent cash value, as determined by the Compensation Committee. The Compensation Committee may, in its discretion and without the need for the consent of any recipient of an award, also take one or more of the following actions contingent upon the occurrence of a change in control: (a) cause any or all outstanding options and stock appreciation rights to become immediately exercisable, in whole or in part; (b) cause any other awards to become non-forfeitable, in whole or in part; (c) cancel any option or stock appreciation right in exchange for a substitute option; (d) cancel any award of restricted stock, restricted stock units, performance shares or performance units in exchange for a similar award of the capital stock of any successor corporation; (e) redeem any restricted stock, restricted stock unit, performance share or performance unit for cash and/or other substitute consideration with a value equal to the fair market value of an unrestricted share of our common stock on the date of the change in control; (f) cancel any option or stock appreciation right in exchange for cash and/or other substitute consideration based on the value of our common stock on the date of the change in control, and cancel any option or stock appreciation right without any payment if its exercise price exceeds the value of our common stock on the date of the change in control; or (g) make such other modifications, adjustments or amendments to outstanding awards as the Compensation Committee deems necessary or appropriate.

***Amendment, Termination.*** The Compensation Committee may amend the terms of awards in any manner not inconsistent with the 2013 Plan, provided that no amendment shall adversely affect the rights of a participant with respect to an outstanding award without the participant's consent. In addition, our board of directors may at any time amend, suspend, or terminate the 2013 Plan, provided that (i) no such amendment, suspension or termination shall materially and adversely affect the rights of any participant under any outstanding award without the consent of such participant and (ii) to the extent necessary to comply with any applicable law or stock exchange rule, the 2013 Plan requires us to obtain stockholder consent. Stockholder approval is required for any plan amendment that increases the number of shares of common stock available for issuance under the 2013 Plan or changes the persons or classes of persons eligible to receive awards.

#### **Tax Withholding**

As and when appropriate, we shall have the right to require each optionee purchasing shares of common stock and each grantee receiving an award of shares of common stock under the 2013 Plan to pay any federal, state or local taxes required by law to be withheld.

#### **Option Grants and Stock Awards**

The grant of options and other awards under the 2013 Plan is discretionary, and we cannot determine now the specific number or type of options or awards to be granted in the future to any particular person or group.

## PRINCIPAL STOCKHOLDERS

The following table sets forth the number of shares of common stock beneficially owned as of March 31, 2014 by:

- each of our stockholders who is known by us to beneficially own 5% or more of our common stock;
- each of our executive officers;
- each of our directors; and
- all of our directors and current executive officers as a group.

Beneficial ownership is determined based on the rules and regulations of the Commission. A person has beneficial ownership of shares if such individual has the power to vote and/or dispose of shares. This power may be sole or shared and direct or indirect. Applicable percentage ownership in the following table is based on 32,000,000 shares outstanding as of March 31, 2014. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock that are subject to options or warrants held by that person and exercisable as of, or within 60 days of, March 31, 2014. These shares, however, are not counted as outstanding for the purposes of computing the percentage ownership of any other person(s). Except as may be indicated in the footnotes to this table and pursuant to applicable community property laws, each person named in the table has sole voting and dispositive power with respect to the shares of common stock set forth opposite that person's name. Unless indicated below, the address of each individual listed below is c/o Matinas BioPharma Holdings, Inc., 1545 Route 206 South, Suite 302, Bedminster, NJ 07921.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
<i>5% Stockholders</i>		
Jennifer Lorenzo (1)	2,850,000	8.6%
George Karfunkel (2)	1,800,000	5.5%
Laurence G. Allen (3)	2,111,250	6.4%
<i>Named Executive Officers, Executive Officers and Directors:</i>		
Roelof Rongen (4)	3,514,408	10.9%
Jerome Jabbour (5)	845,485	2.6%
Herbert Conrad (6)	1,552,952	4.7%
Stefano Ferrari (7)	659,896	2.0%
Adam Stern (8)	4,505,483	13.1%
Gary Gaglione (9)	38,889	*
Abdel A. Fawzy, Ph.D.(10)	1,805,815	5.6%
George Bobotas, Ph.D. (11)	1,464,147	4.6%
James S. Scibetta (12)	29,167	*
All current directors and executive officers as a group(13)	14,416,242	40.0%

\* Less than 1%

(1) Includes (i) 75,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and (ii) 1,750,000 shares of common stock and 875,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by GJG Life Sciences LLC, which is beneficially-owned by Ms. Lorenzo.

(2) Includes 600,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014.

(3) Includes (i) 100,000 shares of common stock and 50,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and registered in the name of Mr. Allen's individual retirement account, (ii) 50,000 shares of common stock and 25,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by ACP Partners, LP, which is beneficially-owned by Mr. Allen, (iii) 1,000,000 shares of common stock and 500,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by ACP X, LP, which is beneficially-owned by Mr. Allen. (iv) 86,250 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by NYPPEX, LLC, which is beneficially owned by Mr. Allen, and (v) 200,000 shares of common stock and 100,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by LGA Investments Family Limited Partnership, which is beneficially owned by Mr. Allen.

(4) Includes 97,222 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Does not include 258,778 options that are not exercisable within sixty days of March 31, 2014.

(5) Includes 86,111 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Does not include 263,889 options that are not exercisable within sixty days of March 31, 2014.

(6) Includes (i) 875,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and (ii) 76,389 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Does not include 198,611 options that are not exercisable within sixty days of March 31, 2014.

- (7) Includes (i) 351,563 shares of common stock and 250,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by 1010 Holdings LLC, which is beneficially owned by Mr. Ferrari and (ii) 58,333 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Does not include 151,667 options that are not exercisable within sixty days of March 31, 2014.
- (8) Includes (i) 2,013,816 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014, (ii) 41,667 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014, (iii) 200,000 shares of common stock and 100,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by Pavilion Capital Partners, LLC, which is wholly-owned by Mr. Stern, (iv) 200,000 shares of common stock and 100,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by Piper Ventures Partners, LLC, which is wholly-owned by Mr. Stern and (v) 250,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of March 31, 2014 and are owned by SternAegis Advisers LLC, which is wholly-owned by Mr. Stern. Does not include 108,333 options that are not exercisable within sixty days of March 31, 2014.
- (9) Includes 38,889 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Excludes 161,111 shares of common stock issuable upon exercise of options that are not exercisable within sixty days of March 31, 2014.
- (10) Includes 97,222 shares of common stock issuable upon exercise of options that are exercisable within 60 days of March 31, 2014. Does not include 252,778 options that are not exercisable within sixty days of March 31, 2014.
- (11) Includes (i) 683,438 shares held by Mr. Bobotas and 683,438 shares held by his wife and (ii) 97,222 shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014. Does not include 252,778 options that are not exercisable within sixty days of March 31, 2014.
- (12) Includes 29,167 shares of common stock issuable upon exercise of options that are exercisable within 60 days of March 31, 2014. Does not include 120,833 options that are not exercisable within sixty days of March 31, 2014 .
- (13) See notes (4) through (12).



## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our named executive officers and directors, we describe below each transaction or series of similar transactions, since January 1, 2010, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

Compensation and indemnification arrangements for our named executive officers and directors are described in the section entitled “Executive and Director Compensation.”

### Formation of Holdings

In connection with our formation in June 2013, we sold an aggregate of 7,500,000 shares of our common stock and 3,750,000 warrants, the Formation Warrants, to purchase 3,750,000 shares of our common stock, for an aggregate of \$375,000 (at a purchase price of \$0.10 for two shares and one warrant), including 2,000,000 shares and warrants to purchase 1,000,000 shares of our common stock to Adam Stern and entities owned by Mr. Stern. Mr. Stern is a member of our board of directors. In addition, at such time, we sold Mr. Stern Formation Warrants to purchase an additional 250,000 shares of our common stock, for which he paid \$10,000 (at a purchase price of \$0.04 per warrant) Formation Warrants. Pursuant to the registration statement of which this prospectus is a part, we are registering the shares of common stock underlying the Formation Warrants issued in connection with our formation for public resale by the selling stockholders named herein and their assigns.

### 2013 Private Placement

In July and August 2013, we completed a private placement, the 2013 Private Placement, under which we sold an aggregate of 15,000,000 shares of our common stock and warrants to purchase an aggregate of 7,500,000 shares of our common stock with an exercise price of \$2.00 per share, which warrants are exercisable for a period of five years from the initial closing date, the Investor Warrants. Herbert Conrad, our chairman of the board, purchased 250,000 shares of common stock and Investor Warrants to purchase 125,000 shares of our common stock. Aegis Capital Corp., or Aegis, acted as the placement agent, or Placement Agent, for the 2013 Private Placement. The gross proceeds to us from the 2013 Private Placement were \$15 million.

In connection with the 2013 Private Placement, we paid the Placement Agent (i) a cash fee of \$1,500,000 and (ii) a non-accountable expense allowance equal to \$450,000. Mr. Stern is an affiliate of Aegis. In addition, as part of its compensation for acting as placement agent for the 2013 Private Placement, we issued (x) warrants to the Placement Agent to purchase 750,000 shares of our common stock with an exercise price of \$2.00 per share and (y) warrants to the Placement Agent to purchase 1,500,000 shares of our common stock with an exercise price of \$1.00 per share. Such warrants, the Placement Agent Warrants, contain a “cashless exercise” feature and are exercisable at any time prior to July 30, 2018.

In connection with the closing of the 2013 Private Placement, the Placement Agent had a right to appoint one member of our Board of Directors for a two-year term from the initial closing. Adam Stern, the Aegis Nominee, was appointed to the Board of Directors at the initial closing and his successor, if any, will be chosen by the Placement Agent, subject to the reasonable approval of the Company and the Voting Agreement described below.

We have agreed to engage the Placement Agent as our warrant solicitation agent in the event the Investor Warrants and the Offering 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 Investor Warrants and the Offering Warrants following such redemption.

## **Consulting Agreement**

We also entered into a consulting agreement with the Placement Agent. The consulting agreement has a term of 12 months pursuant to which we pay the Placement Agent \$20,000 per month. Under the terms of the consulting agreement, the Placement Agent will provide customary financial advisory services as are reasonably requested by us, including consulting services for financing and capital markets activity, mergers, acquisitions, joint ventures and licensing agreements. This consulting agreement terminates on July 30, 2014.

## **Voting Agreement**

In connection with the initial closing of the 2013 Private Placement, the stockholders of Matinas BioPharma prior to the Merger and the 2013 Private Placement (the "Matinas Stockholders") and the stockholders of Holdings prior to the Merger (the "Holdings Stockholders"), entered into a Voting Agreement (the "Voting Agreement"). Pursuant to the terms of the Voting Agreement, (i) the Matinas Stockholders will have the right to nominate four (4) members to our Board (the "Matinas Stockholders' Nominees"), (ii) the Holdings Stockholders will vote in favor of the election and removal of the Matinas Stockholders' Nominees and (iii) the Holdings Stockholders shall nominate the Aegis Nominee to our Board and (iv) the Matinas Stockholders shall vote in favor of the election and removal of the Aegis Nominee. The Voting Agreement will expire upon the earlier of (i) the approval of at least 75% of the Matinas Stockholders and the Holdings Stockholders voting together based upon their ownership of our common stock or (ii) the closing of a firm commitment underwritten public offering of shares of our common stock resulting in gross proceeds of at least \$20 million.

## **Merger Transaction**

On July 11, 2013, Matinas BioPharma entered into the Merger Agreement with Merger Sub, a wholly owned subsidiary of Holdings. Pursuant to the terms of the Merger Agreement, as a condition of and contemporaneously with the initial closing of the 2013 Private Placement, Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly owned subsidiary of Holdings. In connection with the Merger, all shares of common stock and preferred stock of Matinas BioPharma were cancelled and the stockholders of Matinas BioPharma received an aggregate of 9,000,000 shares of our common stock and warrants to purchase 1,000,000 shares of our common stock at an exercise price of \$2.00 per share (the "Merger Warrants"), including Herbert Conrad, our chairman of the board, who received 351,563 shares of our common stock and 250,000 Merger Warrants; Roelof Rongen, our president and chief executive officer, who received 3,417,186 shares of our common stock, Abdel A. Fawzy, our executive vice president, pharmaceutical development and supply chain development, who received 1,708,593 shares of our common stock; Geroge Bobotas, our executive vice president and chief scientific officer, and his spouse, who received an aggregate of 1,366,875 shares of our common stock; Jerome Jabbour, our executive vice president, chief business officer and general counsel, who received 759,374 shares of our common stock and Stefano Ferrari, a member of our board of directors, through an entity controlled by him, received 351,563 shares of our common stock and 250,000 Merger Warrants.

## **Warrant Private Placement**

Contemporaneously with the initial closing of the 2013 Private Placement, we sold 500,000 Private Placement Warrants to Herbert Conrad, our chairman of the board, for a purchase price of \$0.04 per warrant. The Private Placement Warrants have an exercise price of \$2.00 per share. The Private Placement Warrants were offered to all preferred stockholders of Matinas BioPharma prior to the Merger, including Mr. Conrad. See the section entitled "Description of Capital Stock –Warrants" for a discussion of the terms of the Private Placement Warrants.

## **Vendor Agreement**

Since January 1, 2011, we have submitted orders for the purchase of an omega-3 fatty acid concentrate from KD-Pharma Bexbach GmbH, or KD Pharma, totaling approximately \$157,000. Mr. Ferrari, a member of the our board, is the brother of a part owner of the holding company that owns KD Pharma.

## **Indemnification Agreements**

We plan to enter into indemnification agreements with each of our current directors and executive officers. The indemnification agreements will provide for indemnification against expenses, judgments, fines and penalties actually and reasonably incurred by an indemnitee in connection with threatened, pending or completed actions, suits or other proceedings, subject to certain limitations. The indemnification agreements also will provide for the advancement of expenses in connection with a proceeding prior to a final, nonappealable judgment or other adjudication, provided that the indemnitee provides an undertaking to repay to us any amounts advanced if the indemnitee is ultimately found not to be entitled to indemnification by us. The indemnification agreement will set forth procedures for making and responding to a request for indemnification or advancement of expenses, as well as dispute resolution procedures that will apply to any dispute between us and an indemnitee arising under the Indemnification Agreements.

## **Policies and Procedures for Related Party Transactions**

Prior to the effectiveness of the registration of which this prospectus forms a part, we plan to adopt a policy that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock, any members of the immediate family of any of the foregoing persons and any firms, corporations or other entities in which any of the foregoing persons is employed or is a partner or principal or in a similar position or in which such person has a 5% or greater beneficial ownership interest, which we refer to collectively as related parties, are not permitted to enter into a transaction with us without the prior consent of our board of directors acting through the audit committee or, in certain circumstances, the chairman of the audit committee. Any request for us to enter into a transaction with a related party, in which the amount involved exceeds \$100,000 and such related party would have a direct or indirect interest must first be presented to our audit committee, or in certain circumstances the chairman of our audit committee, for review, consideration and approval. In approving or rejecting any such proposal, our audit committee, or the chairman of our audit committee, is to consider the material facts of the transaction, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances, the extent of the benefits to us, the availability of other sources of comparable products or services and the extent of the related party's interest in the transaction.

## DESCRIPTION OF CAPITAL STOCK

Our current Certificate of Incorporation authorizes us to issue:

- 150,000,000 shares of common stock, par value \$0.0001 per share; and
- 10,000,000 shares of preferred stock, par value \$0.0001 per share, none of which have yet been designated.

As of March 31, 2014, there were 32,000,000 shares of common stock outstanding and no shares of preferred stock outstanding. The number of shares of common stock outstanding as of March 31, 2014 does not include (i) 15,250,000 shares of common stock issuable upon the exercise of warrants and (ii) 3,160,000 shares of our common stock issuable upon the exercise of outstanding stock options.

The following statements are summaries only of the material provisions of our authorized capital stock and are qualified in their entirety by reference to our Certificate of Incorporation, which is filed as an exhibit to the registration statement of which this prospectus forms a part.

### Common Stock

*Voting.* The holders of our common stock are entitled to one vote for each share held of record on all matters on which the holders are entitled to vote (or consent to).

*Dividends.* The holders of our common stock are entitled to receive, ratably, dividends only if, when and as declared by our Board of Directors out of funds legally available therefor and after provision is made for each class of capital stock having preference over the common stock (including the common stock).

*Liquidation Rights.* In the event of our liquidation, dissolution or winding-up, the holders of our common stock are entitled to share, ratably, in all assets remaining available for distribution after payment of all liabilities and after provision is made for each class of capital stock having preference over the common stock (including the common stock).

*Conversion Rights.* The holders of our common stock have no conversion rights.

*Preemptive and Similar Rights.* The holders of our common stock have no preemptive or similar rights.

*Redemption/Put Rights.* There are no redemption or sinking fund provisions applicable to the common stock. All of the outstanding shares of our common stock are fully-paid and nonassessable.

*Transfer Restrictions.* Shares of our common stock are subject to transfer restrictions pursuant to certain lock-up agreements. See "Lock-Up Agreements."

### Preferred Stock

We are authorized to issue up to 10,000,000 shares of preferred stock, par value \$0.0001 per share, with such designations, rights, and preferences as may be determined from time to time by our Board of Directors. Accordingly, our Board of Directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting, or other rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying or preventing a change in control of our company, all without further action by our stockholders. We have no shares of our preferred stock outstanding.

### Warrants

As of March 31, 2014, we had outstanding warrants to purchase an aggregate of 15,250,000 shares of common stock at exercise prices ranging from \$1.00 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. The warrants may be exercised on a “cashless” basis in certain circumstances, except the Placement Agent Warrants which may be exercised on a “cashless” basis at any time.

The exercise price and the number of warrant shares purchasable upon the exercise of the Investor Warrants are subject to adjustment upon the occurrence of certain events, including stock dividends, stock splits, combinations and reclassifications of our capital stock. Additionally, an adjustment would be made in the case of a reclassification or exchange, consolidation or merger of our company with or into another corporation (other than a consolidation or merger in which we are the surviving corporation) or sale of all or substantially all of our assets in order to enable holders of the Warrants to acquire the kind and number of shares of stock or other securities or property receivable in such event by a holder of the number of shares common stock that might otherwise have been purchased upon the exercise of the Warrants.

We may call the warrants, other than the Placement Agent Warrants, at any time the common stock trades above \$5.00 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 we can only call the Investor warrants for redemption, if we also call all other warrants for redemption on the terms described above. The Placement Agent Warrants do not have a redemption feature.

### **Options**

As of March 31, 2014, we had outstanding options to purchase an aggregate of 3,160,000 shares of our common stock with an exercise price of \$0.94 per share.

### **Lock-Up Agreements**

In connection with our 2013 Private Placement, purchasers in the 2013 Private Placement agreed not to sell or otherwise dispose of an aggregate of 15,000,000 shares of the shares of our common stock purchased in the 2013 Private Placement and shares underlying the Investor Warrants until the earlier (i) October 3, 2014 and (ii) ninety days following the closing of an underwritten public offering of our securities.

### **Registration Rights**

In connection with the 2013 Private Placement, we entered into a registration rights agreement, the Registration Rights Agreement, with the private placement investors, the placement agent and the holders of our outstanding warrants. Pursuant to the Registration Rights Agreement, we filed a registration statement covering the resale of the shares of common stock and the shares of common stock underlying the warrants, issued in the 2013 Private Placement, as well as the shares of common stock underlying the formation warrants, the merger warrants, and the private placement warrants, which was declared effective on February 11, 2014. We are required to keep the registration statement continuously effective under the Securities Act of 1933, as amended (the “Securities Act”), until the earlier of the date when all the registrable securities covered by the registration statement have been sold or such time as all of the registrable securities covered by the registration statement can be sold under Rule 144 without any volume limitations.

If this registration statement was not declared effective on or before the Effectiveness Deadline, we would have been required to pay to each holder of registrable securities purchased in the 2013 Private Placement an amount in cash equal to one-half of one percent (0.5%) of such holder’s investment amount on every thirty (30) day anniversary of such Effectiveness Deadline until such failure was cured.

We shall keep the registration statement “evergreen” for one (1) year from the date it is declared effective by the Commission or until Rule 144 of the Securities Act is available to the holders of registrable securities purchased in the 2013 Private Placement with respect to all of their shares, whichever is earlier.

We will pay all costs and expenses incurred by us in complying with our obligations to file registration statements pursuant to the registration rights agreement, except that the selling holders will be responsible for their shares of the attorney's fees and expenses and any commissions or other compensation to selling agents and similar persons; provided, however, we will permit a single firm of counsel designated as selling stockholders' counsel by the holders of a majority of the shares of the registrable securities being registered pursuant to the registration rights agreement to review the subject registration statement (and all amendments and/or supplements thereto) for a reasonable period of time prior to their filing and reimburse their legal fees up to \$25,000 per registration statement.

### **Transfer Agent and Registrar**

VStock Transfer, LLC is the transfer agent and registrar for our common stock.

### **Quotation of Securities**

As of the date of this prospectus, a Form 211 has been filed with FINRA by a broker/dealer which will act as our market maker. It is anticipated that our common stock will be quoted on the OTC Bulletin Board and/or OTCQB on or promptly after the date of this prospectus, provided, however, that is no assurance that our common stock will actually be approved and quoted on the OTC Bulletin Board or OTCQB.

### **Anti-Takeover Effect of Delaware Law, Certain Charter and Bylaw Provisions**

Our certificate of incorporation and bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or tender offers or delaying or preventing a change of control of our company. These provisions are as follows:

- they provide that special meetings of stockholders may be called only by the board of directors, President or our Chairman of the Board of Directors, or at the request in writing by stockholders of record owning at least fifty (50%) percent of the issued and outstanding voting shares of common stock;
- they do not include a provision for cumulative voting in the election of directors. Under cumulative voting, a minority stockholder holding a sufficient number of shares may be able to ensure the election of one or more directors. The absence of cumulative voting may have the effect of limiting the ability of minority stockholders to effect changes in our board of directors; and
- they allow us to issue, without stockholder approval, up to 10,000,000 shares of preferred stock that could adversely affect the rights and powers of the holders of our common stock.

We are subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in the following prescribed manner:

- prior to the time of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; and

- on or subsequent to the time of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, for purposes of Section 203, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, owned 15% or more of a corporation’s outstanding voting securities.

## SELLING STOCKHOLDERS

The following table sets forth information as of the date of this prospectus, to our knowledge, about the beneficial ownership of our common stock by the selling stockholders both before and immediately after the offering.

All of the selling stockholders received their securities in: (i) our formation, (ii) 2013 Private Placement; and/or (iii) the Warrant Private Placement, in each case prior to the initial filing date of the registration statement of which this prospectus is a part. We believe that the selling stockholders have sole voting and investment power with respect to all of the shares of common stock beneficially owned by them unless otherwise indicated. We believe that all securities purchased by broker-dealers or affiliates of broker-dealers were purchased by such persons and entities in the ordinary course of business and at the time of purchase, such purchasers did not have any agreements or understandings, directly or indirectly, with any person to distribute such securities.

The percent of beneficial ownership for the selling stockholders is based on 32,000,000 shares of common stock outstanding as of the date of this prospectus. Warrants to purchase shares of our common stock held by certain investors that are currently exercisable or exercisable within 60 days of the date of this prospectus are considered outstanding and beneficially owned by such investors for the purpose of computing the percentage ownership of their respective percentage ownership but are not treated as outstanding for the purpose of computing the percentage ownership of any other stockholder. Unless otherwise stated below, to our knowledge, none of the selling stockholders has had a material relationship with us other than as a stockholder at any time within the past three years or has ever been one of our officers or directors.

Pursuant to Rules 13d-3 and 13d-5 of the Exchange Act, beneficial ownership includes any shares of our common stock as to which a stockholder has sole or shared voting power or investment power, and also any shares of our common stock which the stockholder has the right to acquire within 60 days, including upon exercise of warrants to purchase shares of our common stock.

The shares of common stock being offered pursuant to this prospectus may be offered for sale from time to time during the period the registration statement of which this prospectus is a part remains effective, by or for the account of the selling stockholders. After the date of effectiveness, the selling stockholders may have sold or transferred, in transactions covered by this prospectus or in transactions exempt from the registration requirements of the Securities Act, some or all of their common stock.

Information about the selling stockholders may change over time. Any changed information will be set forth in an amendment to the registration statement or supplement to this prospectus, to the extent required by law.

Name of Selling Stockholder	Shares Beneficially Owned as of the date of this Prospectus <sup>(1)</sup>		Shares Offered by this Prospectus	Shares Beneficially Owned After the Offering <sup>(1)(2)</sup>	
	Number	Percent		Number	Percent
A. Lauren Rhude Trust <sup>(3)</sup>	30,000	*	30,000	-	-
ABBA Properties Partnership <sup>(4)</sup>	112,500	*	112,500	-	-
Ali Bijan Rafie Trust <sup>(5)</sup>	52,500	*	52,500	-	-
Andrew Kaufman	75,000	*	75,000	-	-
Arnold Estates LLC <sup>(6)</sup>	240,625	*	100,000	140,625	*
Aspire Capital Fund LLC <sup>(7)</sup>	375,000	1.2%	375,000	-	-
Bel-Cal Joint Venture <sup>(8)</sup>	375,000	1.2%	375,000	-	-



Blue Ridge Financial Inc <sup>(9)</sup>	37,500	*	37,500	-	-
Bret Shupack	75,000	*	75,000	-	-
Christine Hassuk	15,000	*	15,000	-	-
Clyde J. Berg 2011 Charitable Remainder Trust 2011 <sup>(10)</sup>	150,000	*	150,000	-	-
Collier Holdings LLC <sup>(11)</sup>	225,000	*	75,000	150,000	*
Craig Benson	240,626	*	100,000	140,626	*
The Langston Family Revocable Trust <sup>(12)</sup>	750,000	2.3%	750,000	-	-
Daniel Cardone	30,000	*	30,000	-	-
Daniel S. Travelle	75,000	*	75,000	-	-
David Blonder	337,500	1.1%	337,500	-	-
David Filer	75,000	*	25,000	50,000	*
David Kovacs	22,500	*	22,500	-	-
David M. Kutz, Patricia A. Kutz	150,000	*	150,000	-	-
Deborah Chin	37,500	*	37,500	-	-
Dominion Pension Plan Trustees (Jersey) Limited as Trustee of the Raffaele Ricci Pension Trust <sup>(13)</sup>	375,000	1.2%	375,000	-	-
Douglas P. Kaufman	37,500	*	37,500	-	-
Dov Sugarman	37,500	*	37,500	-	-
Fabrizio Balestri	37,500	*	37,500	-	-
Florence Luvera	15,000	*	15,000	-	-
FourJr. Investments LTD. <sup>(14)</sup>	562,500	1.8%	562,500	-	-
Fred A Wagner, Sr. & Rhonda M. Wagner	37,500	*	37,500	-	-
Fred A. Wagner, Jr. & Allison K. Wagner	75,000	*	75,000	-	-
Frederick B Carson and Barbara Kim Carson Ttee					
U/A Dtd 2/16/06 Carson Living Trust <sup>(15)</sup>	30,000	*	30,000	-	-

Gerald and Lynnette Hannahs	375,000	1.2%	375,000	-	-
Gerald Appel	37,500	*	37,500	-	-
Growth Ventures, Inc. Pension Plan & Trust <sup>(16)</sup>	75,000	*	75,000	-	-
Haitham Elsheikh	225,000	*	225,000	-	-
Henry Rothman	93,750	*	93,750	-	-
Ian Stern	15,000	*	15,000	-	-
Jack J. Springer, M.D., A Medical Corporation Defined Benefit Plan & Trust <sup>(17)</sup>	75,000	*	75,000	-	-
Jack Springer	37,500	*	37,500	-	-
Jacob Movtady	15,000	*	15,000	-	-
James and Sarah Lawler	46,875	*	46,875	-	-
Jan Koe	93,750	*	93,750	-	-
Jeffry F. Schoenbaum Revocable Trust U/A 3/4/96 <sup>(18)</sup>	225,000	*	225,000	-	-
Jeremy Office	75,000	*	75,000	-	-
JKW Family Ltd <sup>(19)</sup>	300,000	*	300,000	-	-
Joel Kovacs	22,500	*	22,500	-	-
John Burgraff	75,000	*	75,000	-	-
Joseph A. Scaniffe	75,000	*	75,000	-	-
Joseph Sharkey	75,000	*	75,000	-	-
Kalman A Barson	15,000	*	15,000	-	-
Keith E. Myers	37,500	*	12,500	25,000	*
Ken Chuzi IRA, Raymond James and Assoc. Inc. Custodian	30,000	*	30,000	-	-
Kenneth Weitzman	93,750	*	93,750	-	-
Kosir Living Trust <sup>(20)</sup>	93,750	*	93,750	-	-
B. Kyle Smith	15,000	*	15,000	-	-
Laura Dell	75,000	*	25,000	50,000	*
Lester Petracca	750,000	2.3%	750,000	-	-
LGA Investments Family Limited Partnership <sup>(21)</sup>	300,000	*	100,000	200,000	*
Martin and Diana Wolmark	225,000	*	225,000	-	-
Marvin Boehm Family Trust <sup>(22)</sup>	45,000	*	45,000	-	-
Mary L. Marcus - West Declaration of Trust <sup>(23)</sup>	52,500	*	52,500	-	-
MAT9 LLC <sup>(24)</sup>	241,875	*	241,875	-	-

Matthew D. and Regina M. MacLean	37,500	*	37,500	-	-
Maureen Campanella	37,500	*	37,500	-	-
Maurice Aaron	75,000	*	75,000	-	-
Michael D Ellerson IRA, Raymond James and Assoc. Inc. Custodian	30,000	*	30,000	-	-
Michael F Hannley IRA, Raymond James and Assoc. Inc. Custodian	30,000	*	30,000	-	-
Michael Garnick	600,000	1.9%	600,000	-	-
Michael Lerner	75,000	*	75,000	-	-
Michael Marino and Gina Rue	75,000	*	25,000	50,000	*
M.J. Fil Investments LLC <sup>(25)</sup>	37,500	*	37,500	-	-
Moggle Investors LLC <sup>(26)</sup>	300,000	*	100,000	200,000	*
MSSB C/F James Moore IRA Rollover	37,500	*	37,500	-	-
MSSB C/F James P. Maher IRA Rollover <sup>(27)</sup>	37,500	*	37,500	-	-
MSSB Custodian Bruce Emad IRA Rollover <sup>(28)</sup>	37,500	*	37,500	-	-
Nickel River LLC <sup>(29)</sup>	150,000	*	150,000	-	-
Option Opportunities Corp. <sup>(30)</sup>	75,000	*	75,000	-	-
Patrick Lorenz	75,000	*	75,000	-	-
Peter Janssen <sup>(31)</sup>	94,442	*	56,250	38,172	*
Peter S Sabo	75,000	*	75,000	-	-
Plank 2010 Family Trust <sup>(32)</sup>	120,313	*	50,000	70,313	*
Precedo Fund LP <sup>(33)</sup>	150,000	*	150,000	-	-
RBC Capital Markets as Custodian for Barbara S. Dickler	187,500	*	187,500	-	-
RBC Custodian FBO Kevin Clarke IRA	15,000	*	15,000	-	-
RBC Custodian FBO Jonathan Young IRA	15,000	*	15,000	-	-

Robert deRose and Susan deRose Family Trust 11/18/86 <sup>(34)</sup>	300,000	*	300,000	-	-
Robert H. Rowley and Dorothy W. Rowley Trust <sup>(35)</sup>	30,000	*	30,000	-	-
Robert L. Consley	75,000	*	75,000	-	-
Robert L. Montgomery	37,500	*	37,500	-	-
Robyn Schreiber	75,000	*	75,000	-	-
Rosalind Capital Partners L.P. <sup>(36)</sup>	281,250	*	281,250	-	-
Rosalind Master Fund L.P. <sup>(37)</sup>	168,750	*	168,750	-	-
S.T. Organovo LLC <sup>(38)</sup>	750,000	2.3%	750,000	-	-
Safier Enterprises LLC <sup>(39)</sup>	150,000	*	150,000	-	-
Samuel R Solis	93,750	*	93,750	-	-
Serenity Now LLC <sup>(40)</sup>	37,500	*	37,500	-	-
Seymore Goldstein and Danyale English	75,000	*	75,000	-	-
SJO Worldwide, LLC <sup>(41)</sup>	900,000	2.8%	900,000	-	-
Souheil Haddad	37,500	*	37,500	-	-
Stacy P. Paros	93,750	*	93,750	-	-
Steven C. Plank	120,313	*	50,000	70,313	*
Terrence Oi	75,000	*	75,000	-	-
The Robert G. Mulchrone Trust <sup>(42)</sup>	97,500	*	97,500	-	-
The Wollheim Family Trust <sup>(43)</sup>	75,000	*	75,000	-	-
Timothy J Prouty IRA Raymond James and Assoc. Inc. Custodian	30,000	*	30,000	-	-
Timothy McInerney	37,500	*	37,500	-	-
Vantage FBO Laurence E. Lof Roth IRA <sup>(44)</sup>	75,000	*	75,000	-	-
Vantage FBO Regina M. MacLean Roth IRA	37,500	*	37,500	-	-
Vekoe Partners LLC <sup>(45)</sup>	67,500	*	67,500	-	-
Vidonia Holdings, LLC <sup>(46)</sup>	240,625	*	100,000	140,625	*
Wachtel Ventures, LLC <sup>(47)</sup>	240,626	*	100,000	140,626	*

Warberg Opportunistic Trading Fund LP <sup>(48)</sup>	75,000	*	75,000	-	-
William F. Miller, III	225,000	*	225,000	-	-
Wiltain Investors LLC <sup>(49)</sup>	2,212,500	6.8%	1,237,500	975,000	3.1%
1010 Holdings LLC <sup>(50)</sup>	601,563	1.9%	250,000	351,563	1.1%
SPH Investments Inc. Profit Sharing Plan FBO Stephen Harrington <sup>(51)</sup>	450,000	1.4%	400,000	50,000	*
Sherif Sidhom Salib <sup>(52)</sup>	405,000	1.2%	355,000	50,000	*
Northlea Partners, LLLP <sup>(53)</sup>	150,000	*	100,000	50,000	*
NSH 2008 Family Trust <sup>(54)</sup>	150,000	*	100,000	50,000	*
RBC Capital Markets FBO Laurence G. Allen IRA	150,000	*	150,000	-	-
ACP Partners, LP <sup>(55)</sup>	75,000	*	75,000	-	-
ACP X, LP <sup>(56)</sup>	1,586,250	4.9%	1,500,000	86,250	-
George Karfunkel	1,800,000	5.5%	1,600,000	200,000	*
Herbert J. Conrad <sup>(57)</sup>	1,552,952	4.7%	1,125,000	427,952	1.3%
Jennifer Lorenzo	225,000	*	75,000	150,000	*
GJG Life Sciences LLC <sup>(58)</sup>	2,625,000	8.0%	2,625,000	-	-
Derek Sroufe	262,500	*	162,500	100,000	*
DIT Equity Investors, LLC <sup>(59)</sup>	375,000	1.2%	375,000	-	-
Edward M. Dunn	525,000	1.6%	425,000	100,000	*
BobCat Property Trust of Angel Fire, New Mexico <sup>(60)</sup>	750,000	2.3%	550,000	200,000	*
Bruce A. Ferguson IRA Raymond James and Assoc. Inc. Custodian	45,000	*	45,000	-	-
Bruce A. Ferguson and Dawn E. Gunter TIC	45,000	*	45,000	-	-
Griffin Value Investors LLC <sup>(61)</sup>	300,000	*	100,000	200,000	*
Salib Holdings LLC <sup>(62)</sup>	375,000	1.1%	125,000	250,000	*

\* Less than 1%.

<sup>(1)</sup> Share numbers include shares underlying warrants held by the selling stockholder.

- (2) Assumes the sale of all shares offered pursuant to this prospectus.
- (3) A. Lauren Rhude is a trustee with voting and dispositive power over the shares held by the A. Lauren Rhude Trust.
- (4) Avrom Balsam and Nathaniel Abramson are natural persons with voting and dispositive power over the shares held by ABBA Properties Partnership.
- (5) Ali Bijan Rafie is a trustee with voting and dispositive power over the shares held by the Ali Bijan Rafie Trust.
- (6) Steven Ellis is a natural person with voting and dispositive power over the shares held by Arnold Estates LLC.
- (7) Steven G. Martin is a natural person with voting and dispositive power over the shares held by Aspire Capital Fund LLC.
- (8) William Belzberg is a natural person with voting and dispositive power over the shares held by Bel-Cal Joint Venture.
- (9) Nancy J. Cooper and Nicholas Ponzio are natural persons with voting and dispositive power over the shares held by Blue Ridge Financial Inc.
- (10) Carl E. Berg and Carl Warden are co-trustees with voting and dispositive power over the shares held by the Clyde J. Berg 2011 Charitable Remainder Trust 2011.
- (11) Todd Van Emburgh is a natural person with voting and dispositive power over the shares held by Collier Holdings LLC.
- (12) Charles Raymond Langston is a trustee with voting and dispositive power over the shares held by The Langston Family Revocable Trust.
- (13) Dominion Pension Plan Trustees (Jersey) Limited is a trustee with voting and dispositive power over the shares held by the Raffaele Ricci Pension Trust. J.L. Piazza is a control person of Dominion Pension Plan Trustees (Jersey) Limited.
- (14) Robert Burke is a natural person with voting and dispositive power over the shares held by FourJr. Investments LTD.
- (15) Frederick B Carson and Barbara Kim Carson are co-trustees with voting and dispositive power over the shares held by the Carson Living Trust.
- (16) Gary J. McAdam is a trustee with voting and dispositive power over the shares held by the Growth Ventures, Inc. Pension Plan & Trust.

- (17) Jack Springer is a trustee with voting and dispositive power over the shares held by the Jack J. Springer, M.D., A Medical Corporation Defined Benefit Plan & Trust.
- (18) Jeffrey F. Schoenbaum and Susan M. Schoenbaum are co-trustees with voting and dispositive power over the shares held by the Jeffrey F. Schoenbaum Revocable Trust U/A 3/4/96.
- (19) Joshua S. Weiss is a natural person with voting and dispositive power over the shares held by JKW Family Ltd.
- (20) B. Ted Kosir and Stojka Kosir are trustees with voting and dispositive power over the shares held by the Kosir Living Trust.
- (21) Laurence G. Allen is a natural person with voting and dispositive power over the shares held by LGA Investments Family Limited Partnership, ACP Partners, LP and ACP X, LP.
- (22) Marvin Boehm is a trustee with voting and dispositive power over the shares held by the Marvin Boehm Family Trust.
- (23) Mary L. Marcus-West is a trustee with voting and dispositive power over the shares held by the Mary L. Marcus-West Declaration Trust.
- (24) Ralph Pastore is a natural person with voting and dispositive power over the shares held by MAT9 LLC and S.T. Organovo LLC.
- (25) Jonathan Blumberg is a natural person with voting and dispositive power over the shares held by M.J. Fil Investments LLC, Option Opportunities Corp., Serenity Now LLC, Warberg Opportunistic Trading Fund LP. Mr. Blumberg is affiliated with a FINRA Member firm.
- (26) Stephen Harrington is a natural person with voting and dispositive power over the shares held by Moggle Investors LLC.
- (27) Mr. Maher is a FINRA member.
- (29) Mr. Emad is a FINRA member.
- (29) Brooks McCartney is a natural person with voting and dispositive power over the shares held by Nickel River LLC. Nickel River LLC is affiliated with a FINRA-member broker-dealer.
- (30) Jonathan Blumberg is a natural person with voting and dispositive power over the shares held by M.J. Fil Investments LLC, Option Opportunities Corp., Serenity Now LLC, Warberg Opportunistic Trading Fund LP. Mr. Blumberg is affiliated with a FINRA Member Firm.
- (31) Mr. Janssen is a FINRA member broker-dealer.
- (32) Julie Plank is a trustee with voting and dispositive power over the shares held by the Plank 2010 Family Trust.
- (33) Timothy Moran is a natural person with voting and dispositive power over the shares held by Precedo Fund LP.

- (34) Robert D. DeRose is a trustee with voting and dispositive power over the shares held by the Robert deRose and Susan deRose Family Trust 11/18/86.
- (35) Robert H. Rowley and Dorothy W. Rowley are co-trustees with voting and dispositive power over the shares held by Robert H. Rowley and Dorothy W. Rowley Trust.
- (36) Steven Salamon is a natural person with voting and dispositive power over the shares held by Rosalind Capital Partners L.P. and Rosalind Master Fund L.P.
- (37) Steven Salamon is a natural person with voting and dispositive power over the shares held by Rosalind Capital Partners L.P. and Rosalind Master Fund L.P.
- (38) Ralph Pastore is a natural person with voting and dispositive power over the shares held by MAT9 LLC and S.T. Organovo LLC.
- (39) Jamie Safier is a natural person with voting and dispositive power over the shares held by Safier Enterprises LLC.
- (40) Jonathan Blumberg is a natural person with voting and dispositive power over the shares held by M.J. Fil Investments LLC, Option Opportunities Corp., Serenity Now LLC, Warberg Opportunistic Trading Fund LP. Mr. Blumberg is affiliated with a FINRA Member Firm.
- (41) Jeremy Office is a natural person with voting and dispositive power over the shares held by SJO Worldwide, LLC.
- (42) Robert G. Mulchrone is a trustee with voting and dispositive power over the shares held by the Robert G. Mulchrone Trust.
- (43) Bryan J. Wollheim and Jaclyn S. Wollheim are co-trustee with voting and dispositive power over the shares held by the Wollheim Family Trust.
- (44) Mr. Lof is a FINRA member.
- (45) Jan Koe is a natural person with voting and dispositive power over the shares held by Vekoe Partners LLC.
- (46) Tara Keiter is a natural person with voting and dispositive power over the shares held by Vidonia Holdings, LLC.
- (47) Adam Wachtel is a natural person with voting and dispositive power over the shares held by Wachtel Ventures, LLC.
- (48) Jonathan Blumberg is a natural person with voting and dispositive power over the shares held by M.J. Fil Investments LLC, Option Opportunities Corp., Serenity Now LLC, Warberg Opportunistic Trading Fund LP. Mr. Blumberg is affiliated with a FINRA Member Firm.
- (49) John McCarthy is a natural person with voting and dispositive power over the shares held by Wiltain Investors LLC.
- (50) Stefano Ferrari is a natural person with voting and dispositive power over the shares held by 1010 Holdings LLC.



- (51) Stephen Harrington is a natural person with voting and dispositive power over the shares held by SPH Investments Inc. Profit Sharing Plan FBO Stephen Harrington.
- (52) Share numbers include shares of common stock that are registered in the name of Mr. Salib's individual retirement account.
- (53) John H Abeles is a natural person with voting and dispositive power over the shares held by Northlea Partners, LLLP.
- (54) David Hochman, Cynthia Hochman and Sara Hochman Allard are co-trustees with voting and dispositive power over the shares held by the NSH 2008 Family Trust.
- (55) Laurence G. Allen is a natural person with voting and dispositive power over the shares held by ACP Partners, LP, ACP X, LP and LGA Investments Family Limited Partnership.
- (56) Laurence G. Allen is a natural person with voting and dispositive power over the shares held by ACP Partners, LP, ACP X, LP and LGA Investments Family Limited Partnership.
- (57) Share numbers include shares of common stock issuable upon exercise of options that are exercisable within sixty days of March 31, 2014.
- (58) Jennifer Lorenzo is a natural person with voting and dispositive power over the shares held by GJG Life Sciences LLC.
- (59) Howard Appel is a natural person with voting and dispositive power over the shares held by DIT Equity Investors, LLC.
- (60) Theresa O'Brien is a trustee with voting and dispositive power over the shares held by the BobCat Property Trust of Angel Fire, New Mexico.
- (61) Ernest Bartlett is a natural person with voting and dispositive power over the shares held by Griffin Value Investors LLC.
- (62) Dana Young is a natural person with voting and dispositive power over the shares held by Salib Holdings LLC.

## PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions.

The selling stockholders may sell some or all of their shares at a fixed price of \$1.00 per share until our shares are quoted on the OTC Bulletin Board and/or OTCQB Market and thereafter at prevailing market prices or privately negotiated prices. Prior to being quoted on the OTC Bulletin Board and/or OTCQB Market, shareholders may sell their shares in private transactions to other individuals.

Our common stock is not listed or traded on any public exchange, and we have not applied for listing or quotation on any exchange. We are seeking sponsorship for the quotation of our common stock on the OTC Bulletin Board and/or OTCQB Market. In order to be quoted on the OTC Bulletin Board and/or OTCQB Market, a market maker must file an application on our behalf in order to make a market for our common stock. There can be no assurance that a market maker will agree to file the necessary documents with FINRA, nor can there be any assurance that such an application for quotation will be approved. There is further no assurance that an active trading market for our shares will develop, or, if developed, that it will be sustained. In the absence of a trading market or an active trading market, investors may be unable to liquidate their investment.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- privately negotiated transactions;
- short sales;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus; provided, however, that prior to any such transfer the following information (or such other information as may be required by the federal securities laws from time to time) with respect to each such selling beneficial owner must be added to the prospectus by way of a prospectus supplement or post-effective amendment, as appropriate: (1) the name of the selling beneficial owner; (2) any material relationship the selling beneficial owner has had within the past three years with us or any of our predecessors or affiliates; (3) the amount of securities of the class owned by such beneficial owner before the offering; (4) the amount to be offered for the beneficial owner's account; and (5) the amount and (if one percent or more) the percentage of the class to be owned by such beneficial owner after the offering is complete.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering, provided, however, we will receive proceeds from the exercise of the warrants held by certain investors.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents, or their affiliates, that participate in the sale of the common stock or interests therein are “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

The maximum amount of compensation to be received by any FINRA member or independent broker-dealer for the sale of any securities registered under this prospectus will not be greater than 8.0% of the gross proceeds from the sale of such securities.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

## MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

### Market Information

There is no public trading market on which our common stock is traded. Among other matters, in order for our common stock to become OTCBB/OTCQB eligible, a FINRA-member broker/dealer must file a Form 211 with FINRA and commit to make a market in our securities once the Form 211 is approved by FINRA. As of the date of this prospectus, a FINRA-member broker/dealer has filed the Form 211 with FINRA. There is no assurance that our common stock will be included on the OTCBB/OTCQB.

The shares of common stock registered hereby can be sold by selling stockholders at a fixed price of \$1.00 per share until our shares are quoted on the OTC Bulletin Board and/or OTCQB Market and thereafter at prevailing market prices or privately negotiated prices. We determined such fixed price based on the highest price at which shares of our common stock were sold in our previous private placements.

We can offer no assurance that an active public market in our shares will develop or be sustained. Future sales of substantial amounts of our shares in the public market could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through the sale of our equity securities.

### Holders

As of the date of this prospectus, there are 161 record holders of our common stock.

## LEGAL MATTERS

The validity of the securities offered in this prospectus is being passed upon for us by Lowenstein Sandler LLP, New York, New York. A partner of the firm beneficially owns 50,000 shares and warrants to purchase 25,000 shares of our common stock with an exercise price of \$2.00 per share.

## EXPERTS

The consolidated financial statements of Matinas BioPharma Holdings, Inc. appearing in this prospectus and related registration statement have been audited by EisnerAmper LLP, an independent registered public accounting firm, as set forth in their report (which includes an explanatory paragraph relating to the Company's ability to continue as a going concern as discussed in Note B to the financial statements) thereon and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the common stock offered by this prospectus. This prospectus, which is part of the registration statement, omits certain information, exhibits, schedules and undertakings set forth in the registration statement and the exhibits and schedules filed therewith. For further information pertaining to us and our common stock, reference is made to the registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of such document has been filed as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matters involved.

You may read all or any portion of the registration statement and the exhibits and schedules filed therewith without charge at the office of the SEC at the Public Reference Room, 100 F Street, N.E., Room 1580 Washington, D.C. 20549. Copies of the registration statement may be obtained from such office. Please call the SEC at 1-800-SEC-0330 for further information about the Public Reference Room. In addition, registration statements and certain other filings made with the SEC electronically are publicly available through the SEC's web site at <http://www.sec.gov>. The registration statement, including all exhibits and amendments to the registration statement, has been filed electronically with the SEC.

Contemporaneously with the effectiveness of the registration statement of which this prospectus is a part, we will become subject to the information and periodic reporting requirements of the Exchange Act and, accordingly, will file annual reports containing financial statements audited by an independent public accounting firm, quarterly reports containing unaudited financial data, current reports, and other information with the Securities and Exchange Commission. You will be able to inspect and copy such periodic reports, and other information at the SEC's public reference room, and from the web site of the SEC referred to above.

**MATINAS BIOPHARMA, INC.**  
**(Formerly NEREUS BIOPHARMA LLC)**  
**(A Development Stage Company)**

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**MATINAS BIOPHARMA HOLDINGS, INC.**  
**(Formerly Matinas BioPharma, Inc.)**  
**(A Development Stage Entity)**  
**Unaudited Condensed Consolidated Balance Sheets**

	<u>March 31, 2014</u>	<u>December 31, 2013</u>
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 8,558,105	\$ 10,840,428
Prepaid expenses and other current assets	87,630	84,493
Total current assets	<u>8,645,736</u>	<u>10,924,921</u>
Property, plant and equipment, net	364,854	93,057
Other long term assets	315,986	315,778
Total assets	<u>\$ 9,326,576</u>	<u>\$ 11,333,756</u>
<b>Liabilities, Preferred Stock and Stockholders' Equity</b>		
Current liabilities		
Accounts payable	\$ 242,326	\$ 396,768
Accrued expenses	386,481	462,200
Lease liability - current	44,543	—
Total current liabilities	<u>673,350</u>	<u>858,968</u>
Lease liability – long term	43,636	—
Total liabilities	<u>716,986</u>	<u>858,968</u>
Stockholders' equity		
Preferred stock - \$0.001 par value, 10,000,000 shares authorized, 0 shares issued and outstanding at March 31, 2014 and December 31, 2013	—	—
Common stock - \$0.001 par value, 150,000,000 shares authorized, 32,000,000 shares issued and outstanding at March 31, 2014 and December 31, 2013	3,200	3,200
Additional paid-in capital	14,576,131	14,302,307
Deficit accumulated during development stage	<u>(5,969,742)</u>	<u>(3,830,719)</u>
Total stockholders' equity	<u>8,609,590</u>	<u>10,474,788</u>
Total liabilities and stockholders' equity	<u>\$ 9,326,576</u>	<u>\$ 11,333,756</u>

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

**MATINAS BIOPHARMA HOLDINGS, INC.**  
**(Formerly Matinas BioPharma, Inc.)**  
**(A Development Stage Entity)**  
**Unaudited Condensed Consolidated Statements of Operations**

	<u>Three Months Ended March 31,</u>		<u>Period from</u>
	<u>2014</u>	<u>2013</u>	<u>August 11, 2011</u>
			<u>(Inception) to</u>
			<u>March 31,</u>
			<u>2014</u>
<b>Costs and expenses:</b>			
Research and development	\$ 1,073,781	\$ 49,586	\$ 2,915,296
General and administrative	<u>1,055,247</u>	<u>62,547</u>	<u>3,043,762</u>
<b>Total costs and expenses</b>	<u>2,129,027</u>	<u>112,133</u>	<u>5,959,058</u>
<b>Loss from operations</b>	(2,129,027)	(112,133)	(5,959,058)
Other expense, net	<u>9,996</u>	<u>—</u>	<u>10,684</u>
Net loss	<u>\$ (2,139,024)</u>	<u>\$ (112,133)</u>	<u>\$ (5,969,742)</u>
Net loss per share - basic and diluted	<u>\$ (0.07)</u>	<u>\$ (0.01)</u>	
<b>Weighted average common shares outstanding:</b>			
Basic and diluted	<u>32,000,000</u>	<u>10,000,000</u>	

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



**Matinas BIOPHARMA HOLDINGS, INC.**  
**(Formerly Matinas BioPharma, Inc.)**  
**(A Development Stage Company)**  
**Unaudited Condensed Consolidated Statements of Cash Flows**

	<b>Three months ended March 31,</b>		<b>Period from August 11, 2011 (Inception) to March 31,</b>
	<b>2014</b>	<b>2013</b>	<b>2014</b>
<b>Operating Activities</b>			
Net loss	\$ (2,139,024)	\$ (112,133)	\$ (5,969,742)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	9,452	—	10,583
Share-based compensation	273,824	—	491,248
Issuance of equity instruments below fair value	—	—	108,316
Changes in operating assets and liabilities:			
Other Assets	(41,117)	—	(356,895)
Prepaid expense	37,980	(33,126)	(46,513)
Other liabilities	(75,720)	—	386,530
Accounts payable	(154,441)	(4,864)	242,329
Net cash used in operating activities	<u>(2,089,046)</u>	<u>(150,123)</u>	<u>(5,134,144)</u>
<b>Investing Activities</b>			
Purchase of property, equipment	(193,277)	—	(287,467)
Net cash used in investing activities	<u>(193,277)</u>	<u>—</u>	<u>(287,467)</u>
<b>Financing Activities</b>			
Return of membership capital in Matinas BioPharma LLC	—	—	(2,000)
Loans provided by founders	—	—	24,100
Payment of loans provided by founders	—	(12,850)	(24,100)
Proceeds from membership units issued for cash	—	—	2,000
Proceeds from redeemable convertible preferred stock issued for cash	—	400,001	1,000,001
Preferred Stock issuance costs	—	(1,716)	(47,613)
Proceeds from common stock issued for cash	—	—	15,001,000
Common stock issuance costs	—	—	(2,378,672)
Proceeds from formation of holding's common stock	—	—	375,000
Proceeds from formation warrants	—	—	10,000
Proceeds from private placement warrants	—	—	20,000
Net cash provided by financing activities	<u>—</u>	<u>385,435</u>	<u>13,979,716</u>
Net change in cash and cash equivalents	<u>(2,282,323)</u>	<u>235,312</u>	<u>8,558,105</u>
<b>Cash and cash equivalents</b>			
Beginning of period	10,840,428	424,364	—
End of period	<u>\$ 8,558,105</u>	<u>\$ 659,676</u>	<u>\$ 8,558,105</u>
<b>Supplemental disclosures of cash flow information</b>			
Issuance of shares	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 953,389</u>
Issuance of private placement warrants as consideration for equity issuance costs	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,252,111</u>
Issuance of restricted stock for services	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 470,000</u>

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

**MATINAS BIOPHARMA HOLDINGS, INC.**  
**(Formerly Matinas BioPharma, Inc.)**  
**(A Development Stage Company)**  
**Notes to Unaudited Financial Statements**  
**(tabular dollars and shares in thousands, except per share data)**

**Note A - Company Information And History**

**[1] Corporate History**

Matinas BioPharma Holdings Inc. (“Holdings”) is a development stage enterprise and a Delaware corporation formed in 2013 and is the parent company of Matinas BioPharma, Inc., its operating subsidiary (“BioPharma” or “the Company” or “we” or “our” or “us”). Nereus BioPharma LLC, a Delaware limited liability company (and Matinas BioPharma’s predecessor) (“Nereus”) was formed on August 12, 2011. On February 29, 2012, Nereus converted from a limited liability company to a corporation and changed its name to Matinas BioPharma, Inc.

On July 11, 2013, and contemporaneously with the initial closing of a private placement in July and August 2013 described below, Matinas BioPharma Inc. entered into a Merger agreement whereby it become a wholly owned subsidiary of Holdings (the “Merger”) to effect its recapitalization plan. In connection with the Merger, the stockholders of Matinas BioPharma Inc. become the stockholders of the Holdings and received an aggregate of 9,000,000 shares of Holdings common stock and warrants to purchase 1,000,000 shares of Holdings common stock. See Note D for further discussion. For financial reporting purposes the accounting acquirer is Matinas BioPharma Inc., and accordingly, the historical financial statements of Matinas BioPharma Inc. are the continuing financial statements of the entity. In July and August of 2013, the Company completed the private placement, under which the Company sold an aggregate of 15,000,000 shares of common stock and warrants to purchase an aggregate of 7,500,000 shares of common stock (the “2013 Private Placement”). See Note D for further discussion. On February 12, 2014, the Company’s S-1 covering the resale of certain shares of our common stock was declared effective by the Securities and Exchange Commission (the “SEC”).

**[2] Proprietary Products and Technology Portfolios**

Matinas is a development stage biopharmaceutical company with a focus on identifying and developing novel pharmaceutical products for the treatment of abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular and metabolic diseases.

The Company is primarily focused on developing its lead product candidate, MAT9001, through approval with the United States Food and Drug Administration (“FDA”), with a primary indication for the treatment of severe hypertriglyceridemia. Severe hypertriglyceridemia refers to a condition in which patients have high blood levels of triglycerides (>500 mg/dl) and is recognized as an independent risk factor for pancreatitis and cardiovascular disease.

The Company’s MAT9001 development approach for the severe hypertriglyceridemia indication is similar to the clinical trial programs used by other pharmaceutical companies for FDA approval of other omega-3 fatty acid based products in this indication. By designing the MAT9001 development program for this indication in a manner consistent with the established FDA guidance, the Company believes the required clinical development program and regulatory approval pathway for MAT9001 for severe hypertriglyceridemia is more predictable and may be relatively lower in risk compared to other typical clinical development programs in the cardiovascular field.

In addition to MAT9001, the Company has established a discovery program called MAT8800 to identify and develop product candidates derived from omega-3 fatty acids for the treatment of prevalent liver diseases for which there are currently only limited therapeutic solutions. Our development work has indicated that certain omega-3 fatty acids may yield improvement in liver enzyme levels and liver histology. Accordingly, the Company has identified potential omega-3 fatty acid compositions to study in preclinical settings. This discovery program is focused on identifying and optimizing candidates comprising omega-3 fatty acids as potential treatments for nonalcoholic fatty liver disease, or NAFLD, nonalcoholic steatohepatitis, or NASH, or other hepatic conditions.

**[3] Business Risks**

The Company's operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include, but are not limited to: the results of clinical testing and trial activities of the Company's products, any changes in the regulatory environment and FDA requirements for approval within the dyslipidemia field, the Company's ability to obtain regulatory approval to market its products, competition from products manufactured and sold or being developed by other companies, the price of, and demand for, Company products, the Company's ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products, the Company's ability to raise capital and other factors listed under the heading “Risk Factors” elsewhere in this report.

## **Note B - Going Concern And Plan Of Operation**

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 March 31, 2014, the Company had an accumulated deficit of approximately \$6.0 million. The Company's operations have been financed through the sale of equity securities and advances from officers and directors. The Company's net loss for the three months ended March 31, 2014 was approximately \$2.1 million.

The Company has been engaged in developing MAT9001 since 2011. To date, the Company has not generated any revenue from MAT9001 and the Company expects to incur significant expenses to complete clinical work and to prepare MAT9001 for Phase III trials in the United States. The Company may never be able to obtain regulatory approval for the marketing of MAT9001 in any indication in the United States or internationally and even if the Company is able to commercialize MAT9001 or any other product candidate, there can be no assurance that the Company will generate significant revenues or ever achieve profitability.

Assuming the Company obtains FDA approval for MAT9001, which the Company does not expect to receive until 2017 at the earliest, the Company expects that its expenses will increase if the Company reaches commercial launch of MAT9001. The Company also expects that its research and development expenses will continue to increase as it moves forward for other indications for MAT9001 and diversifies its R&D portfolio. Furthermore, the Company expects that its research and development expenses will significantly increase as its MAT8800 discovery program progresses and advances to preclinical and clinical trials with one or more product candidates. As a result, the Company expects to continue to incur substantial losses for the foreseeable future, and that these losses will be increasing.

The Company will need to secure additional capital in order to initiate and complete its planned clinical and operational activities related to MAT9001 and we can provide no assurances that such additional financing will be available on favorable terms, or at all. Without such additional funding, the Company is anticipating that the existing cash balance on hand at March 31, 2014 would be sufficient to meet operating activities until approximately January 2015. 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 in its report on the Company's financial statements as of and for the year ended December 31, 2013 with respect to this uncertainty.

## **Note C - Summary Of Significant Accounting Policies**

### **[1] Basis of Presentation**

The accompanying consolidated financial statements include the consolidated accounts of Matinas BioPharma Holdings Inc. (Holdings) and its wholly owned subsidiary, Matinas BioPharma Inc. Matinas BioPharma Inc. is the operational subsidiary 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 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, 2013, which are included in the Company's Special Financial Report on Form 10-K filed with the SEC on April 11, 2014. In the opinion of management, the interim 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 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.

The condensed consolidated balance sheet at December 31, 2013 was derived from the audited consolidated financial statements as of that date. Operating results for the three months ended March 31, 2014 are not necessarily indicative of the results that may be expected for the year ending December 31, 2014. For further information, refer to the consolidated financial statements and notes thereto included in the Company's Special Financial Report on Form 15d2 for the year ended December 31, 2013.

**[2] Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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.

**[3] Cash and Cash Equivalents**

For purposes of financial statement presentation the Company considers all highly liquid instruments purchased with a maturity of three months or less to be cash equivalents 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 various times throughout the period ended March 31, 2014, the Company's cash balances exceeded the FDIC insurance limit. The Company has not experienced any losses in such accounts.

**[5] Property, Plant and Equipment**

Property, plant and 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 property, plant, and equipment range from three to ten years. Capitalized costs associated with leasehold improvements are depreciated 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 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 2013 and 2012 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 March 31, 2014. In addition, future changes in unrecognized tax benefits will have no impact on the effective tax rate due to the existence of the valuation.

Since the Company incurred net operating losses in every tax year since inception, 2012 and 2013 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] Financial Instruments**

### Accounting considerations

The Company evaluates the terms of the equity instruments to determine whether any embedded derivatives or other features required liability classification. The Company’s instruments did not contain any features that would require liability or derivative accounting treatment in 2011 through March 31, 2014.

### July and August 2013 issuance pursuant to Private Placement

The Company allocated the aggregate proceeds of the units sold between the warrants and the common stock based on their relative fair values.

The fair value of the warrants issued to unit holders is calculated utilizing the Black-Scholes option-pricing model and similar assumptions as described in Note G. Since these warrant instruments were considered equity instruments, the allocation did not change the total amount of additional paid in capital.

As discussed in Note F, the placement agent was issued warrants as part of their cost of raising the funds in the private placement. The fair value of the warrants issued to the placement agent was calculated utilizing the Black-Scholes option-pricing model and similar assumptions as described in Note F, and is considered a component of equity (no net effect on Additional Paid In Capital), and amounted to \$1,252,111 at the date of issuance.

### Matinas BioPharma Inc. Series A Convertible Redeemable Preferred Stock issuance

Prior to the merger transaction described in Note D, Matinas BioPharma Inc. had issued shares of Series A Convertible Redeemable Preferred Stock (“Preferred Stock”) to investors in four separate tranches occurring from December 2012 to April 2013. The Preferred shares were converted to common shares of Holdings as part of the Merger transaction. The Preferred Stock entitled the holder to voting rights, and it did not accrue a dividend at a stated rate. The term of the Preferred Stock also had included options for conversion into common stock and potential redemption by the Company if certain conditions were met.

## **[9] 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 and cash equivalents, other current assets, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

#### **[10] Basic Net Loss per Common Share**

Basic net loss per common share is computed as net loss divided by the weighted average number of common shares outstanding for the period. Diluted net loss per common share is the same as basic net loss 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, warrants would have an antidilutive effect. As of March, 31, 2014 and 2013 the number of shares issuable upon the exercise of stock options, warrants, and shares held in escrow was 18,410,000 and 0, respectively.

#### **[11] Revenue Recognition**

The Company will develop an appropriate revenue recognition policy when planned anticipated future commercial operations commence.

#### **[12] 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.

### **Note D – Formation And Reverse Acquisition of Matinas Biopharma Holdings**

#### **Formation**

In May 2013, Holdings was formed solely to prepare the Company for the capital raising transaction described below under “2013 Private Placement”. As part of the formation of Holdings, Holdings sold an aggregate of 7,500,000 shares of Holdings’ common stock and 3,750,000 warrants to purchase 3,750,000 shares of its common stock at an exercise price of \$2.00 per share, for an aggregate of \$375,000 (at a purchase price of \$0.10 for two shares and one warrant), including 2,000,000 shares and warrants to purchase 1,000,000 shares of its common stock to Adam Stern and entities owned by Mr. Stern. Mr. Stern is an affiliate of Aegis Capital Corp., the placement agent in Holdings’ private placement in 2013 described below under 2013 Private Placement and a member of the board of directors of Holdings. The net cash proceeds of \$375,000 has been reflected in the total equity for Holdings. The remaining 5,500,000 shares of its common stock and 2,250,000 warrants to purchase 2,250,000 shares of its common stock were sold to third parties, including certain representatives of Aegis Capital Corp., the placement agent for the 2013 Private Placement.

The aggregate proceeds of the units sold (\$375,000 gross proceeds) were allocated between the warrants and the common stock based on their relative fair values which amounted to approximately \$300,000 allocated to the common stock and \$75,000 allocated to the warrants.

In addition, Holdings also offered and sold to Mr. Stern 250,000 warrants to purchase an additional 250,000 shares of its common stock at an exercise price of \$2.00 per share, for which he paid \$10,000 (at a purchase price of \$0.04 per warrant) (the "Formation Warrants") for his effort in connection with the transaction. These additional Formation Warrants offered to Mr. Stern are compensatory for his services in connection with structuring the formation transaction and were sold at a lower price than the fair value of \$0.47 per warrant. The difference of the fair value of the warrants and the cash proceeds in the amount of \$108,316 was recorded as acquisition costs incurred in connection with this transaction, and included in general and administrative expenses. Mr. Stern is an affiliate of Aegis Capital Corp., the placement agent in the 2013 Private Placement (the "Placement Agent"), and became a director of Holdings in connection with the transactions described below.

## **Merger**

In July 2013, Matinas BioPharma entered into the Merger Agreement with Merger Sub, a wholly owned subsidiary of Holdings. Pursuant to the terms of the Merger Agreement, as a condition of and contemporaneously with the initial closing of the 2013 Private Placement, Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly owned subsidiary of Holdings.

In connection with the Merger, all shares of common stock and preferred stock of Matinas BioPharma were cancelled, and the stockholders of Matinas BioPharma received an aggregate of 9,000,000 shares (approximately 28.5% of the issued common shares) of Holdings' common stock and warrants to purchase 1,000,000 shares of Holdings' common stock at an exercise price of \$2.00 per share (the "Merger Warrants"). As a result of this Merger, the shareholders of Matinas BioPharma became shareholders of Holdings, and the respective holdings of management are as follows: Herbert Conrad, Chairman of the Board, who received 351,563 shares of Holdings' common stock and 250,000 Merger Warrants; Roelof Rongen, President and Chief Executive Officer, who received 3,417,186 shares of Holdings' common stock, Abdel A. Fawzy, Executive Vice President, Pharmaceutical Development and Supply Chain Development, who received 1,708,593 shares of Holdings' common stock; George Bobotas, executive vice president and chief scientific officer, and his spouse, who received an aggregate of 1,366,875 shares of Holdings' common stock; Jerome Jabbour, Executive Vice President, Chief Business Officer and General Counsel, who received 759,374 shares of Holdings' common stock and Stefano Ferrari, a member of the board of directors, through an entity controlled by him, received 351,563 shares of Holdings' common stock and 250,000 Merger Warrants.

After consummation of the Merger transaction, the management of Matinas BioPharma became the management of Holdings and the board representatives consisted of four former Board members of Matinas BioPharma and Mr. Adam Stern as the Aegis Capital Corp. nominee. Because Holdings was formed solely to effect the Merger and the 2013 Private Placement, with no operations, and assets consisting solely of cash and cash equivalents, the Company accounted for the Merger as a reverse acquisition. The legal acquiree Matinas BioPharma becomes the successor entity, and its historical results became the historical results for Holdings (the legal acquirer and the registrant). The Statement of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) reflects the recapitalization of Matinas BioPharma equity as a result of this reverse acquisition.

## **2013 Private Placement**

In July and August 2013, Holdings completed the 2013 Private Placement, under which it sold an aggregate of 15,000,000 shares of its common stock and warrants to purchase an aggregate of 7,500,000 shares of Holdings' common stock with an exercise price of \$2.00 per share, which warrants are exercisable for a period of five years from the initial closing date (the "Investor Warrants"). The aggregate gross proceeds of the units sold (\$15.0 million gross proceeds) were allocated between the warrants and the common stock based on their relative fair values which amounted to approximately \$11,983,000 allocated to the common stock and \$3,017,000 allocated to the warrants. One of the units was sold to Mr. Herb Conrad for the full offering price of \$250,000, and consisted of 250,000 shares of common stock and 125,000 warrants.

Aegis Capital Corp. acted as the Placement Agent for the 2013 Private Placement. The gross proceeds to Holdings from the 2013 Private Placement were \$15.0 million. In connection with the 2013 Private Placement, the Placement Agent received a cash placement agent fee of \$1.5 million and a non-accountable expense allowance of \$450,000. In addition, as part of its compensation for acting as placement agent for the 2013 Private Placement, Holdings issued (x) warrants to the Placement Agent to purchase 750,000 shares of its common stock with an exercise price of \$2.00 per share and (y) warrants to the Placement Agent to purchase 1,500,000 shares of its common stock with an exercise price of \$1.00 per share. These warrants contain a "cashless exercise" feature and are exercisable at any time prior to July 30, 2018. The fair value of such warrants at the date of issuance was approximately \$1.3 million using assumptions similar to those described in Note G and was recorded as part of equity, together with the other sales of common stock and warrants and not as a separate entry in the statement of stockholders equity for this stock issuance cost.

In connection with the closing of the 2013 Private Placement, the Placement Agent had a right to appoint one out of five members of Board of Directors of Holdings for a two-year term from the initial closing (the "Aegis Nominee"). Adam Stern was appointed to the Board of Directors at the initial closing and his successor, if any, will be chosen by the Placement Agent, subject to the reasonable approval of Holdings and the Voting Agreement described below. Holdings agreed to engage the Placement Agent as its warrant solicitation agent in the event the warrants, other than the Placement Agent 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.

After the consummation of the Merger and the 2013 Private Placement, the former shareholders of Matinas BioPharma held 28.5% of the common stock of Holdings by category of these transactions and approximately 30% when the additional shares purchased by Mr. Conrad in the 2013 Private Placement are included.

The private placement issuance cost totaled approximately \$2.4 million of which \$1.95 million was related to Placement Agent cash fees and expenses, \$425,000 related to external legal costs and the remaining balance in other costs directly and incrementally attributable to the private placement funds raised. These costs are reflected as an offset to additional paid in capital.

### Warrant Private Placement

Contemporaneously with the initial closing of the 2013 Private Placement, Holdings offered to all former preferred stockholders of Matinas BioPharma the right to purchase additional warrants with an exercise price of \$2.00 per share of its common stock at a purchase price of \$0.04 per warrant. Only Mr. Conrad exercised such right. As a result, Holdings sold 500,000 Private Placement Warrants to Herbert Conrad, the Chairman of the Board, for net cash proceeds of \$20,000.

### Summary of Changes in Capitalization

The following summarizes the capital structure before and after the Merger.

<b>Investor Group</b>	<b>Matinas BioPharma Inc. (Accounting Acquirer)</b>	<b>Holdings (Accounting Acquiree)</b>
Former preferred and common shareholders	10,000,000 shares of common and 1,851,852 shares of preferred stock	9,000,000 shares of commons stock (28.6% of aggregate common stock holdings) and 1,500,000 warrants (1)
\$0.10 unit purchasers, including Mr. Adam Stern and certain representatives of Aegis Capital	none	7,500,000 shares of commons stock (23.8% of aggregate common stock holdings) and 4,000,000 warrants (2)
2013 Private Placement Investors	none	15,000,000 shares of common stock (47.7% of the aggregate common stock holdings) and 7,500,000 warrants (3)
Aegis Capital Corporation	none	2,250,000 warrants

1. Includes 500,000 warrants purchased by Mr. Conrad - see Warrant Private Placement section.
2. Includes 2,250,000 warrants issued in connection with the placement agent fees, 3,750,000 issued in connection with the sale of units at the Formation and 250,000 warrants purchased by Mr. Stern - see section entitled "Formation"
3. From the 2013 Private Placement, and includes 1 unit purchased by Mr. Conrad for \$ 250,000 at the full price paid by all third party investors.

### Registration Rights and Other

In connection with the 2013 Private Placement, Holdings entered into a registration rights agreement with the private placement investors, the Placement Agent and the holders of its outstanding warrants. Holdings was required to file with the SEC no later than October 7, 2013 (the "Filing Deadline"), a registration statement covering the resale of the shares of common stock and the shares of common stock underlying the warrants, issued in the 2013 Private Placement, as well as the shares of common stock underlying the Formation Warrants, the Merger Warrants, and the Private Placement Warrants. The Company was also required to use commercially reasonable efforts to have the registration statement declared effective within one hundred and fifty (150) days after the registration statement was filed (the "Effectiveness Deadline"), and to keep the registration statement continuously effective under the Securities Act of 1933, as amended (the "Securities Act"), until the earlier of the date when all the registrable securities covered by the registration statement have been sold or such time as all of the registrable securities covered by the registration statement can be sold under Rule 144 without any volume limitations. If this registration statement was not declared effective on or before the Effectiveness Deadline, Holdings would have been required to pay to each holder of registrable securities purchased in the 2013 Private Placement an amount in cash equal to one half of one percent (0.5%) of such holder's investment amount on every thirty (30) day anniversary of such Effectiveness Deadline until such failure was cured. The Company's registration statement was declared effective by the Securities and Exchange Commission on February 12, 2014, therefore no liability for the above provision has been recognized. However, assessments will be made on a quarterly basis, until all the securities can be sold without restriction under Rule 144.





Through March 31, 2014, approximately \$350,000 in professional fees related to this registration statement have been incurred, and are included in general and administrative expenses, since they are not directly related to the fund raising.

At the closing of the 2013 Private Placement (July 30, 2013), Holdings entered into a consulting agreement with the Placement Agent. The consulting agreement has a term of 12 months pursuant to which the Placement Agent receives \$20,000 per month.

#### **Note E - Prepaid Assets**

In March 2013, the Company entered into a rights agreement with a manufacturer to insure the use of a dedicated Good Manufacturing Process (GMP) suite to produce Active Pharmaceutical Ingredient (API) for MAT 9001 during the development phase. These right costs of approximately \$34,000, which were paid during the nine months ended September 30, 2013 are included in prepaid expenses and will be amortized over 20 months on a straight line basis.

#### **Note F - Stock Holders Equity**

##### **Preferred Stock – Matinas BioPharma Inc.**

Prior to July 11, 2013, the Company was authorized to issue up to 6,481,481 shares of redeemable convertible preferred stock, par value \$0.0001 per share, with such designations, rights, and preferences as may be determined from time to time by the Company Board of Directors. Among other features, shares of Series A Convertible Redeemable Preferred Stock were redeemed by the Company at a price equal to the Series A Original Issue Price per share, plus all declared but unpaid dividends thereon in two annual installments commencing not more than 90 days after receipt by the Company at any time on or after October 2017 (fifth anniversary of initial public offering closing), from the holders of at least a majority of the then outstanding shares of Series A Convertible Redeemable Preferred Stock, of written notice requesting redemption of all shares of Series A Convertible Redeemable Preferred Stock. The Company was required to redeem, on a pro-rata basis in accordance with the number of shares of Series A Convertible Redeemable Preferred Stock owned by each holder. This instrument was classified outside of permanent equity in the accompanying consolidated balance sheet.

As part of the formation and reverse acquisition of Matinas BioPharma Holdings discussed in Note D all authorized Preferred Shares of Matinas BioPharma Inc. were canceled and exchanged for Holdings' common shares. There were no shares of the redeemable convertible preferred stock outstanding at March 31, 2014, and this instrument is no longer authorized by the Company articles of incorporation.

##### **Warrants**

As of March 31, 2014, the Company had outstanding warrants to purchase an aggregate of 15,250,000 shares of common stock at exercise prices ranging from \$1.00 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 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. 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 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 March 31, 2014 is presented below, all of which are fully vested.

	<u>Shares</u>
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
<b>Total Warrants Outstanding at March 31, 2014</b>	<b><u>15,250,000</u></b>

## **Note G - Share Based Compensation**

### **Valuation of common stock**

The Company was privately held with no active public market for its common stock. Therefore, management has for financial reporting purposes determined the estimated per share fair value of the Company's common stock and redeemable convertible preferred stock using valuation consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation," also known as the Practice Aid. This valuation was performed with the assistance of a third-party valuation specialist. The Company performed its valuation as of September 1, 2013. In conducting its valuation, management considered all objective and subjective factors that it believed to be relevant, including management's best estimate of the Company's business condition, prospects and operating performance at the valuation date. Within the valuation performed, a range of factors, assumptions and methodologies were used. The significant factors included external market conditions affecting the biotechnology industry, trends within the biotechnology industry, the prices at which the Company sold shares of preferred stock, the superior rights and preferences of the preferred stock relative to common stock at the time of each grant, the results of operations, financial position, status of research and development efforts, stage of development and business strategy, the lack of an active public market for the common and preferred stock, and the likelihood of achieving a liquidity event such as an initial public offering (IPO) or sale of the Company in light of prevailing market conditions. Such analysis resulted in an estimated fair value of common stock to be \$0.94 per share. Management does not believe there is a significant change in the value of the common stock between September 1, 2013 and March 31, 2014, since the Company had not raised any additional capital or completed any major clinical activities in that period.

### **Stock Options**

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 reserved 8,250,000 shares of common stock for issuance under the plan.

During the twelve months ended December 31, 2013, the Company granted stock options to certain employees and non-employees. Stock-based compensation expense recognized during the three months ended March 31, 2014, includes compensation expense for stock-based awards granted to employees and non-employees based on the grant date fair value estimated in accordance with the provisions of ASC 718 and amounted to approximately \$158,000. The unrecognized compensation expense related to stock option grants as of March 31, 2014 was approximately \$1,580,000 which will be recognized over approximately the next 2.5 years. During 2013, options granted to employees and directors had a vesting period of 3 years and a term of 10 years. Options granted to non-employees (e.g. consultants/contractors) had a vesting period of 4 years combined with performance targets for vesting a percentage of the grant, with a term of 10 years.

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 March 31, 2014, there were approximately 5,090,000 shares of the Company common stock available for issuance under the Plan.

As of March 31, 2014, the Company had outstanding options to purchase an aggregate of 3,160,000 shares of the Company common stock with an exercise price of \$0.94 price. At March 31, 2014, 565,055 options vested at a weighted average exercise price of \$0.94 per share. The computation of the aggregate intrinsic value is based upon the difference between the original exercise price of the options and the Company's estimate of the deemed fair value of the Company's common stock at March 31, 2014. The total intrinsic value of options outstanding and vested at March 31, 2014 was de minimus. No options were granted prior to 2013 and none were granted during the three months ended March 31, 2014.

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 three months ended March 31, 2014 and 2013:

	<b>For the three months ended</b>	
	<b>March 31,</b>	
	<b>2014</b>	<b>2013</b>
Volatility	69.12%	N/A
Risk-free interest rate	1.93%	N/A
Dividend yield	0.00	N/A
Expected life	5.54	N/A

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 the Company 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 the Company did not have any trading 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 revises, if necessary, were estimated based on management's expectation through industry knowledge and historical data.

### **Restricted Stock**

The Company granted 500,000 shares of restricted common stock to a third party consultant for services. These shares were fully vested and non-forfeitable at the time of grant, but are restricted to resale over varying periods in 2014. The Company recognized the fair value of the entire grant as a service receivable (disclosed as contra equity) and will recognize expenses as services are rendered over a 12 month period. The value of the restricted stock grant is estimated using the assumed fair market value of the common stock as of date of grant, which was \$0.94 a share.

## Note I - Commitments and officer loans

### Security Deposit

The Company was obligated to provide a security deposit of \$300,000 to obtain lease space. Starting May 1, 2015, this deposit can be reduced by \$100,000 on an annual basis, down to \$50,000, as long as the Company makes timely rental payments.

### Lease Space

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

In December of 2013, the Company has entered into an agreement to lease laboratory space for one year starting January 1, 2014 in Monmouth Junction, New Jersey at a monthly rent of \$2,072.

Listed below is a summary of future lease rental payments as of March 31, 2014:

	Lease Commitments
2014	\$ 101,200
2015	154,140
2016	157,076
2017	160,014
2018 & Beyond	582,797
Total future minimum lease payments	<u>\$ 1,155,227</u>

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders  
Matinas BioPharma Holdings Inc. (formerly Matinas BioPharma Inc.)

We have audited the accompanying consolidated balance sheets of Matinas BioPharma Holdings, Inc. and Subsidiary (the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of operations, stockholders' deficit and cash flows for the periods then ended and for the period from August 11, 2011 (date of inception) to December 31, 2013. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits include consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements enumerated above present fairly, in all material respects, the consolidated financial position of Matinas BioPharma Holdings, Inc. and subsidiary as of December 31, 2013 and 2012, and the consolidated results of their operations and their consolidated cash flows for period then ended and for the period from August 11, 2011 (date of inception) to December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note B to the financial statements, the Company has recurring losses from operations and limited liquidity, together which raises substantial doubt about its ability to continue as a going concern. Management's plans regarding those matters are also described in Note B. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ EisnerAmper LLP

Iselin, New Jersey  
April 7, 2014

**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
**(Formerly MATINAS BIOPHARMA INC.)**  
**(A Development Stage Company)**

**Consolidated Balance Sheets**

	<u>December 31,</u> <u>2013</u>	<u>December 31,</u> <u>2012</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and Cash Equivalents	\$ 10,840,428	\$ 424,364
Prepaid Expenses	<u>84,493</u>	<u>-</u>
Total Current Assets	10,924,921	424,364
Fixed Assets, net of accumulated depreciation of \$1,131	93,057	-
Other assets including security deposit of \$300 thousand	<u>315,778</u>	<u>-</u>
<b>TOTAL ASSETS</b>	<u><b>\$ 11,333,756</b></u>	<u><b>\$ 424,364</b></u>
<b>LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 396,768	\$ 60,327
Accrued Expenses	462,200	-
Loans made by Founders	<u>-</u>	<u>24,100</u>
Total Current Liabilities	<u>858,968</u>	<u>84,427</u>
<b>COMMITMENTS AND CONTINGENCIES</b>		
Redeemable Convertible Preferred Stock, \$0.0001 par value: 925,926 issued and outstanding at December 31, 2012, none authorized at December 31, 2013	-	456,529
<b>STOCKHOLDERS' EQUITY (DEFICIT)</b>		
Preferred Stock, par value \$0.0001, 10,000,000 authorized, none issued	-	-
Common Stock Par Value \$ 0.0001, 150,000,000 Authorized, 32,000,000 Issued and outstanding as of December 31, 2013	3,200	1,000
Additional Paid in Capital, including \$470,000 of restricted stock issued for services to be rendered	14,302,307	
Deficit accumulated during the development stage	<u>(3,830,719)</u>	<u>(117,592)</u>
Total Stockholders' Equity (Deficit)	<u>10,474,788</u>	<u>(116,592)</u>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)</b>	<u><b>\$ 11,333,756</b></u>	<u><b>\$ 424,364</b></u>

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

**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
**(Formerly MATINAS BIOPHARMA INC.)**  
**(A Development Stage Company)**

**Consolidated Statements of Operations**

	<b>For the Year Ended December 31</b>		<b>Cumulative Period From August 11, 2011 (Date of Inception) To December 31,</b>
	<b>2013</b>	<b>2012</b>	<b>2013</b>
REVENUES	\$ -	\$ -	\$ -
<b>OPERATING EXPENSES</b>			
Research and development	1,761,486	78,846	1,841,515
General and administrative	1,950,952	37,229	1,988,515
Total Operating Expenses	3,712,439	116,075	3,830,031
Other expense, (net)	688	-	688
NET LOSS	\$ (3,713,127)	\$ (116,075)	\$ (3,830,719)
<b>BASIC AND DILUTED</b>			
LOSS PER SHARE	\$ (0.20)	\$ (0.01)	\$ (0.28)
<b>WEIGHTED AVERAGE</b>			
NUMBER OF SHARES OUTSTANDING	19,001,370	10,000,000	13,763,459

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



**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
**(Formerly MATINAS BIOPHARMA INC.)**  
**(A Development Stage Company)**

**Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity**

MATINAS BIOPHARMA INC	Redeemable Convertible Preferred Stock		Common Stock		Additional	Membership	Deficit	Total
	(Shares)	(Amount)	(Shares)	(Amount)	Paid - in Capital	Units	Accumulated During the Development Stage	Stockholders' Deficit
	\$	\$	\$	\$	\$		\$	\$
Nereus Biopharma LLC. ownership units issued, August 11, 2011						2,000		2,000
Net loss for the year ended December 31, 2011							(1,517)	(1,517)
Balance at December 31, 2011	-	-	-	-	-	2,000	(1,517)	483
Conversion of LLC into Corporation and purchase of common stock			10,000,000	1,000				1,000
Repurchase of membership units						(2,000)		(2,000)
Series A Redeemable Convertible Preferred Stock issued on December 14, 2012 for cash at \$ .54 per share, 1st tranche	925,926	500,000						-
Issuance cost paid in connection with Series A redeemable convertible preferred stock		(43,472)						
Net loss for the year ended December 31, 2012							(116,075)	(116,075)
Balance at December 31, 2012	925,926	456,528	10,000,000	1,000		-	(117,592)	(116,592)
Series A Preferred Stock issued on February 1, 2013 for cash at \$ .54 per share, 2nd tranche	555,557	300,001						
Series A Preferred Stock issued on February 26, 2013 for cash at \$ .54 per share, 3rd tranche	185,185	100,000						
Series A Preferred Stock issued on April 1, 2013 for cash at \$ .54 per share, 4rd tranche								
Issuance cost paid in connection with Series A convertible preferred stock		(4,140)						
<b>MATINAS BIOPHARMA HOLDINGS INC.</b>								
Formation of Holdings (July 11, 2013) - Sale of 7,500,000 share and 3,750,000 warrants for \$ 375,000			7,500,000	750	374,250			375,000
Sale of 250,000 warrants to Mr. Adam Stern (July 11, 2013) for \$ 10,000 and related compensation charge of \$ 108,316					118,316			118,316
Elimination of Matinas Biopharma Inc. equity (July 11, 2013) upon Merger	(1,851,852)	(952,389)	(10,000,000)	(1,000)				(1,000)
Issuance of shares in Matinas Holdings (July 11, 2013) to former shareholders of Matinas Biopharma Inc.			9,000,000	900	952,489			953,389
Sale of 500,000 warrants to Mr. Herb Conrad (July 30, 2013) for \$ 20,000					20,000			20,000
Private Placement (July 30, 2013 and August 8, 2013) - 15,000,000 shares and warrants to purchase 7,500,000 shares - 2,250,000 Placement Agent warrants			15,000,000	1,500	14,998,500			15,000,000
Private Placement Issuance Costs					(2,378,672)			(2,378,672)
Restricted Stock Grant of 500,000 shares to non-employee			500,000	50	469,950			470,000
Restricted Stock for services to be rendered					(463,562)			(463,562)
Stock Based Compensation - options					211,036			211,036
Net loss for the year ended December 31, 2013							(3,713,127)	(3,713,127)
Stock Holders Equity December 31, 2013	-	\$ -	32,000,000	\$ 3,200	\$ 14,302,307	-	\$ (3,830,719)	\$ 10,474,788

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

**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
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**Consolidated Statements of Cash Flows**

	December 31,		Cumulative Period From August 11, 2011 (date of inception) to December 31,
	2013	2012	2013
<b>Cash flows from operating activities:</b>			
Net loss	\$ (3,713,127)	\$ (116,075)	\$ (3,830,719)
Adjustments to reconcile net loss to net cash used by operating activities:			
Depreciation	1,131		1,131
Share based compensation (options and restricted stock)	217,424		217,424
Share based compensation resulting from issuance of equity instruments below fair value	108,316		108,316
Changes in operating assets and liabilities			
Security Deposit	(315,778)		(315,778)
Prepaid expenses	(84,493)	-	(84,493)
Other liabilities	462,250	-	462,250
Accounts payable	336,441	58,811	396,770
Net cash used in operating activities	<u>(2,987,836)</u>	<u>(57,264)</u>	<u>(3,045,100)</u>
<b>Cash flows used by investing activities</b>			
Equipment Purchases	<u>(94,188)</u>	<u>-</u>	<u>(94,188)</u>
Net cash used in investing activities	<u>(94,188)</u>	<u>-</u>	<u>(94,188)</u>
<b>Cash flows from financing activities:</b>			
Return of membership capital in LLC	-	(2,000)	(2,000)
Loans provided by founders	-	24,100	24,100
Repayment of loans provided by founders	(24,100)	-	(24,100)
Proceeds from membership units issued for cash	-		2,000
Proceeds from redeemable convertible preferred stock issued for cash	500,001	500,000	1,000,001
Preferred Stock issuance costs	(4,140)	(43,472)	(47,613)
Proceeds from common stock issued for cash	15,000,000	1,000	15,001,000
Common stock issuance costs	(2,378,672)		(2,378,672)
Proceeds from formation of holding's common stock	375,000		375,000
Proceeds from formation warrants	10,000		10,000
Proceeds from private placement warrants	20,000		20,000
Net cash provided by financing activities	<u>13,498,089</u>	<u>479,628</u>	<u>13,979,716</u>
<b>Net increase in cash equivalents</b>	<b>10,416,064</b>	<b>422,364</b>	<b>10,840,428</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>424,364</b>	<b>2,000</b>	<b>-</b>
<b>Cash and cash equivalents at end of period</b>	<b>\$ 10,840,428</b>	<b>\$ 424,364</b>	<b>\$ 10,840,428</b>
Supplemental non-cash financing activities			
Issuance of shares in Matinas Holdings (July 11, 2013)	\$ 953,389	-	953,389
Issuance of private placement warrants as consideration for equity issuance costs	1,252,111	-	1,252,111
Issuance of restricted stock for services to be rendered	470,000	-	470,000

*The accompanying notes are an integral part of these financial statements*



**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
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**Notes to the Financial Statements**  
**December 31, 2013**

**Note A - Company Information And History**

**[1] Corporate History**

Matinas BioPharma Holdings Inc. (“Holdings”) is a Delaware corporation formed in 2013 and is the parent company of Matinas BioPharma, Inc., its operating subsidiary (“BioPharma” or “the Company”). Nereus BioPharma LLC, a Delaware limited liability company (and Matinas BioPharma’s predecessor) (“Nereus”) was formed on August 12, 2011. On February 29, 2012, Nereus converted from a limited liability company to a corporation and changed its name to Matinas BioPharma, Inc.

On July 11, 2013, and contemporaneously with the initial closing of the 2013 Private Placement, Matinas BioPharma Inc. entered into a Merger agreement (“Merger”) whereby it become a wholly owned subsidiary of Holdings to effect its recapitalization plan. In connection with the Merger, the stockholders of Matinas BioPharma Inc. become the stockholders of the Holdings and received an aggregate of 9,000,000 shares of Holdings common stock and warrants to purchase 1,000,000 shares of Holdings common stock. See Note D for further discussion. For financial reporting purposes the accounting acquirer is Matinas BioPharma Inc., and accordingly, the historical financial statements of Matinas BioPharma Inc. are the continuing financial statements of the entity. In July and August of 2013, the Company completed the 2013 Private Placement, under which the Company sold an aggregate of 15,000,000 shares of common stock and warrants to purchase an aggregate of 7,500,000 shares of common stock. See Note D for further discussion. On February 12, 2014, the Company’s S-1 regarding the resale of common stock was declared effective by the Securities and Exchange Commission, making Matinas BioPharma Holdings a publicly reporting company.

**[2] Proprietary Product and Technology Portfolios**

Matinas is a development stage biopharmaceutical company with a focus on identifying and developing novel pharmaceutical products for the treatment of abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular disease.

The Company is primarily focused on developing MAT9001 through approval with the United States Food and Drug Administration (“FDA”), with a primary indication for the treatment of severe hypertriglyceridemia. Severe hypertriglyceridemia refers to a condition in which patients have high blood levels of triglycerides (>500 mg/dl) and is recognized as an independent risk factor for pancreatitis.

The Company’s MAT9001 development approach for the severe hypertriglyceridemia indication is similar to the clinical trial design used by other pharmaceutical companies for FDA approval of other omega-3 fatty acid based products. By designing MAT9001 development for this indication in a manner consistent with the established FDA guidance, the Company believes the required clinical development program for MAT9001 is more predictable and relatively lower in risk compared to other typical clinical development programs in the cardiovascular field.

**[3] Business Risks**

The Company’s operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include, but are not limited to: the results of clinical testing and trial activities of the Company’s products, any changes in the regulatory environment and FDA requirements for approval within the dyslipidemia field, the Company’s ability to obtain regulatory approval to market its products, competition from products manufactured and sold or being developed by other companies, the price of, and demand for, Company products, the Company’s ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products, and the Company’s ability to raise capital.

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**Notes to the Financial Statements**  
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**Note B - Going Concern And Plan Of Operation**

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 December 31, 2013, the Company had an accumulated deficit of approximately \$3.8 million. The Company's operations have been financed through advances from officers and directors and from outside capital. The Company's net loss for the year ended December 31, 2013 was approximately \$3.7 million.

The Company has been engaged in developing MAT9001 since 2011. To date, the Company has not generated any revenue from MAT9001 and the Company expects to incur significant expenses to complete clinical work and to prepare MAT9001 for Phase III trials in the United States. The Company may never be able to obtain regulatory approval for the marketing of MAT9001 in any indication in the United States or internationally and even if the Company is able to commercialize MAT9001 or any other product candidate, there can be no assurance that the Company will generate significant revenues or ever achieve profitability.

Assuming the Company obtained FDA approval, which the Company does not expect to receive prior to at least 2017, the Company expects that its expenses will increase if the Company reaches commercial launch of MAT9001. The Company also expects that its research and development expenses will continue to increase as it moves forward for other indications for MAT9001 and diversifies its R&D portfolio. As a result, the Company expects to continue to incur substantial losses for the foreseeable future, and these losses will be increasing.

The Company is in the process of seeking an additional fund raising transaction, which will be required to complete planned clinical and operational activities related to MAT9001. Without such additional funding, the Company is anticipating that the existing cash balance on hand at December 31, 2013 would be sufficient to meet operating activities until approximately December 2014. 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 in its report on the Company's financial statements as of and for the year ended December 31, 2013 with respect to this uncertainty.

**Note C - Summary Of Significant Accounting Policies**

**[1] Basis of Presentation**

The accompanying consolidated financial statements include the consolidated accounts of Matinas BioPharma Holdings Inc. (Holdings) and its wholly owned subsidiary, Matinas BioPharma Inc. Matinas BioPharma Inc. is the operational subsidiary of Holdings.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note C - Summary Of Significant Accounting Policies (Continued)**

**[2] Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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.

**[3] Cash and Cash Equivalents**

For purposes of financial statement presentation the Company considers all highly liquid instruments purchased with a maturity of three months or less to be cash equivalents 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 two major U.S. financial institutions and are insured by the Federal Deposit Insurance Corporation ("FDIC") up to regulatory limits. At various times throughout the year, the Company's cash balances exceeded the FDIC insurance limit. The Company has not experienced any losses in such accounts.

**[5] Property, Plant and Equipment**

Property, plant and 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 property, plant, and equipment range from three to ten years. Capitalized costs associated with leasehold improvements are depreciated 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 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 2013 and 2012 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 December 31, 2013 and 2012. In addition, future changes in unrecognized tax benefits will have no impact on the effective tax rate due to the existence of the valuation.

Since the Company incurred net operating losses in every tax year since inception, 2011 and 2012 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.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note C - Summary Of Significant Accounting Policies (Continued)**

**[7] Shared-Based Compensation**

The Company accounts for stock-based payments to employees in conformity with the provisions of ASC Topic 718, “Share *Based Payments*”. Stock-based payments 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 or 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] Financial Instruments**

Accounting considerations

The Company evaluates the terms of the equity instruments to determine whether any embedded derivatives or other features required liability classification. The Company’s instruments did not contain any features that would require liability or derivative accounting treatment in 2011 through December 31, 2013.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note C - Summary Of Significant Accounting Policies (Continued)**

**[8] Financial Instruments (Continued)**

July and August 2013 issuance pursuant to Private Placement

The Company allocated the aggregate proceeds of the units sold between the warrants and the common stock based on their relative fair values.

The fair value of the warrants issued to unit holders is calculated utilizing the Black-Scholes option-pricing model and similar assumptions as described in Note G. Since these warrant instruments were considered equity instruments, the allocation did not change the total amount of additional paid in capital.

As discussed in Note F, the placement agent was issued warrants as part of their cost of raising the funds in the private placement. The fair value of the warrants issued to the placement agent was calculated utilizing the Black-Scholes option-pricing model and similar assumptions as described in Note F, and is considered a component of equity (no net effect on Additional Paid In Capital), and amounted to \$1,252,111 at the date of issuance.

2012 Matinas BioPharma Inc. Series A Convertible Redeemable Preferred Stock issuance

Prior to the merger transaction described in Note D, Matinas BioPharma Inc. had issued shares of Series A Convertible Redeemable Preferred Stock ("Preferred Stock") to investors. The Preferred shares were converted to common shares of Holdings as part of the Merger transaction.

The Preferred Stock entitled the holder to voting rights, and it did not accrue a dividend at a stated rate. The term of the Preferred Stock also had included options for conversion into common stock and potential redemption by the Company if certain conditions were met. The Company determined that the Preferred Stock host contract was more akin to an equity instrument and that its embedded conversion feature was clearly and closely related to the host. Accordingly, the entire Preferred Stock instrument was accounted as an equity instrument and no bifurcation was necessary. Furthermore, because of the contingent redemption option, the Company had classified the Preferred Stock in mezzanine, outside of the permanent equity, on the financial statements.

The Company also considered whether or not a beneficial conversion feature was required to be recorded pursuant to ASC 470-20 and noted that since the fair market value of the common stock approximated the conversion price at the time of the issuance, no beneficial conversion feature existed.

**[9] 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.



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**Notes to the Financial Statements**  
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**Note C - Summary Of Significant Accounting Policies (Continued)**

**[9] Fair Value Measurements (Continued)**

- 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 and cash equivalents, other current assets, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

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

Basic net loss per common share is computed as net loss divided by the weighted average number of common shares outstanding for the period. Diluted net loss per common share is the same as basic net loss 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, warrants would have an antidilutive effect. As of December 31, 2013 and 2012 the number of shares issuable upon the exercise of stock options, warrants, and shares held in escrow was 18,410,000 and 0, respectively.

**[11] Revenue Recognition**

The Company will develop an appropriate revenue recognition policy when planned anticipated future commercial operations commence.

**[12] 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.

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**Notes to the Financial Statements**  
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**Note D – Formation And Reverse Acquisition of Matinas Biopharma Holdings**

Formation

In May 2013, Holdings was formed solely to prepare the Company for the capital raising transaction described below under “2013 Private Placement”. As part of the formation of Holdings, Holdings sold an aggregate of 7,500,000 shares of Holdings’ common stock and 3,750,000 warrants to purchase 3,750,000 shares of its common stock at an exercise price of \$2.00 per share, for an aggregate of \$375,000 (at a purchase price of \$0.10 for two shares and one warrant), including 2,000,000 shares and warrants to purchase 1,000,000 shares of its common stock to Adam Stern and entities owned by Mr. Stern. Mr. Stern is an affiliate of Aegis Capital Corp., the placement agent in Holdings’ private placement in 2013 described below under 2013 Private Placement and a member of the board of directors of Holdings. The net cash proceeds of \$375,000 has been reflected in the total equity for Holdings. The remaining 5,500,000 shares of its common stock and 2,250,000 warrants to purchase 2,250,000 shares of its common stock were sold to third parties, including certain representatives of Aegis Capital Corp., the placement agent for the 2013 Private Placement.

The aggregate proceeds of the units sold (\$375,000 gross proceeds) were allocated between the warrants and the common stock based on their relative fair values which amounted to approximately \$300,000 allocated to the common stock and \$75,000 allocated to the warrants.

In addition, Holdings also offered and sold to Mr. Stern 250,000 warrants to purchase an additional 250,000 shares of its common stock at an exercise price of \$2.00 per share, for which he paid \$10,000 (at a purchase price of \$0.04 per warrant) (the “Formation Warrants”) for his effort in connection with the transaction. These additional Formation Warrants offered to Mr. Stern are compensatory for his services in connection with structuring the formation transaction and were sold at a lower price than the fair value of \$0.47 per warrant. The difference of the fair value of the warrants and the cash proceeds in the amount of \$108,316 was recorded as acquisition costs incurred in connection with this transaction, and included in general and administrative expenses. Mr. Stern is an affiliate of Aegis Capital Corp., the placement agent in Holdings’ 2013 Private Placement and became a director of Holdings in connection with the transactions described below.

Merger

In July 2013, Matinas BioPharma entered into the Merger Agreement with Merger Sub, a wholly owned subsidiary of Holdings. Pursuant to the terms of the Merger Agreement, as a condition of and contemporaneously with the initial closing of the 2013 Private Placement, Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly owned subsidiary of Holdings.

In connection with the Merger, all shares of common stock and preferred stock of Matinas BioPharma were cancelled, and the stockholders of Matinas BioPharma received an aggregate of 9,000,000 shares (approximately 28.5% of the issued common shares) of Holdings’ common stock and warrants to purchase 1,000,000 shares of Holdings’ common stock at an exercise price of \$2.00 per share (the “Merger Warrants”). As a result of this Merger, the shareholders of Matinas BioPharma became shareholders of Holdings, and the respective holdings of management are as follows: Herbert Conrad, Chairman of the Board, who received 351,563 shares of Holdings’ common stock and 250,000 Merger Warrants; Roelof Rongen, President and Chief Executive Officer, who received 3,417,186 shares of Holdings’ common stock, Abdel A. Fawzy, Executive Vice President, Pharmaceutical Development and Supply Chain Development, who received 1,708,593 shares of Holdings’ common stock; George Bobotas, executive vice president and chief scientific officer, and his spouse, who received an aggregate of 1,366,875 shares of Holdings’ common stock; Jerome Jabbour, Executive Vice President, Chief Business Officer and General Counsel, who received 759,374 shares of Holdings’ common stock and Stefano Ferrari, a member of the board of directors, through an entity controlled by him, received 351,563 shares of Holdings’ common stock and 250,000 Merger Warrants.

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**Notes to the Financial Statements**  
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**Note D – Formation And Reverse Acquisition of Matinas Biopharma Holdings (continued)**

After consummation of the Merger transaction, the management of Matinas BioPharma became the management of Holdings and the board representatives consisted of four former Board members of Matinas BioPharma and Mr. Adam Stern as the Aegis Capital Corp. nominee. Because Holdings was formed solely to effect the Merger and the 2013 Private Placement, with no operations, and assets consisting solely of cash and cash equivalents, the Company accounted for the Merger as a reverse acquisition. The legal acquiree Matinas BioPharma becomes the successor entity, and its historical results became the historical results for Holdings (the legal acquirer and the registrant). The Statement of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) reflects the recapitalization of Matinas BioPharma equity as a result of this reverse acquisition.

2013 Private Placement

In July and August 2013, Holdings completed the 2013 Private Placement, under which it sold an aggregate of 15,000,000 shares of its common stock and warrants to purchase an aggregate of 7,500,000 shares of Holdings' common stock with an exercise price of \$2.00 per share, which warrants are exercisable for a period of five years from the initial closing date (the "Investor Warrants"). The aggregate gross proceeds of the units sold (\$15,000,000 gross proceeds) were allocated between the warrants and the common stock based on their relative fair values which amounted to approximately \$11,983,000 allocated to the common stock and \$3,017,000 allocated to the warrants. One of the units was sold to Mr. Herb Conrad for the full offering price of \$250,000, and consisted of 250,000 shares of common stock and 125,000 Warrants.

Aegis Capital Corp. acted as the Placement Agent for the 2013 Private Placement (the "Placement Agent"). The gross proceeds to Holdings from the 2013 Private Placement were \$15 million. In connection with the 2013 Private Placement, the Placement Agent received a cash placement agent fee of \$1,500,000 and a non-accountable expense allowance of \$450,000. In addition, as part of its compensation for acting as placement agent for the 2013 Private Placement, Holdings issued (x) warrants to the Placement Agent to purchase 750,000 shares of its common stock with an exercise price of \$2.00 per share and (y) warrants to the Placement Agent to purchase 1,500,000 shares of its common stock with an exercise price of \$1.00 per share. These warrants contain a "cashless exercise" feature and are exercisable at any time prior to July 30, 2018. The fair value of such warrants at the date of issuance was approximately \$1,252,000 using assumptions similar to those described in Note G and was recorded as part of equity, together with the other sales of common stock and warrants and not as a separate entry in the statement of stockholders equity for this stock issuance cost.

In connection with the closing of the 2013 Private Placement, the Placement Agent had a right to appoint one out of five members of Board of Directors of Holdings for a two-year term from the initial closing (the "Aegis Nominee"). Adam Stern was appointed to the Board of Directors at the initial closing and his successor, if any, will be chosen by the Placement Agent, subject to the reasonable approval of Holdings and the Voting Agreement described below. Holdings agreed to engage the Placement Agent as its warrant solicitation agent in the event the Investor Warrants and the Offering 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 Investor Warrants and the Offering Warrants following such redemption.

After the consummation of the Merger and the 2013 Private Placement, the former shareholders of Matinas BioPharma held 28.5% of the common stock of Holdings by category of these transactions and approximately 30% when the additional shares purchased by Mr. Conrad in the 2013 Private Placement are included.

The private placement issuance cost totaled approximately \$2.4 million of which \$1.95 million was related to Placement Agent cash fees and expenses, \$425,000 related to external legal costs and the remaining balance in other costs directly and incrementally attributable to the private placement funds raised. These costs are reflected as an offset to additional paid in capital.

Warrant Private Placement

Contemporaneously with the initial closing of the 2013 Private Placement, Holdings offered to all former preferred stockholders of Matinas BioPharma the right to purchase additional warrants with an exercise price of \$2.00 per share of its common stock at a purchase price of \$0.04 per warrant. Only Mr. Conrad exercised such right. As a result, Holdings sold 500,000 Private Placement Warrants to Herbert Conrad, the Chairman of the Board, for net cash proceeds of \$20,000.

**MATINAS BIOPHARMA HOLDINGS, INC. AND SUBSIDIARY**  
**(Formerly MATINAS BIOPHARMA INC.)**

**(A Development Stage Company)**

**Notes to the Financial Statements**  
**December 31, 2013**

**Note D – Formation And Reverse Acquisition of Matinas Biopharma Holdings (continued)**

**Summary of Changes in Capitalization**

The following summarizes the capital structure before and after the Merger.

<u>Investor Group</u>	<u>Matinas BioPharma Inc. (Accounting Acquirer)</u>	<u>Holdings (Accounting Acquiree)</u>
Former preferred and common shareholders	10,000,000 shares of common and 1,851,852 shares of preferred stock	9,000,000 shares of commons stock (28.6% of aggregate common stock holdings) and 1,500,000 warrants (1)
\$0.10 unit purchasers, including Mr. Adam Stern and certain representatives of Aegis Capital	none	7,500,000 shares of commons stock (23.8% of aggregate common stock holdings) and 4,000,000 warrants (2)
2013 Private Placement Investors	none	15,000,000 shares of common stock (47.7% of the aggregate common stock holdings) and 7,500,000 warrants (3)
Aegis Capital Corporation	none	2,250,000 warrants

1. Includes 500,000 warrants purchased by Mr. Conrad - see Warrant Private Placement section.
2. Includes 2,250,000 warrants issued in connection with the placement agent fees, 3,750,000 issued in connection with the sale of units at the Formation and 250,000 warrants purchased by Mr. Stern - see section entitled "Formation"
3. From the 2013 Private Placement, and includes 1 unit purchased by Mr. Conrad for \$ 250,000 at the full price paid by all third party investors.

**Registration Rights and Other**

In connection with the 2013 Private Placement, Holdings entered into a registration rights agreement with the private placement investors, the Placement Agent and the holders of its outstanding warrants. Holdings was required to file with the SEC no later than October 7, 2013 (the "Filing Deadline"), a registration statement covering the resale of the shares of common stock and the shares of common stock underlying the warrants, issued in the 2013 Private Placement, as well as the shares of common stock underlying the Formation Warrants, the Merger Warrants, and the Private Placement Warrants. The Company is also required to use commercially reasonable efforts to have the registration statement declared effective within one hundred and fifty (150) days after the registration statement is filed (the "Effectiveness Deadline"), and to keep the registration statement continuously effective under the Securities Act of 1933, as amended (the "Securities Act"), until the earlier of the date when all the registrable securities covered by the registration statement have been sold or such time as all of the registrable securities covered by the registration statement can be sold under Rule 144 without any volume limitations. If this registration statement is not declared effective on or before the Effectiveness Deadline, Holdings shall pay to each holder of registrable securities purchased in the 2013 Private Placement an amount in cash equal to one half of one percent (0.5%) of such holder's investment amount on every thirty (30) day anniversary of such Effectiveness Deadline until such failure is cured. The payment amount shall be prorated for partial thirty (30) day periods. The maximum aggregate amount of payments to be made by the Company as the result of such failures shall be an amount equal to 6% of each holder's investment amount. Notwithstanding the foregoing, no payments shall be owed with respect to any period during which all of the holder's registrable securities may be sold by such holder without restriction under Rule 144. The Company's registration statement was declared effective by the Securities and Exchange Commission on February 12, 2014 therefore no liability for the above provision has been recognized. However, assessments will be made on a quarterly basis, until all the securities can be sold without restriction under Rule 144.

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**Note D – Formation And Reverse Acquisition of Matinas Biopharma Holdings (continued)**

At the closing of the 2013 Private Placement, Holdings entered into a consulting agreement with the Placement Agent. The consulting agreement has a term of 12 months pursuant to which the Placement Agent receives \$20,000 per month. Through December 31, 2013, the Company recorded \$ 80,000 in its statement of operations.

Through December 31, 2013 approximately \$152,000 in professional fees related to this registration statement have been incurred, and are included in general and administrative expenses, since they are not directly related to the fund raising.

**Note E - Prepaid Asset**

In March 2013, the Company entered into a rights agreement with a manufacturer to insure the use of a dedicated Good Manufacturing Process (GMP) suite to produce Active Pharmaceutical Ingredient (API) for MAT 9001 during the development phase. These right costs of approximately \$34,000, which was paid during the nine months ended September 30, 2013 are included in prepaid expenses and will be amortized over 20 months on a straight line basis.

**Note F - Stock Holders Equity**

**Preferred Stock – Matinas BioPharma Inc.**

Prior to July 11, 2013 the Company was authorized to issue up to 6,481,481 shares of redeemable convertible preferred stock, par value \$0.0001 per share, with such designations, rights, and preferences as may be determined from time to time by the Company Board of Directors.. Among other features, shares of Series A Convertible Redeemable Preferred Stock were redeemed by the Company at a price equal to the Series A Original Issue Price per share, plus all declared but unpaid dividends thereon in two annual installments commencing not more than 90 days after receipt by the Company at any time on or after October 2017 (fifth anniversary of initial public offering closing), from the holders of at least a majority of the then outstanding shares of Series A Convertible Redeemable Preferred Stock, of written notice requesting redemption of all shares of Series A Convertible Redeemable Preferred Stock. The Company was required to redeem, on a pro-rata basis in accordance with the number of shares of Series A Convertible Redeemable Preferred Stock owned by each holder. This instrument was classified outside of permanent equity in the accompanying consolidated balance sheet.

As part of the formation and reverse acquisition of Matinas BioPharma Holdings discussed in Note D all authorized Preferred Shares of Matinas BioPharma Inc. were canceled and exchanged for Holding's common shares. There were no shares of the redeemable convertible preferred stock outstanding at December 31, 2013, and this instrument is no longer authorized by the Company articles of incorporation.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note F - Stock Holders Equity (continued)**

**Warrants**

As of December 31, 2013, the Company had outstanding warrants to purchase an aggregate of 15,250,000 shares of common stock at exercise prices ranging from \$1.00 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 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. 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 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 during 2013 is presented below, all of which are fully vested.

	<u>Shares</u>
July 11, 2013 formation of Holdings, 4,000,0000 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
<b>Total Warrants Outstanding at December 31, 2013</b>	<b><u>15,250,000</u></b>

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note G - Share Based Compensation**

**Valuation of common stock**

The Company was privately held with no active public market for its common stock. Therefore, management has for financial reporting purposes determined the estimated per share fair value of the Company's common stock and redeemable convertible preferred stock using valuation consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation," also known as the Practice Aid. This valuation was performed with the assistance of a third-party valuation specialist. The Company performed its valuation as of September 1, 2013. In conducting its valuation, management considered all objective and subjective factors that it believed to be relevant, including management's best estimate of the Company's business condition, prospects and operating performance at the valuation date. Within the valuation performed, a range of factors, assumptions and methodologies were used. The significant factors included external market conditions affecting the biotechnology industry, trends within the biotechnology industry, the prices at which the Company sold shares of preferred stock, the superior rights and preferences of the preferred stock relative to common stock at the time of each grant, the results of operations, financial position, status of research and development efforts, stage of development and business strategy, the lack of an active public market for the common and preferred stock, and the likelihood of achieving a liquidity event such as an initial public offering (IPO) or sale of the Company in light of prevailing market conditions. Such analysis resulted in an estimated fair value of common stock to be \$0.94 per share. Management does not believe there is a significant change in the value of the common stock between September 1 and December 31, 2013, since the Company had not raised any additional capital or completed any major clinical activities in that period.

**Stock Options**

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 reserved 8,250,000 shares of common stock for issuance under the plan.

During the twelve months ended December 31, 2013, the Company granted stock options to certain employees and non-employees. Stock-based compensation expense recognized during twelve months ended December 31, 2013, includes compensation expense for stock-based awards granted to employees and non-employees based on the grant date fair value estimated in accordance with the provisions of ASC 718 and amounted to approximately \$211,000. The unrecognized compensation expense related to stock option grants as of December 31, 2013 was approximately \$1,737,000 which will be recognized over approximately the next four years. During 2013, options granted to employees and directors had a vesting period of 3 years and a term of 10 years. Options granted to non-employees (e.g. consultants/contractors) had a vesting period of 4 years combined with performance targets for vesting a percentage of the grant, with a term of 10 years.

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 December 31, 2013, there were approximately 5,090,000 shares of the Company common stock available for issuance under the Plan.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note G – Share based compensation (Continued)**

**Stock Options (Continued)**

As of December 31, 2013, the Company had outstanding options to purchase an aggregate of 3,160,000 shares of the Company common stock with an exercise price of \$0.94 price. At December 31, 2013, 321,347 options vested at a weighted average exercise price of \$0.94 per share. The computation of the aggregate intrinsic value is based upon the difference between the original exercise price of the options and the Company's estimate of the deemed fair value of the Company's common stock at December 31, 2013. The total intrinsic value of options outstanding and vested at December 31, 2013 was de minimus. No options were granted prior to 2013.

A summary of the Company stock option grants for 2013 and related data is as follows:

<u>Date of Grant/Termination</u>	<u># of options granted</u>	<u># options vested as of 12/31/2013</u>	<u>Exercise Price Per Share</u>	<u>Common Stock Fair Value on Date Per Share of Grant</u>
<b>Third Quarter</b>				
8/1/2013	1,835,000	N/A	\$ 0.79	\$ 0.94
<b>Fourth Quarter</b>				
October 3, 2013 (cancellation)	(1,835,000)	N/A	\$ 0.79	\$ 0.94
October 3, 2013 (reissuance) *	1,835,000	254,861	\$ 0.94	\$ 0.94
10/4/2013	200,000	16,667	\$ 0.94	\$ 0.94
10/15/2013	375,000	11,625	\$ 0.94	\$ 0.94
11/1/2013	475,000	26,389	\$ 0.94	\$ 0.94
11/15/2013	150,000	8,333	\$ 0.94	\$ 0.94
12/2/2013	125,000	3,472	\$ 0.94	\$ 0.94
<b>Total as of December 31, 2013 **</b>	<b>3,160,000</b>	<b>321,347</b>		

\* All grants outstanding as of September 30, 2013 (1,835,000) were terminated and reissued at an exercise price of \$ 0.94 on October 3, 2013, to reflect the independent valuation contracted by the company on September 1, 2013. The \$0.79 exercise price initially set was based upon management's estimate of the fair value of the underlying shares in July 2013. Subsequently, the Company had received a valuation report from a third party valuation firm, whose valuation report was finalized as of September 16, 2013. Pursuant to that report and consistent with the value of the Company's shares sold in transactions in the time period around the issuance of the stock options, the fair value of the securities was determined to be \$0.94 per share. Given that the exercise price was below the previously estimated fair value for the underlying shares, the Company obtained Board approval on October 3, 2013 to cancel the existing stock options and reissue them with a strike price of \$0.94 per share. The cancellation and reissuance of the shares did not result in additional total compensation cost to be amortized over the options requisite service period because the strike price increased from \$.79 to \$.94.



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**December 31, 2013**

**Note G - Share Based Compensation (Continued)**

**Stock Options (Continued)**

\*\* All options expire ten years from date of grant. Except for options granted on October 15, 2013, all remaining options vest entirely and evenly over three years. The October 15, 2013, options had been granted to non-employee consultants. A portion of each of these consultant options 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. No milestones were met as of December 31, 2013.

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 full year ended December 31, 2013:

	<b>For the year ended</b>	
	<b>December 31,</b>	
	<b>2013</b>	<b>2012</b>
Volatility	81.06%	N/A
Risk-free interest rate	1.85% - 2.15%	N/A
Dividend yield	0.0%	N/A
Expected life	5.0 - 6.0 years	N/A

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 the Company 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 the Company did not have any trading 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 revises, if necessary, were estimated based on management's expectation through industry knowledge and historical data.

**Restricted Stock**

The Company granted 500,000 shares of restricted common stock to a third party consultant for services. These shares were fully vested and non-forfeitable at the time of grant, but are restricted to resale over varying periods in 2014. The Company recognized the fair value of the entire grant as a service receivable (disclosed as contra equity) and will recognize expenses as services are rendered over a 12 month period. The value of the restricted stock grant is estimated using the assumed fair market value of the common stock as of date of grant, which was \$0.94 a share.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note H - Income Taxes**

The Company accounts for income taxes in accordance with ASC 740 (Topic 740, Income Taxes). ASC 740 is an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected tax consequences or events that have been recognized in the Company financial statements. This interpretation prescribes a recognition threshold and measurement attribute for financial statement recognition and measurement of a tax position taken, or expected to be taken in a tax return that have been recorded in the Company consolidated financial statements for fiscal years 2013 and 2012.

Additionally, ASC topic 740 provides guidance on the recognition of interest and penalties related to income taxes. For year end 2013 the Company have recorded penalties of approximately \$5 thousand as a component of Other Income and Expense.

At December 31, 2013, the Company had net operating loss carry forwards of approximately \$3.3 million which may be offset against future taxable income through 2033. Deferred tax assets resulting principally from the net operating loss carry forwards amounted to approximately \$1.4 million at December 31, 2013. No net deferred tax assets are recorded at December 31, 2013 or December 31, 2012, as all deferred tax assets have been fully offset by a valuation allowance due to the uncertainty of future utilization. The tax effects of the major items recorded as deferred tax assets for year ending 2013 are as follows:

	<b>Current Tax Asset</b>	<b>Non-current Tax Asset</b>
<b>Assets</b>		
Accrued Bonus - Ending	\$ 60	\$ -
Intangible assets	-	9
Stock Options - non ISO	-	28
Contribution carryover	-	43
Net Operating Loss	<u>\$ -</u>	<u>\$ 1,318</u>
	\$ 60	\$ 1,398
Credit carryovers	-	24
Less: valuation allowance	<u>\$ (60)</u>	<u>\$ (1,423)</u>
Net Deferred Tax Asset	<u>\$ -</u>	<u>\$ -</u>

The Internal Revenue Code ("IRC") limits the amounts of net operating loss carry forwards that a company may use in any one year in the event of certain cumulative changes in ownership over a three-year period as described in Section 382 of the IRC. The Company have not performed a detailed analysis to determine whether an ownership change has occurred. Such a change of ownership could limit the Company utilization of the net operating losses, and could be triggered by subsequent sales of securities by us or the Company stockholders.

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**Notes to the Financial Statements**  
**December 31, 2013**

**Note I - Commitments and officer loans**

**Employment Contracts**

During the year ended December 31, 2013, the Company has entered into employment contracts with executives and management personnel. The contracts provide for salaries, bonuses and stock option grants, along with other employee benefits. The employment contracts generally have no set term and can be terminated by either party. There is a provision for payments of up to twelve months of annual salary as severance if the Company terminate a contract without cause, along with the acceleration of certain unvested stock option grants.

**Security Deposit**

The Company was obligated to provide a security deposit of \$300 thousand to obtain lease space. This deposit can be reduced by \$100 thousand on an annual basis, down to \$50 thousand, as long as the Company makes timely rental payments.

**Loans**

During 2012, the Company borrowed \$24,100 from its founders and shareholders. These loans were short term, non-collateralized and non-interest bearing. In March 2013, \$12,850 was repaid and in April 2013, the remaining loan balance was repaid.

**Lease Space**

On November 1, 2013, the Company entered into 7 year lease for office space in Bedminster, New Jersey to start approximately May, 2014 at a monthly rent of \$12,723, increasing to approximately \$14,200 per month at the end of the term. The Company will be required to record rent expense on a straight-line basis.

In December of 2013, the Company has entered into an agreement to lease laboratory space for one year starting January 1, 2014 in Monmouth Junction, New Jersey at a monthly rent of \$2,072.

Listed below is a summary of future lease rental payments:

Fiscal Year Ending December 31,

	Lease Commitments
2014	\$ 126,645
2015	154,629
2016	157,565
2017	160,504
2018 & Beyond	555,883
Total future minimum lease payments	<u>\$ 1,155,227</u>

**MATINAS BIOPHARMA HOLDINGS, INC.**

**25,422,500 Shares  
Common Stock**

**PROSPECTUS**

**[        ], 2014**

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## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

Our estimated expenses in connection with the issuance and distribution of the securities being registered are:

SEC Registration Fee	\$ 4,628
Accounting Fees and Expenses	\$ 110,000
Legal Fees and Expenses	\$ 220,000
Miscellaneous Fees and Expenses	\$ 15,000
<b>Total</b>	<b>\$ 349,628</b>

#### ITEM 14. INDEMNIFICATION OF OFFICERS AND DIRECTORS

Section 145 of the Delaware General Corporation Law (the "DGCL") provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Our certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the DGCL, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any stockholders' or directors' resolution or by contract. In addition, we plan to enter into director and officer indemnification agreements with each of our directors and officers that provide, among other things, for the indemnification to the fullest extent permitted or required by Delaware law, provided that no indemnitee will be entitled to indemnification in connection with any claim initiated by the indemnitee against us or our directors or officers unless we join or consent to the initiation of the claim, or the purchase and sale of securities by the indemnitee in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended.

Any repeal or modification of these provisions approved by our stockholders will be prospective only and will not adversely affect any limitation on the liability of any of our directors or officers existing as of the time of such repeal or modification.

We are also permitted to apply for insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the DGCL would permit indemnification.

## **ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES**

Since January 1, 2011, the Company made sales of the following unregistered securities:

### ***Original Issuances of Stock and Warrants***

#### *Formation of Holdings*

In connection with our formation in June 2013, we sold an aggregate of 7,500,000 shares of our common stock and 3,750,000 warrants to purchase 3,750,000 shares of our common stock, for an aggregate of \$375,000 (\$0.10 for two shares and one warrant), to 31 accredited investors.

#### *2013 Private Placement*

In July and August 2013, we sold an aggregate of 15,000,000 shares of our common stock and warrants to purchase an aggregate of 7,500,000 shares of our common stock with an exercise price of \$2.00 per share to 119 accredited investors.

In connection with the 2013 Private Placement, we issued (x) a warrant to the Placement Agent to purchase 750,000 shares of our common stock with an exercise price of \$2.00 per share and (y) a warrant to the Placement Agent to purchase 1,500,000 shares of our common stock with an exercise price of \$1.00 per share.

#### *Merger Transaction*

On July 30, 2013, pursuant to the terms of the Merger Agreement between Matinas BioPharam, Holdings and Merger Sub, a wholly owned subsidiary of Holdings, the Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly owned subsidiary of Holdings. In connection with the Merger, we issued an aggregate of 9,000,000 shares of our common stock and warrants to purchase 1,000,000 shares of our common stock at an exercise price of \$2.00 per share to 15 stockholders of Matinas BioPharma.

#### *Warrant Private Placement*

On July 30, 2013, we sold 500,000 warrants to purchase 500,000 shares of our common stock at an exercise price of \$2.00 per share to one accredited investor for a purchase price of \$0.04 per warrant.

#### *Consulting Agreement*

On December 26, 2013, we issued 500,000 shares of restricted common stock to a consultant as compensation pursuant to the terms of a consulting agreement.

### ***Stock Options***

Since January 1, 2011, the Company granted stock options under its 2013 Equity Compensation Plan to purchase an aggregate of 3,160,000 at an exercise price of \$0.94 per share.

### ***Securities Act Exemptions***

We deemed the offers, sales and issuances of the securities described above under “—Original Issuances of Stock and Warrants” to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, relative to transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the shares for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the grants of stock options and issuances of common stock upon exercise of such options described above under “—Stock Options” to be exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

## ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Exhibit No.	Description
2.1	Merger Agreement, dated July 11, 2013, by and among the Company, Matinas Merger Sub, Inc., and Matinas BioPharma, Inc.*
3.1	Certificate of Incorporation*
3.2	Bylaws*
4.1	Form of Warrant*
4.2	Form of Placement Agent Warrant *
4.3	Registration Rights Agreement dated July 30, 2013*
5.1	Opinion of Lowenstein Sandler LLP*
10.1	Placement Agency Agreement, dated July 11, 2013, between the Company and Aegis Capital Corp.*
10.2	Consulting Agreement, dated July 30, 2013, between the Company and Aegis Capital Corp.*
10.3	Form of Subscription Agreement for the Company's 2013 private placement*
10.4	Form of Subscription Agreement for the Company's 2013 warrant private placement*
10.5	Voting Agreement, dated July 30, 2013, by and among the Company and the stockholders named therein.*
10.6	Matinas BioPharma Holdings, Inc. 2013 Equity Compensation Plan*
10.7	Form of Incentive Stock Option Agreement*
10.8	Form of Non-Qualified Stock Option Agreement*
10.9	Employment Agreement, dated July 30, 2013, between the Company and Roelof Rongen*
10.10	Employment Agreement, dated July 30, 2013, between the Company and George Bobotas*
10.11	Employment Agreement, dated July 30, 2013, between the Company and Abdel A. Fawzy.*
10.12	Employment Agreement effective as of October 4, 2013 between the Company and Jerome Jabbour*
10.13	Offer Letter, dated October 31, 2013, between the Company and Gary Gaglione*
10.14	Form of Indemnification Agreement*
10.15	Form of Securities Purchase Agreement (Warrants) for the Company's formation private placement*
10.16	Form of Securities Purchase Agreement (Units) for the Company's formation private placement*
10.17	Lease, effective as of November 4, 2013, by and between the company and A-K Bedminster Associates, L.P.*
21.1	List of Subsidiaries of the Company*
23.1	Consent of EisnerAmper LLP**
23.2	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)*
24.1	Power of Attorney (included on the signature page of this Registration Statement)*

\* Previously filed

\*\* Filed herewith





## ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Inssofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Bedminster, State of New Jersey on May 14, 2014.

### MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Roelof Rongen

Name: Roelof Rongen

Title: President & Chief Executive Officer

By: /s/ Gary Gaglione

Name: Gary Gaglione

Title: Interim Chief Financial Officer

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned officers and directors Matinas BioPharma Holdings, Inc., a Delaware corporation (the "Company"), do hereby constitute and appoint Roelof Rongen as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments, exhibits thereto and other documents in connection therewith) to this Registration Statement and any subsequent registration statement filed by the registrant pursuant to Rule 462(b) of the Securities Act of 1933, as amended, which relates to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Person</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Roelof Rongen</u> Roelof Rongen	President, Chief Executive Officer and Director (Principal Executive Officer)	May 14, 2014
<u>/s/ Gary Gaglione</u> Gary Gaglione	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	May 14, 2014
<u>/s/ Herbert Conrad</u> Herbert Conrad	Chairman of the Board	May 14, 2014
<u>/s/ Stefano Ferrari</u> Stefano Ferrari	Director	May 14, 2014
<u>/s/ James S. Scibetta</u> James S. Scibetta	Director	May 14, 2014
<u>/s/ Adam K. Stern</u> Adam K. Stern	Director	May 14, 2014

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the inclusion in this Post-Effective Amendment No.1 to Registration Statement of Matinas BioPharma Holdings, Inc. on Form S-1 to be filed on or about May 13, 2014 of our report dated April 7, 2014 on our audits of the financial statements as of December 31, 2013 and 2012 and for the periods then ended December 31, 2013 and the cumulative period from August 11, 2011 (date of inception) to December 31, 2013. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-1.

/s/ EisnerAmper LLP

Iselin, New Jersey

May 13, 2014

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