

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

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.)

**915 Klosterman Road East
Tarpon Springs, Florida 34689
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.
915 Klosterman Road East
Tarpon Springs, Florida 34689
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including area code, of agent for service)*

Copies to:

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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.

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 ⁽¹⁾	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Shares of common stock sold to selling stockholders in private placement ⁽²⁾	15,000,000	\$ 1.00	\$	\$
Shares of common stock underlying warrants sold to selling stockholders in private placement ⁽³⁾	7,500,000	\$ 2.00	\$	\$
Other shares of common stock underlying warrants held by selling stockholders ⁽⁴⁾	5,500,000	\$ 2.00	\$	\$
Total	28,000,000	\$	\$	\$

(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).

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 October 4, 2013

Matinas BioPharma Holdings, Inc.

**28,000,000 Shares
Common Stock**

This prospectus relates to the offer for sale of up to an aggregate of 28,000,000 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 13,000,000 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 28,000,000 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 _____, 2013.

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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. While we believe that the statistical data, market data and other industry data and forecasts are reliable, we have not independently verified the data.

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

Matinas BioPharma is 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 disease. By capitalizing on our management’s significant expertise and experience in the field of lipid science and the proven therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop 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 and thus address what we believe is currently a significant unmet medical need.

MAT9001 is a proprietary prescription-grade omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid (“EPA”), a key omega-3 fatty acid, several other omega-3 fatty acids, and only relatively small amounts of docosahexaenoic acid (“DHA”) and non-omega-3 fatty acids. Each of the components of MAT9001 have previously been tested in other studies involving animals and humans. We are currently developing the GMP manufacturing process for our exact composition and have initiated animal studies. To date, we have been developing the manufacturing process for the MAT9001 active pharmaceutical ingredient and initiated preparations for our Investigational New Drug (“IND”) filing with the United States Food and Drug Administration (“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 triglyceride (“hypertriglyceridemia”) and dyslipidemia. 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 (described below). We believe that the results of these targeted development activities and related clinical investigations may yield a 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 a first 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 (“NCEP”) ATP III Guidelines (collectively, the “NCEP Guidelines”), we estimate that more than 7 million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for severe hypertriglyceridemia, we subsequently plan to seek approval for use of MAT9001 in a second indication, patients with mixed dyslipidemia who are already undergoing treatment with a statin, a commonly used class of cholesterol lowering medications. 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

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

1. MAT9001 has unique mechanistic features due to its proprietary composition of omega-3 fatty acids, including a key differentiating omega-3 fatty acid component (*i.e.*, a component that is neither EPA nor DHA); and
2. 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 one of the key omega-3 components contained in MAT9001, our product will likely:

- Better control cholesterol, and may decrease low-density lipoproteins, or LDL, cholesterol levels;
- Better control triglyceride levels;
- Produce aspirin-like anti-coagulatory effects; and
- Improve clinical outcomes in reducing adverse cardiovascular events.

In addition, 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 proposed product design, we believe that MAT9001 is well positioned to become a leading treatment for hypertriglyceridemia and non-HDL-cholesterol reduction in conjunction with a statin if approved by the FDA.

MAT9001 Development and Regulatory Program

Our MAT9001 development and regulatory program 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. These companies performed Phase III trials only, as they were not required to perform Phase I and 2 trials. By designing the MAT9001 program in a manner consistent with the established FDA guidance, we believe the required clinical development program and regulatory approval pathway for MAT9001 is predictable and relatively lower in risk compared to typical three-phase clinical development programs for new therapeutic compounds in the cardiovascular field. See "Business – MAT9001 Development Program" for a detailed description of our proposed FDA process.

Principal Offices

Our principal offices are located at 915 Klosterman Road East, Tarpon Springs, Florida 34689. Our web address is 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.

Formation of Holdings

We are a Delaware corporation. 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 (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 an affiliate of Aegis Capital Corporation, the placement agent in our private placement in 2013 described under “—2013 Private Placement” (the “2013 Private Placement”) and a member of our board of directors. In addition, at such time, we sold Mr. Stern 250,000 warrants to purchase 250,000 shares of our common stock, for which he paid \$10,000 (at a purchase price of \$0.04 per warrant) (the “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.

Formation of Matinas BioPharma

Matinas BioPharma is a Delaware corporation. 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 pursuant to Section 265 of the General Corporation Law of the State of Delaware and changed its name to Matinas BioPharma, Inc.

Recent Developments

The Merger Transaction

On July 11, 2013, Matinas BioPharma entered into a merger agreement (the “Merger Agreement”) with Matinas Merger Sub, Inc., a Delaware corporation (“Merger Sub”) and our wholly owned subsidiary. 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 (the “Merger”) and Matinas BioPharma became a wholly-owned subsidiary of us. In connection with the Merger, 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”) and all outstanding shares of common stock and preferred stock of Matinas BioPharma were cancelled. As a result, there will not be any changes in the carrying value of assets and liabilities of the Company. Pursuant to the registration statement of which this prospectus is a part, we are registering the shares of common stock underlying the Merger Warrants issued in connection with the Merger for public resale by the selling stockholders named herein and their assigns.

The Merger was treated as a recapitalization of Matinas BioPharma for financial accounting purposes and the historical financial statements of Matinas BioPharma are our financial statements as a result of the Merger. The parties to the Merger Agreement have agreed to take all actions necessary to ensure the Merger is treated as a “plan of reorganization” under Section 368(a) of the Internal Revenue Code of 1986, as amended.

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 (the “Investor Warrants”). 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.

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. 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 contain a “cashless exercise” feature and are exercisable at any time prior to July 30, 2018.

Pursuant to the registration statement of which this prospectus is a part, we are registering the shares of common stock sold in the 2013 Private Placement and the shares of common stock underlying the Investor Warrants sold in the 2013 Private Placement for public resale by the selling stockholders named herein and their assigns. See “Certain Relationships and Related Transactions.”

Warrant Private Placement

Contemporaneously with the initial closing of the 2013 Private Placement, we sold 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;” and together with the Formation Warrants, the Merger Warrants and Investor Warrants are sometimes referred to collectively as the “Warrants”). The Private Placement Warrants were offered to all preferred stockholders of Matinas BioPharma prior to the Merger, including Mr. Conrad. Pursuant to the registration statement of which this prospectus is a part, we are registering the shares of common stock underlying the Private Placement Warrants for public resale by the selling stockholders named herein and their assigns. See “Certain Relationships and Related Transactions.”

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 \$572,000 from inception through June 30, 2013;
- we will need to obtain additional financing to complete clinical development of MAT9001;
- clinical trials for our sole 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 solely dependent on the success of our lead product candidate, MAT9001, which is still in early pre-clinical development;
- we may not be able to manufacture a sufficient number of GMP batches of MAT9001 as required for pre-clinical and clinical trials and, subsequently, our ability to manufacture commercial quantities of MAT9001;
- we rely on third parties to manufacture MAT9001 and to conduct our clinical trials;
- we may not be able to obtain the required regulatory approvals for MAT9001 in which case we will not be able to commercialize MAT9001;
- we currently do not have the infrastructure to commercialize MAT9001 if MAT9001 receives regulatory approval;
- MAT9001 is designed to be a prescription only omega-3 fatty acid based medication and may 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 are choosing to “opt out” of the extended transition periods available under the JOBS Act for complying with new or revised accounting standards, and intend to take advantage of the other exemptions.

THE OFFERING

Common Stock Outstanding 31,500,000 shares (1)

**Common Stock, including Shares of
Common Stock underlying Warrants,
Offered by Selling Stockholders** 28,000,000 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 \$26,000,000. 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 28,000,000 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 1,985,000 shares of our common stock at an exercise price of \$0.94 per share; (ii) up to 6,265,000 shares of our common stock that are available for issuance under our stock option 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) 7,500,000 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) 4,000,000 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 is speculative and illiquid and 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 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. 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 pre-clinical stage biopharmaceutical company with a limited operating history.

We are a development stage biopharmaceutical company with a limited operating history. We have not commenced clinical or human trials and anticipate meeting with the FDA prior to commencing 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 pre-clinical 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;
- 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 manufacture clinical product and establish commercial drug supply;
- secure market exclusivity and/or adequate intellectual property protection for MAT9001
- 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 Phase III clinical trials.

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 a human pharmacokinetic (“PK”) study and prepare MAT9001 for Phase III trials 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 six months ended June 30, 2013 and for the year ended December 31, 2012 was \$455,000 and \$116,000, respectively. As of June 30, 2013, we had an accumulated deficit of \$572,000.

Assuming we obtain FDA approval for MAT9001, which we do not expect until late 2016 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 pre-clinical and clinical trials and pursue FDA approval for MAT9001 for the reduction of triglycerides and non-HDL-Cholesterol in patients with high triglycerides (TG 200-499 mg/dl) in combination with statin therapy, as well as the clinical outcome study for the reduction of morbidity and mortality in high risk cardiovascular patients. As a result, we expect to continue to incur substantial losses for the foreseeable future, and 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.

We believe that our cash and cash equivalents will be sufficient to fund our operations for at least the next nine to twelve months and will allow us to conduct our pre-clinical studies, file additional patent applications and enhance our intellectual property position, file our investigational new drug application (“IND”) and initiate special protocol assessments with the FDA for the MAT9001 Phase III clinical trial. However, we will need to seek additional equity or debt financing to provide the capital required to support our development and commercialization efforts for MAT9001 and we believe we will need at least \$55.0 to \$60.0 million of additional capital to complete our Phase III trials.

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 and strategic collaborations. Debt financing, if obtained, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, 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. 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, 2012 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 depend entirely on the success of MAT9001, which is still in early pre-clinical development. If we are unable to generate revenues from MAT9001, our ability to create stockholder value will be limited.

Our only product candidate is MAT9001, which is at the pre-clinical development stage. We do not commercialize any FDA approved drug products and have no other product candidates in development. We intend to follow the regulatory pathway described in this registration statement for the approval of MAT9001. We intend to commence pre-clinical studies and 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 Phase III trials. We may not be successful in obtaining acceptance from the FDA for our proposed regulatory pathway, including acceptance of the IND for MAT9001. If we do not obtain such approval, the time in which we expect to commence our Phase III trials will be extended and such extension will increase our expenses and reduce our capital. Moreover, there is no guarantee that our Phase III trials will be successful or that it will ultimately be adequate to support an approval from the FDA. 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 product candidate and our ability to generate revenue will be limited.

We must successfully complete pre-clinical and clinical trials for 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 a New Drug Application, or 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 streamlined approach process for approval of MAT9001 in conjunction with the established regulatory pathway for omega-3 based products;
- 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. The FDA may not agree with a portion or any of our streamlined approach process for approval of MAT9001 in conjunction with the established regulatory pathway for omega-3 based products.

We are a pre-clinical development stage 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 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. We cannot be certain that 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. 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;
- 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 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, 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 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. 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., 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, which owns the patents for Lovaza, entered into an agreement with Apotex Corp. and Apotex Inc. to settle their patent litigation related to Lovaza in the United States. 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. Generic versions of Lovaza from Apotex or other companies, if available, will also create greater market competition for our product and may take market share away from us. Amarin currently markets Vascepa, an ethyl-ester form of EPA for the treatment of patients with severe hypertriglyceridemia, and recently filed a supplemental NDA for this product for the treatment of patients with mixed dyslipidemia (TG 200-499 mg/dL while on statin therapy).

Other companies are also developing products that, if approved, will compete directly with MAT9001. These companies that are in various stages of clinical development with omega-3 prescription therapies for the treatment of high triglycerides include AstraZeneca/Omthera Pharmaceuticals, Inc. (completed Phase III and filed NDA), Trygg Pharma AS (Phase III), Acasti Pharma Inc., a subsidiary of Neptune Technologies and Bioresources Inc. (Phase II), Resolvix Pharmaceuticals, Inc. (Phase II) and Catabasis Pharmaceuticals, Inc. (Phase II).

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 continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current 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 be obligated to rely on contract manufacturers, if and when MAT9001 is approved for commercialization. We have not entered into an 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 by the FDA or IRBs 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 due to 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 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 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 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 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. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any such clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize MAT9001. As a result, 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

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 may never be approved by United States or foreign patent offices and the existing patent applications relating to MAT9001 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 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 United States or foreign patent offices.

We also rely on trade secrets to protect technology, especially in cases when 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 rely on the trademarks we may develop 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 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.

A number of companies, including several major pharmaceutical companies, have conducted research on pharmaceutical uses of omega-3 fatty acids, which 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 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.

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 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 four 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, George Bobotas, our Chief Scientific Officer, Abdel A. Fawzy, our Executive Vice President for Pharmaceutical and Supply Chain Development and Jerome Jabbour, our Chief Business Officer and General Counsel, 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. 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, George Bobotas, our Chief Scientific Officer, Abdel A. Fawzy, our Executive Vice President for Pharmaceutical and Supply Chain Development, or Jerome Jabbour, our Chief Business Officer and General Counsel, 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 materials 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 \$5 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 majority stockholders will control our company for the foreseeable future, including the outcome of matters requiring stockholder approval.

Our founders, officer and directors and 5% stockholders collectively beneficially own approximately 55.2% of our outstanding shares of common stock. In addition, these stockholders have entered into a voting agreement, whereby they have agreed to vote in favor of nominees for directors selected by the parties to the voting agreement as described herein. As a result, such entities and individuals will have the ability, acting together, to control the election of our directors and the outcome of corporate actions requiring stockholder approval, such as: (i) a merger or a sale of our company, (ii) a sale of all or substantially all of our assets, and (iii) amendments to our articles of incorporation and bylaws. This concentration of voting power and control could have a significant effect in delaying, deferring or preventing an action that might otherwise be beneficial to our other stockholders and be disadvantageous to our stockholders with interests different from those entities and individuals. Certain of these individuals also have significant control over our business, policies and affairs as officers or directors of our company. Therefore, you should not invest in reliance on your ability to have any control over our company. See “Principal Stockholders.”

An investment in our company should be considered illiquid.

An investment in our company requires a long-term commitment, with no certainty of return. Because we do not plan to become an SEC reporting company by the traditional means of conducting an initial public offering of our common stock, we may be unable to establish a liquid market for our common stock. Moreover, we do not expect security analysts of brokerage firms to provide coverage of our company in the near future. In addition, investment banks may be less likely to agree to underwrite primary or secondary offerings on behalf of our company or its stockholders in the future than they would if we were to become a public reporting company by means of an initial public offering of common stock. If all or any of the foregoing risks occur, it would have a material adverse effect on our company.

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, at some time following the effectiveness of this registration statement of which this prospectus forms a part, 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 not been filed with FINRA by any broker/dealer. 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.

Our common stock may be considered a "penny stock," and thereby be subject to additional sale and trading regulations that may make it more difficult to sell.

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 October 4, 2013, 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 1,985,000 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 that we did not incur as a private company. For example, we will be 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, 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. 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

There may be limitations on the effectiveness of our internal controls, and a failure of our control systems to prevent error or fraud may materially harm our company.

Proper systems of internal controls over financial accounting and disclosure are critical to the operation of a public company. As we are a start-up company, we are at the very early stages of establishing, and we may be unable to effectively establish such systems, especially in light of the fact that we expect to operate as a publicly reporting company. This would leave us without the ability to reliably assimilate and compile financial information about our company and significantly impair our ability to prevent error and detect fraud, all of which would have a negative impact on our company from many perspectives.

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 may 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 the first fiscal year beginning after the effective date of the registration statement of which this prospectus is a part. 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 control 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 will remain an “emerging growth company” for up to five years, although if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of any June 30 before that time, we would cease to be an “emerging growth company” as of the following December 30.

At such time, our independent registered public accounting firm may issue a report that is adverse 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 may be subject to penalties under a registration rights agreement if the registration statement of which this prospectus forms a part is not declared effective within one hundred and fifty (150) days after we file this registration statement.

In connection with the 2013 Private Placement, we entered into a registration rights agreement with the private placement investors, the placement agent and the holders of our outstanding warrants. We were 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. We are 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, we 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 us 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.

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.

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, competitive environment and regulation. Words such as “may,” “should,” “could,” “would,” “predicts,” “potential,” “continue,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” and similar expressions, as well as statements in future tense, identify forward-looking statements. 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. Forward-looking statements are based on information we have when those statements are made or management’s good faith belief as of that time with respect to 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 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 our ability to satisfy our capital needs;
- our dependence on MAT9001, our sole product candidate, which is still in early pre-clinical development,
- 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 to manufacture MAT9001;
- our reliance on third-party CROs to conduct our clinical trials for MAT9001;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executive members;
- our ability to internally develop new inventions and intellectual property;
- interpretations of current laws and the passages of future laws;
- 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 be covered by the forward-looking statements contained herein or risk factors that we are faced with that may cause our actual results to differ from those anticipate in our forward-looking statements. 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 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. 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 \$26,000,000. 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 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. By capitalizing on our management's significant expertise and experience in the field of lipid science and the proven therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop 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 and thus address what we believe is currently a significant unmet medical need.

MAT9001 is a proprietary prescription-grade omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid ("EPA"), a key omega-3 fatty acid, several other omega-3 fatty acids, and only relatively small amounts of docosahexaenoic acid ("DHA") and non-omega-3 fatty acids. Each of the components of MAT9001 have previously been tested in other studies involving animals and humans. We are currently developing the GMP manufacturing process for our exact composition and have initiated animal studies. To date, we have been developing the manufacturing process for the MAT9001 active pharmaceutical ingredient and initiated preparations for our Investigational New Drug ("IND") filing with the FDA.

We are primarily focused on developing and commercializing MAT9001 through approval by the United States Food and Drug Administration ("FDA"), initially with a first 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 ("NCEP") ATP III Guidelines (collectively, the "NCEP Guidelines"), we estimate that more than seven million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for severe hypertriglyceridemia, we subsequently plan to seek approval for use of MAT9001 in a second indication, patients with mixed dyslipidemia who are already undergoing treatment with a statin, a commonly used class of cholesterol lowering medications. Mixed dyslipidemia refers to a condition in which patients have a combination of both elevated triglycerides (≥ 200 mg/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 to June 30, 2013, our losses from operations have been \$575,000. Our net loss was \$455,000 and \$116,000 for the six months ended June 30, 2013 and the year ended December 31, 2012, 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.

Financial Operations Overview

Revenue

To date, we have not generated any revenue. Our ability to generate product revenue, which we do not expect will occur before late 2016, if ever, will depend solely on the successful development and eventual commercialization of our sole product candidate, MAT9001.

Research and Development Expenses

Research and development expenses consist of costs incurred for the development of MAT9001, which include:

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

The table below summarizes our direct research and development expenses for MAT9001 for the periods indicated. Our direct research and development expenses consist principally of external costs, such as fees paid to contractors, consultants, analytical laboratories and CROs, in connection with our development work. We have been developing MAT9001 and typically use our employee and infrastructure resources.

	Six Months Ended June 30,		Year Ended December 31,	From August 11, 2011 (date of inception) to December 31,
	2013	2012	2012	2011
	(In thousands)			
Direct research and development expense by program:				
MAT9001 Manufacturing process development	\$ 174	\$ 0	\$ 73	\$ 0
MAT9001 – Other expenses	\$ 115	\$ 4	\$ 6	\$ 1
Total research & development	<u>\$ 289</u>	<u>\$ 4</u>	<u>\$ 79</u>	<u>\$ 1</u>

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

We continue to develop the manufacturing process for the active pharmaceutical ingredient of MAT9001 and initiated animal studies with MAT9001 active ingredient. We expect to complete the first animal studies of MAT9001 and commence manufacturing of GMP manufacturing batches of MAT9001 during the fourth quarter of 2013, file our IND with the U.S. FDA and commence a human study with MAT9001 during the first quarter of 2014, complete Special Protocol Assessment Reviews with the FDA during the first half of 2014, commencement of the first pivotal Phase III study during the third quarter of 2014, initiate the second pivotal Phase III study during the fourth quarter of 2014, commence an additional Phase III study during early 2015, complete the Phase III program by early 2016 and submit an NDA with the FDA during the first half of 2016 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, by early 2017.

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

- the uncertainty of the outcome of animal 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 uncertainty of the timing and outcome of regulatory review of Special Protocol Assessments for pivotal Phase III studies for MAT9001;
- the uncertainty of the timing and outcome of pivotal Phase III studies with MAT9001;
- the uncertainty of the timing and outcome of regulatory NDA submissions for MAT9001 and subsequent FDA review thereof;
- the uncertainty of the timing and outcome of the prosecution of patent 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 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 \$55.0 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. Prior to the close of our 2013 Private Placement, our founders and board members did not receive any compensation for their services. Effective July 30, 2013, we entered into employment agreements with our executive officers and we expect to adopt a director compensation policy prior to the effectiveness of the registration statement of which this prospectus forms a part.

We anticipate that our general and administrative expenses will increase in 2013 due to many factors, the most significant of which include:

- increased personnel expenses as the founders of our company have entered into employment agreements and as we expand our operations to prepare for our Phase III pivotal studies of MAT9001, which we expect to commence in 2014; and
- 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.

Other Income

Other income is comprised of interest income earned on cash.

Net Operating Losses and Tax Carryforwards

As of December 31, 2012, we had approximately \$92,000 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 June 30, 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 study supplies.

We will 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 depend on factors such as the successful enrollment of subjects and the completion of specific study milestones. In accruing service fees, we 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 adjust the accrual or prepaid 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. 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.

Stock-Based Compensation

Since our inception in 2011, we have applied the fair value recognition provisions of Financial Accounting Standards Board Accounting Standards Codification, or ASC 718 "Accounting for Stock-Based Compensation," which we refer to as ASC 718. Determining the amount of stock-based compensation to be recorded requires us to develop estimates of the fair value of stock options as of their grant date. Compensation expense is recognized, on a straight-line basis, over the vesting period of the award. 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 price 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. Many of these assumptions are highly subjective. As a privately-held company with a limited operating history, we utilize data from several peer companies to estimate expected stock price volatility and the expected term of our options. We selected peer companies from the biopharmaceutical industry with similar characteristics to us, including stage of product development, market capitalization, number of employees and therapeutic focus. 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.

No stock options were issued prior to June 30, 2013. In October 2013, 735,000 options were granted to members of our board of directors and 1,250,000 options were awarded to members of the management team at an exercise price of \$ 0.94 per share. These options vest over 36 months in equal monthly installments.

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, and further such report 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 stock options issued in October 2013, and for recognition of accounting charges related to options and warrants issued in the third quarter of 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 Six Months Ended June 30, 2013 and 2012

	Six Months Ended		Increase (Decrease)
	June 30,		
	2013	2012	
	(In thousands)		
Expenses:			
Research and development	\$ 289	\$ 4	\$ 285
General and administrative	166	9	157
Operating loss	(455)	(13)	442
Net loss	<u>\$ (455)</u>	<u>\$ (13)</u>	<u>\$ 442</u>

Research and Development expenses. Research and development expense for the six months ended June 30, 2013 was \$289,000, compared to \$4,000 for the six months ended June 30, 2012, an increase of \$285,000. The increase in research and development expense was primarily due to an increase in activities for the development of the manufacturing process for MAT9001 and preparations of supplies for our animal studies.

General and Administrative expenses. General and administrative expenses for the six months ended June 30, 2013 was \$166,000, compared to \$9,000 for the six months ended June 30, 2012, an increase of \$157,000. The increase in general and administrative expense was primarily attributable to increased legal fees and costs associated with compliance and corporate organizational matters.

Comparison of Year Ended December 31, 2012 and Period Ended December 31, 2011

	Year Ended December 31,	From August 11,		Increase (Decrease)
		2011 (date of inception) to December 31,		
	2012	2011		
	(In thousands)			
Expenses:				
Research and development	\$ 79	\$ 1	\$ 78	
General and administrative	37	1	36	
Operating loss	(116)	(2)	(114)	
Net loss	<u>\$ (116)</u>	<u>\$ (2)</u>	<u>\$ (114)</u>	

Research and Development expenses. Research and development expense for the year ended December 31, 2012 was \$79,000, compared to \$1,000 for the period ended December 31, 2011, an increase of \$78,000. The increase in research and development expense was primarily due to an increase in activities for the development of the manufacturing process for MAT9001.

General and Administrative expenses. General and administrative expense for year ended December 31, 2012 was \$37,000, compared to \$1,000 for the period ended December 31, 2011, an increase of \$36,000. The increase in general and administrative expense was primarily attributable to increased legal fees and costs associated with compliance and corporate organizational matters.

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 warrants. As of June 30, 2013, we raised a total of \$ 1.0 million from sales of our Series A Preferred Stock. As part of the Merger, this Series A Preferred Stock converted into common stock and warrants.

As of June 30, 2013, we had cash and cash equivalents totaling \$462,000. Subsequent to June 30, 2013, we raised additional net proceeds of \$12.8 million from sales of our equity securities. As of September 30, 2013, we had estimated cash and cash equivalents totaling \$12.6 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 (the "Investor Warrants"). 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.

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. 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 contain a "cashless exercise" feature and are exercisable at any time prior to July 30, 2018. See the section entitled "Description of Capital Stock –Warrants" for a discussion of the terms of the Investor 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.

Cash Flows

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

	Six Months Ended		Year Ended	From August
	June 30,		December	11, 2011 (date
	2013	2012	31,	of inception)
			2012	to December
				31,
				2011
	(In thousands)			
Cash used in operating activities	\$ (435)	\$ -	\$ (57)	\$ -
Cash provided by (used in) financing activities	472	-	479	2
Net increase (decrease) in cash and cash equivalents	<u>\$ 37</u>	-	<u>\$ 422</u>	<u>\$ 2</u>

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 is being developed. However, we will have significantly increased development costs in conducting animal and human studies, regulatory filing activities, preparation of the NDA for MAT9001 as well as costs for continued development and validation of the manufacturing process. We also expect our general and administrative expenses to increase as we have entered into employment agreements with our founders and expand our administrative, compliance and investor relations activities and prepare for establishing our company as a publicly traded company. Net cash used in operating activities was \$435,000 for the six months ended June 30, 2013 and \$0 for the six months ended June 30, 2012. The increase in cash used in operating activities for six months ended June 30, 2013 compared to the six months ended June 30, 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. Net cash used in operating activities was \$57,000 for the year ended December 31, 2012 and \$0 for the period ended December 31, 2011. The increase in cash used in operating activities for year ended December 31, 2012 compared to the period ended December 31, 2011 was primarily due to higher development costs in connection with development of the manufacturing process and corporate development activities.

Financing Activities

Net cash provided by financing activities was \$471,000 for the six months ended June 30, 2013 and \$0 for the six months ended June 30, 2012. The cash provided by financing activities for the six months ended June 30, 2013 was primarily due to the sale and issuance of 500,000 shares of our Series A Preferred Stock for net proceeds of \$495,000, inclusive of legal costs associated with the transaction. Net cash provided by financing activities was \$479,000 for the year ended December 31, 2012 and \$2,000 for the period ended December 31, 2011. The increase in net cash provided by financing activities was primarily due to the issuance of 500,000 shares of our Series A Preferred Stock in 2012 for net proceeds of \$457,000, (\$500,000 gross proceeds offset by legal costs). See “– Sources of Liquidity” for a discussion of financing activities occurring after June 30, 2013.

Funding Requirements and Other Liquidity Matters

MAT9001 is still in early stage development. 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:

- commence manufacturing of GMP batches of MAT9001;
- initiate human trials with MAT9001;
- commence non-clinical studies of MAT9001;
- initiate Phase III pivotal studies with MAT9001;
- enter and invest into manufacturing and supply agreements for MAT9001;
- seek to identify additional indications for MAT9001;
- maintain, leverage and expand our intellectual property portfolio;
- 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; 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 for at least the next nine to twelve months and will allow us to conduct our pre-clinical studies, file additional patent applications and enhance our intellectual property position, file our IND and initial special protocol assessments with the FDA for the MAT9001 Phase III clinical trial. 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 are required to initiate and complete Phase III pivotal studies for MAT9001. We believe that we will need at least \$55 to \$60 million of additional capital to complete our Phase III trials.

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 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. If we raise additional funds through collaborations, strategic alliances or licensing arrangements with pharmaceutical partners, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or MAT9001 or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings 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 that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

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 June 30, 2013, we have 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, 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 disease. We believe that by capitalizing on our management's significant expertise and experience in the field of lipid science and the proven therapeutic benefits of omega-3 fatty acids in treating lipid disorders, we have designed a program to develop our lead product candidate MAT9001. Our objective is to establish significant differentiation of MAT9001 as compared to existing available therapies by demonstrating significant reductions in triglyceride levels, lowering of cholesterol levels and improvement of important physiological parameters and thus address what we believe currently is a significant unmet medical need.

MAT9001 is a proprietary prescription-grade omega-3 fatty acid composition, comprised of a complex mixture of omega-3 fatty acids, including eicosapentaenoic acid ("EPA"), a key omega-3 fatty acid, several other omega-3 fatty acids, and only relatively small amounts of docosahexaenoic acid ("DHA") and non-omega-3 fatty acids. Each of the components of MAT9001 have previously been tested in other studies involving animals and humans. We are currently developing the GMP manufacturing process for our exact composition and have initiated animal studies. To date, we have been developing the manufacturing process for the MAT9001 active pharmaceutical ingredient and initiated preparations for our Investigational New Drug ("IND") filing with the 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 and very high triglycerides ("hypertriglyceridemia") and mixed dyslipidemia. 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 developed MAT9001, which has been designed to optimize and target the treatment of hypertriglyceridemia and mixed dyslipidemia. We believe that the results of these targeted development activities and related clinical investigations may yield a stronger 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 United States Food and Drug Administration ("FDA"), with a first 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 ("NCEP") ATP III Guidelines (collectively, the "NCEP Guidelines"), we estimate that more than 7 million people in the United States have severe hypertriglyceridemia. If we receive FDA approval for severe hypertriglyceridemia, we subsequently plan to seek approval for use of MAT9001 in a second indication, patients with mixed dyslipidemia who are already undergoing treatment with a statin, a commonly used class of cholesterol lowering medications. Mixed dyslipidemia refers to a condition in which patients have a combination of both elevated triglycerides (≥ 200 mg/dl), and elevated cholesterol levels. According to the NCEP Guidelines, we estimate that approximately 30 to 35 million Americans have mixed dyslipidemia.

Currently Available Treatment Options and Market Opportunity

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 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%-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.

The cardioprotective efficacy of omega-3 fatty acids is well-established as evidenced by the American Heart Association and its recommendation that patients with documented coronary heart disease consume increased intakes of fish rich in omega-3 fatty acids, specifically enough fish to provide one gram of EPA and DHA per day. Many omega-3 fatty acid based products have anti-thrombotic and anti-inflammatory effects that have been proven to inhibit atherosclerosis in animal models as well as reduce the rate of adverse cardiovascular events in humans at high risk for such events. 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

In contrast to many other omega-3 based products, MAT9001 is not a product repurposed from a previous development program for another disease or condition, as it was specifically designed for the treatment of severe hypertriglyceridemia and mixed dyslipidemia. Specifically, we are pursuing two avenues of differentiation from existing products, including Vascepa and Lovaza:

1. MAT9001 has unique mechanistic features due to its proprietary composition of omega-3 fatty acids, including a key differentiating omega-3 fatty acid component (*i.e.*, a component that is neither EPA nor DHA); and

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

We believe that based upon both publicly available pre-clinical and human data associated with one of the key omega-3 components contained in MAT9001, our product will likely:

- Better control cholesterol, and may decrease low-density lipoproteins, or LDL, cholesterol levels;
- Better control triglyceride levels;
- Produce aspirin-like anti-coagulatory effects; and
- Improve clinical outcomes in reducing adverse cardiovascular events.

In addition, 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 proposed product design, we believe that MAT9001 is well positioned to become a leading treatment for hypertriglyceridemia and non-HDL-cholesterol reduction in conjunction with a statin if approved by the FDA.

MAT9001 Development Program

Our MAT9001 development program has been designed based on the clinical development pathway set forth below, which is similar to the clinical trial programs used by other pharmaceutical companies for FDA approval of other omega-3 fatty acid based products. By designing the MAT9001 development program in a manner consistent with established FDA guidance, we believe the required clinical development program for MAT9001 is highly 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

Activity	Description	Planned Commencement
Pre-clinical Studies	<ul style="list-style-type: none"> • Conduct two 13-week safety and toxicology animal studies of MAT9001 involving two species. • Concurrently with safety and toxicology, conduct our first human bioavailability studies for MAT9001 in Canada. • Initiate a long term, two year animal safety and toxicology study to support our filing with the FDA of our application seeking approval for MAT9001. 	<ul style="list-style-type: none"> • First quarter of 2014 • First quarter of 2014 • First quarter of 2014

Anticipated Development Timeline

Activity	Description	Planned Commencement
IND Application Filing	<ul style="list-style-type: none"> Request pre-IND meetings with the FDA 	<ul style="list-style-type: none"> Fourth quarter of 2013
	<ul style="list-style-type: none"> Submit an IND to the FDA seeking to initiate our first clinical trial in humans in the United States. 	<ul style="list-style-type: none"> First quarter of 2014
Pharmacokinetic ("PK") Studies	<ul style="list-style-type: none"> Conduct a PK study designed to demonstrate superior bioavailability of MAT9001 compared to Vascepa. 	<ul style="list-style-type: none"> First quarter of 2014
Pivotal Registration Studies	<ul style="list-style-type: none"> Conduct the first Phase III, 12-week study with approximately 320 patients with severe hypertriglyceridemia (TG \geq 500 mg/dL). 	<ul style="list-style-type: none"> Third quarter of 2014
	<ul style="list-style-type: none"> Conduct the second Phase III, 8 week study with approximately 880 patients on statins with hypertriglyceridemia (TG 200-499 mg/dL). 	<ul style="list-style-type: none"> Second half of 2014
	<ul style="list-style-type: none"> Conduct the third Phase III, 6 to 12 week study with approximately 450-500 patients in a population to be determined. 	<ul style="list-style-type: none"> First half of 2015
	<ul style="list-style-type: none"> Commence a significantly sized clinical outcomes study upon filing an NDA with the FDA. 	<ul style="list-style-type: none"> 2016
	<ul style="list-style-type: none"> We plan to initiate detailed exploration and planning over the course of fiscal 2014 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. 	<ul style="list-style-type: none"> Second half of 2014
NDA Filing - US	<ul style="list-style-type: none"> We plan to initiate the NDA compilation at the end of fiscal year 2015 and we expect to file our NDA under the Prescription Drug User Fee Act ("PDUFA") for the treatment of severe hypertriglyceridemia in patients with TG \geq 500 mg/dL. 	<ul style="list-style-type: none"> First half 2016

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 & Drug Act. We plan to conduct two 13-week safety and toxicology animal studies of MAT9001 involving two species (the “animal studies”). These studies will include genotox studies (the effect of a medication on DNA and chromosomal integrity as measured by Ames, Chromosomal Abberation, and Mouse Lymphoma tests), 28-day acute toxicity study in rats, 28-day acute toxicity study in dogs, and critical function studies. We also plan to conduct a long term, two year animal safety and toxicology study. The purpose of these pre-clinical trials is to establish basic safety data for MAT9001 and enable a potential 505(b)(1) filing, a form of NDA. Section 505(b)(1) and Section 505(b)(2) of the Food & Drug Act are the provisions governing the type of NDA filings that may be submitted under this Act.

IND Application Filing. We plan to file an IND in the first quarter 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 will 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 first quarter of 2014, we will also conduct a PK study, which we believe may demonstrate MAT9001’s potency advantage due to its formulation compared to Vascepa. The first study will involve an open label 4-way cross-over PK study assessing comparative bioavailability of MAT9001 versus Vascepa under fed and fasting drug administration conditions. Other endpoints will be assessed to substantiate the differentiation potential of MAT9001 over Vascepa. We also intend to conduct drug interaction PK studies concurrently with our pivotal Phase III studies to document the interaction of MAT9001 with selected likely concomitant therapies in clinical practice.

Pivotal Registration Studies. 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 2 studies for Vascepa and Epanova, respectively, prior to their pivotal Phase III registration studies in hypertriglyceridemia patients. Based on this pathway, we believe we will be able to follow the same approval process.

We are planning three Phase III studies in order to meet the requirements for FDA approval for the first indication, severe hypertriglyceridemia, or the reduction of very high triglycerides (>500 mg/dl). The first study, planned to start in the third quarter of 2014, is a 12-week, 4-arm, 320-patient randomized double-blind placebo controlled trial in patients with TG500-2000 mg/dL, with long term follow-up. This trial will study three doses of MAT9001, and first results are expected around mid-2015.

The second Phase III study is planned to start in the second half of 2014 and is an 8-week, 4-arm, 880-patient randomized double blind placebo controlled study in patients on statin therapy with well controlled LDL-cholesterol levels and TG200-499 mg/dL, with long term follow-up. This trial will also study three doses of MAT9001, and first results for this trial are expected in the second half of 2015.

These first two trials are designed in line with apparent regulatory requirements for omega-3 based prescription drugs (Lovaza, Vascepa and Epanova), and our trial designs are built on our arms-length observations, interpretation and experience with development of omega-3 products such as management’s Lovaza. We plan to submit these two trials to Special Protocol Assessments (SPAs) with the FDA, to obtain in writing an explicit understanding of the FDA requirements for the approval of MAT9001.

A third Phase III trial may be required to ensure International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (“ICH”) guideline patient safety numbers (1500 patients, of which at least 100 with 1 year drug exposure) are met for the NDA filing. This trial creates an opportunity to bring out the best in MAT9001 beyond following FDA direction on the first two Phase III trials. This third trial is anticipated to be a 6 to 12 week 450-500 patient randomized double blind placebo controlled study in a special patient population, thus adding to MAT9001’s differentiation potential. This trial is expected to be initiated in first half of 2015 and results are expected by late-2015 in the run-up to the NDA filing for the first indication (treatment of patients with TG ≥ 500 mg/dL).

Assuming success in our Phase III studies, we plan to compile an NDA application for the first indication for MAT9001, treatment of hypertriglyceridemia in patients with TG \geq 500 mg/dL. It is our expectation that the FDA will want to see additional long term safety data in a significant population size before granting us approval for the second indication, treatment of mixed dyslipidemia (patients on statin treatment with TG 200-499 mg/Dl). If we have adequate financial resources, we would commence a significantly sized clinical outcomes study upon the submission of our NDA filing for the first indication. We would expect this outcome study to provide the required long term safety data for the second indication (to be filed 1-2 years after approval of the first indication), mixed dyslipidemia. Ultimately (several years after the second indication is submitted), this outcome study will form the core of an additional supplemental NDA for a third indication for the reduction of the rate of certain mortalities or morbidities in patients with certain forms of high risk cardiovascular disease.

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 in electronic format during the first half of 2016. PDUFA allows us to qualify for a 10-month review period by the FDA. Concurrently with our pivotal Phase III studies, we plan to initiate detailed exploration and planning over the course of fiscal 2014 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., excluding the clinical outcome study, will be approximately \$70 million to \$75 million. As a result, we will need to raise additional capital. 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 fourth quarter of 2013 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.

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 biopharmaceutical 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.

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) currently markets Tricor (fenofibrate), Trilipix (a fenofibric acid salt) and Niaspan (extended release niacin) for treatment of severe hypertriglyceridemia and high triglycerides. According to IMS Health's market database, MIDAS, Tricor and Niaspan both reached over \$1 billion in US 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.

Pursuant to a March 2011 agreement to settle patent litigation related to Lovaza in the United States, Pronova BioPharma Norge AS, which holds patents for Lovaza, granted Apotex Corp. and Apotex Inc. a license to enter the United States market with a generic version of Lovaza in the first quarter of 2015, or potentially sooner. Recently, Teva Pharmaceuticals USA Inc. and Par Pharmaceutical Inc. were successful in invalidating a key patent related to Lovaza. Generic versions of Lovaza from Apotex or other companies, if available, will also create greater market competition for our product.

There are other companies that are also developing prescription products that, if approved, will compete directly with MAT9001. These companies are in various stages of clinical development with omega-3 prescription therapies for the treatment of high triglycerides, including AstraZeneca/Omthera Pharmaceuticals (Epanova, Phase III completed filed NDA in July of 2013), Trygg Pharma AS (AKR963, in Phase III), Acasti Pharma Inc., a subsidiary of Neptune Technologies and Bioresources Inc. (Phase II), Resolvix Pharmaceuticals, Inc. (Phase II) and Catabasis Pharmaceuticals, Inc. (Phase II). Other companies, which may not have made any public disclosures about their development programs, may be developing additional products for the treatment of hypertriglyceridemia and/or mixed dyslipidemia, or may embark upon such development programs in the future.

MAT9001, along with currently-marketed prescription 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 (ii) 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.

Research and Development

We spent approximately \$79,000 in fiscal year 2012 and approximately \$1,100 in fiscal year 2011 on research and development activities. For the six months ended June 30, 2013, we spent approximately \$289,000 on 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

We will seek to protect MAT9001 and associated technologies for its 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.

Matinas BioPharma's current patent applications include four (4) patent families covering the oil composition for MAT9001 and similar 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 MAT9001 drug substance, formulation, and methods for use in treatment would extend protection until at least 2033.

The FDA grants five years of exclusivity to the first applicant to obtain 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 ingredient. 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 a drug based on the same active ingredient, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, 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 to one of the patents listed with the FDA by the innovator NDA holder. As in these cases, the FDA can only accept and begin to review new applications after the exclusivity period has expired, the data exclusivity can effectively expand the protection period by another one and a half to a total of six and a half years, before competitors with the same active ingredient can reach the market. We believe MAT9001 is a novel and complex mixture different from any other FDA approved product, and, therefore, has the potential to be regarded as an NCE. Analogous data and market exclusivity provisions, of varying duration, may be available in Europe and other countries.

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 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 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.

Drug Development in Europe

In the European Union, 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.

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 four 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

Our principal offices are located at 915 Klosterman Road East, Tarpon Springs, Florida 34689 for which we pay \$200 per month pursuant to a verbal agreement. We are in the process of identifying suitable office space for our executive offices in the New Jersey/Pennsylvania area in order to facilitate expansion of our operations.

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.

Name	Age	Position(s)
Herbert Conrad	80	Chairman of the Board, Director
Roelof Rongen	48	President and Chief Executive Officer, Director
George Bobotas	66	Executive Vice President and Chief Scientific Officer
Abdel A. Fawzy	61	Executive Vice President, Pharmaceutical Development and Supply Chain
Jerome Jabbour	39	Executive Vice President, Chief Business Officer, General Counsel and Secretary, Director
Gary Gaglione	61	Vice President of Finance and Interim Chief Financial Officer ⁽¹⁾
Stefano Ferrari	52	Director
Adam Stern	49	Director

(1) Mr. Gaglione serves as our Interim Chief Financial Officer on a consulting basis.

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 and a director of Matinas BioPharma since April 2012. Mr. Rongen is the President and Chief Executive Officer and a Co-Founder of Matinas BioPharma. 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 (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 Global Product Director for Humira® at BASF Pharma (1998-2000), later acquired by Abbott Laboratories. He was also 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.

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 expert consulting firm Demelle BioPharma, LLC (“DeMelle BioPharma”) (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 the 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, MA, 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.

Jerome Jabbour, JD has served as our Executive Vice President, Chief Business Officer, General Counsel, Secretary since October 2013 and as one of our directors since the Merger and as a director of Matinas BioPharma since February 2012. Mr. Jabbour is also a Co-Founder and Director of Matinas BioPharma. He has been the Executive Vice President and General Counsel of MediMedia USA since 2012, a privately held/ diversified health care services company. Prior to MediMedia, he was the Senior Vice President 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.

Gary Gaglione, CPA has served as our Interim Chief Financial Officer, Vice President of Finance & Treasurer on a consulting basis since April 2013. Mr. Gaglione is President of MCM Consulting LLC. In this capacity, he also served as the interim CFO and Corporate Secretary of GTech USA Inc. 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, PA, and an MBA in Finance from Seton Hall University, West Orange, NJ.

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.

Jerome Jabbour, JD. See description under “Management.” We believe Mr. Jabbour is qualified to serve on our board of directors due to his status as one of our founders and his experience as an executive officer in domestic and global life sciences companies and his background as a lawyer.

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.

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. Herbert Conrad and Stefano Ferrari will initially serve as members of the Audit Committee with Herbert Conrad serving as its chairman. All the members of the Audit Committee are considered independent directors as defined under Nasdaq’s listing standards. We intend to find 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. Herbert Conrad and Stefano Ferrari will initially serve as members of the Compensation Committee, with Stefano Ferrari serving as its chairman. All the members of the Compensation Committee are considered independent directors as defined under 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 and Stefano Ferrari will initially serve as members of the Compensation Committee, with Herbert Conrad serving as its chairman. All the members of the Nominating and Corporate Governance Committee are considered independent directors as defined under Nasdaq's listing standards.

Director Independence

Our board of directors has reviewed the materiality of any relationship that each of our directors has with us, either directly or indirectly. Based on this review, our board has determined that Messrs. Herbert Conrad and Stefano Ferrari are "independent directors" as defined in the rules of the NASDAQ Stock Market 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 not adopted a Code of Business Conduct and Ethics but anticipate doing so following the effectiveness of the registration statement of which this prospectus is a part.

Limitation of Directors Liability and Indemnification

The Delaware General Corporation Law authorizes corporations to limit or eliminate, subject to certain conditions, the personal liability of directors to corporations and their stockholders for monetary damages for breach of their fiduciary duties. Our certificate of incorporation limits the liability of our directors to the fullest extent permitted by Delaware law.

We have director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us, including matters arising under the Securities Act. Our certificate of incorporation and bylaws also provide that we will indemnify our directors and officers who, by reason of the fact that he or she is one of our officers or directors, is involved in a legal proceeding of any nature.

There is no pending litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

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.

EXECUTIVE COMPENSATION

Summary Compensation Table

There was no cash or equity compensation paid to our named executive officers for the year ended December 31, 2012. Please see the section entitled “Executive Compensation—Employment and Consulting Agreements” for a discussion of the compensation arrangements for our named executive officers in 2013.

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 trial 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 trial 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 trial 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. Under the terms of the agreement, Mr. Gaglione receives \$125 per hour. Mr. Gaglione may also be eligible to receive option grants, at the discretion of our Compensation Committee. Currently, Mr. Gaglione is expected to devote up to approximately two days per week to us.

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 price 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 trial 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

There were no outstanding equity awards at December 31, 2012.

Director Compensation

There was no cash or equity compensation paid to our directors for the year ended December 31, 2012. We plan to adopt a compensation policy pursuant to which our independent board members 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 exception of the Chairman of the Board who will be granted 200,000 options. In October 2013, Mr. Conrad and Mr. Ferrari received 275,000 and 210,000 options, respectively, at an exercise price of \$0.94 per share. The options will vest on a monthly basis during the three year period commencing on August 1, 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 October 4, 2013 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 31,500,000 shares outstanding as of October 4, 2013. 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, October 4, 2013. 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., 915 Klosterman Road East, Tarpon Springs, Florida 34689.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
<i>5% Stockholders</i>		
Jennifer Lorenzo (1)	2,850,000	8.8%
George Karfunkel (2)	1,800,000	5.6%
Laurence G. Allen (3)	2,053,750	6.4%
<i>Named Executive Officers, Executive Officers and Directors:</i>		
Roelof Rongen (4)	3,465,803	11.0%
Jerome Jabbour (5)	796,878	2.5%
Herbert Conrad (6)	1,514,758	4.7%
Stefano Ferrari (7)	630,728	2.0%
Adam Stern (8)	4,484,651	13.2%
Gary Gaglione	-	-
Abdel A. Fawzy, Ph.D.(9)	1,757,209	5.6%
George Bobotas, Ph.D. (10)	1,415,491	4.5%
All current directors and executive officers as a group(11)	14,065,518	39.8%

(1) Includes (i) 75,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of October 4, 2013 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 October 4, 2013 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 October 4, 2013.

(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 October 4, 2013 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 October 4, 2013 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 October 4, 2013 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 October 4, 2013 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 October 4, 2013 and are owned by LGA Investments Family Limited Partnership, which is beneficially owned by Mr. Allen.

(4) Includes 48,615 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013. Does not include 301,385 options that are not exercisable within sixty days of October 4, 2013.

(5) Includes 37,503 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013. Does not include 312,497 options that are not exercisable within sixty days of October 4, 2013.

(6) Includes (i) 875,000 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of October 4, 2013 and (ii) 38,195 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013. Does not include 236,805 options that are not exercisable within sixty days of October 4, 2013.

(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 October 4, 2013 and are owned by 1010 Holdings LLC, which is beneficially owned by Mr. Ferrari and (ii) 29,165 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013. Does not include 180,835 options that are not exercisable within sixty days of October 4, 2013.

(8) Includes (i) 2,013,816 shares of common stock issuable upon exercise of outstanding Warrants that are exercisable within sixty days of October 4, 2013, (ii) 20,835 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013, (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 October 4, 2013 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 October 4, 2013 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 October 4, 2013 and are owned by SternAegis Advisers LLC, which is wholly-owned by Mr. Stern. Does not include 129,165 options that are not exercisable within sixty days of October 4, 2013.

(9) Includes 48,615 shares of common stock issuable upon exercise of options that are exercisable within 60 days of October 4, 2013. Does not include 301,385 options that are not exercisable within sixty days of October 4, 2013.

(10) Includes (i) 683,438 shares held by Mr. Bobotas and 683,438 shares held by his wife and (ii) 48,615 shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013. Does not include 301,385 options that are not exercisable within sixty days of October 4, 2013.

(11) See notes (4) through (10).

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 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 an affiliate of Aegis Capital Corporation, the placement agent in our 2013 Private Placement and a member of our board of directors. In addition, at such time, we sold Mr. Stern 250,000 warrants to purchase 250,000 shares of our common stock, for which he paid \$10,000 (at a purchase price of \$0.04 per warrant) (the “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 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 125,000 Investor Warrants. 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.

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. 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 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 (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 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. 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 shall have the right to nominate four (4) members to our Board (the "Matinas Stockholders' Nominees"), (ii) the Holdings Stockholders shall 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 will merge with and into Matinas BioPharma and Matinas BioPharma will become 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; Geroqe 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.

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 September 30, 2013, there were 31,500,000 shares of common stock outstanding and no shares of preferred stock outstanding. The number of shares of common stock outstanding as of September 30, 2013 does not include (i) 15,250,000 shares of common stock issuable upon the exercise of warrants and (ii) 1,785,000 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. See "Restrictions on the Transfer of Securities."

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 September 30, 2013, 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 October 4, 2013, we had outstanding options to purchase an aggregate of 1,985,000 shares of our common stock with an exercise price of \$0.94 per share.

Registration Rights

In connection with the 2013 Private Placement, we entered into a registration rights agreement with the private placement investors, the placement agent and the holders of our outstanding warrants. We were required to 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. We are 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, we 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 us as the result of such failure, 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.

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

We intend to seek to have a broker-dealer file a Form 211 in order to have our common stock quoted on the OTC Bulletin Board and/or OTCQB. 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.

The percent of beneficial ownership for the selling stockholders is based on 31,500,000 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 ⁽¹⁾		Shares Offered by this Prospectus	Shares Beneficially Owned After the Offering ⁽¹⁾⁽²⁾	
	Number	Percent		Number	Percent
Adam Stern ⁽³⁾	3,634,651	10.8%	800,000	2,834,651	8.7%
A. Lauren Rhude Trust ⁽⁴⁾	30,000	*	30,000	-	-
ABBA Properties Partnership ⁽⁵⁾	112,500	*	112,500	-	-
Ali Bijan Rafie Trust ⁽⁶⁾	52,500	*	52,500	-	-
Andrew Kaufman	75,000	*	75,000	-	-
Arnold Estates LLC ⁽⁷⁾	240,625	*	100,000	140,625	*
Aspire Capital Fund LLC ⁽⁸⁾	375,000	1.2%	375,000	-	-
Bel-Cal Joint Venture ⁽⁹⁾	375,000	1.2%	375,000	-	-

Blue Ridge Financial Inc ⁽¹⁰⁾	37,500	*	37,500	-	-
Bret Shupack	75,000	*	75,000	-	-
Christine Hassuk	15,000	*	15,000	-	-
Clyde J. Berg 2011 Charitable Remainder Trust 2011 ⁽¹¹⁾	150,000	*	150,000	-	-
Collier Holdings LLC ⁽¹²⁾	225,000	*	75,000	150,000	*
Craig Benson	240,626	*	100,000	140,626	*
CrL Management LLC ⁽¹³⁾	750,000	2.4%	750,000	-	-
Daniel Cardone	30,000	*	30,000	-	-
Daniel S. Travelle	75,000	*	75,000	-	-
David Blonder	337,500	1.1%	337,500	-	-
David Bocchi Inc ⁽¹⁴⁾	150,000	*	50,000	100,000	*
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 ⁽¹⁵⁾	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. ⁽¹⁶⁾	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 ⁽¹⁷⁾	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 ⁽¹⁸⁾	75,000	*	75,000	-	-
Haiham 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 ⁽¹⁹⁾	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 ⁽²⁰⁾	225,000	*	225,000	-	-
Jeremy Office	75,000	*	75,000	-	-
JKW Family Ltd ⁽²¹⁾	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 ⁽²²⁾	93,750	*	93,750	-	-
Kyle Smith	15,000	*	15,000	-	-
Laura Dell	75,000	*	25,000	50,000	*
Lester Petracca	750,000	2.4%	750,000	-	-
LGA Investments Family Limited Partnership ⁽²³⁾	300,000	*	100,000	200,000	*
Martin and Diana Wolmark	225,000	*	225,000	-	-
Marvin Boehm Family Trust ⁽²⁴⁾	45,000	*	45,000	-	-
Mary L. Marcus - West Declaration of Trust ⁽²⁵⁾	52,500	*	52,500	-	-
MAT9 LLC ⁽²⁶⁾	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 ⁽²⁷⁾	37,500	*	37,500	-	-
Moggle Investors LLC ⁽²⁸⁾	600,000	1.9%	200,000	400,000	1.3%
MSSB C/F James Moore IRA Rollover	37,500	*	37,500	-	-
MSSB C/F James P. Maher IRA Rollover ⁽²⁹⁾	37,500	*	37,500	-	-
MSSB Custodian Bruce Emad IRA Rollover ⁽³⁰⁾	37,500	*	37,500	-	-
Nickel River LLC ⁽³¹⁾	150,000	*	150,000	-	-
Option Opportunities Corp. ⁽³²⁾	75,000	*	75,000	-	-
Patrick Lorenz	75,000	*	75,000	-	-
Peter Janssen ⁽³³⁾	94,442	*	56,250	38,172	*
Peter S Sabo	75,000	*	75,000	-	-
Plank 2010 Family Trust ⁽³⁴⁾	120,313	*	50,000	70,313	*
PPG Trading, Inc. ⁽³⁵⁾	821,098	2.6%	187,500	633,598	2.0%
Precedo Fund LP ⁽³⁶⁾	150,000	*	150,000	-	-
Ramnarain Jaigobind	300,000	*	100,000	200,000	*
RBC Capital Markets FBO Ronald Lazar	37,500	*	37,500	-	-
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	-	-
RL Capital Management Corp. ⁽³⁷⁾	15,000	*	15,000	-	-
RL Capital Partners, LP ⁽³⁸⁾	75,000	*	75,000	-	-

Robert deRose and Susan deRose Family Trust 11/18/86 ⁽³⁹⁾	300,000	*	300,000	-	-
Robert H. Rowley and Dorothy W. Rowley Trust ⁽⁴⁰⁾	30,000	*	30,000	-	-
Robert L. Consley	75,000	*	75,000	-	-
Robert L. Montgomery	37,500	*	37,500	-	-
Robyn Schreiber	75,000	*	75,000	-	-
Roger Baumberger	606,510	1.9%	125,000	250,000	*
Rosalind Capital Partners L.P. ⁽⁴¹⁾	281,250	*	281,250	-	-
Rosalind Master Fund L.P. ⁽⁴²⁾	168,750	*	168,750	-	-
S.T. Organovo LLC ⁽⁴³⁾	750,000	2.4%	750,000	-	-
Safier Enterprises LLC ⁽⁴⁴⁾	150,000	*	150,000	-	-
Samuel R Solis	93,750	*	93,750	-	-
Serenity Now LLC ⁽⁴⁵⁾	37,500	*	37,500	-	-
Seymore Goldstein and Danyale English	75,000	*	75,000	-	-
SJO Worldwide, LLC ⁽⁴⁶⁾	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	*
Strategic Associates Ltd ⁽⁴⁷⁾	562,500	1.8%	187,500	375,000	1.2%
Terrence Oi	75,000	*	75,000	-	-
The Robert G. Mulchrone Trust ⁽⁴⁸⁾	97,500	*	97,500	-	-
The Wollheim Family Trust ⁽⁴⁹⁾	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 ⁽⁵⁰⁾	75,000	*	75,000	-	-
Vantage FBO Regina M. MacLean Roth IRA	37,500	*	37,500	-	-
Vekoe Partners LLC ⁽⁵¹⁾	67,500	*	67,500	-	-
Vidonia Holdings, LLC ⁽⁵²⁾	240,625	*	100,000	140,625	*
Wachtel Ventures, LLC ⁽⁵³⁾	240,626	*	100,000	140,626	*

Warberg Opportunistic Trading Fund LP ⁽⁵⁴⁾	75,000	*	75,000	-	-
William F. Miller, III	225,000	*	225,000	-	-
Wiltain Investors LLC ⁽⁵⁵⁾	750,000	2.4%	750,000	-	-
1010 Holdings LLC ⁽⁵⁶⁾	601,563	2.0%	351,563	51,563	1.2%
SPH Investments Inc. Profit Sharing Plan FBO Stephen Harrington ⁽⁵⁷⁾	450,000	1.4%	400,000	50,000	*
Sherif Sidhom Salib ⁽⁵⁸⁾	405,000	1.3%	355,000	50,000	*
Northlea Partners, LLLP ⁽⁵⁹⁾	150,000	*	100,000	50,000	*
NSH 2008 Family Trust ⁽⁶⁰⁾	150,000	*	100,000	50,000	*
Pavilion Capital Partners, LLC ⁽⁶¹⁾	300,000	*	100,000	200,000	*
SternAegis Advisers LLC ⁽⁶²⁾	250,000	*	250,000	-	-
Piper Ventures Partners, LLC ⁽⁶³⁾	300,000	*	100,000	200,000	*
Laurence G. Allen	150,000	*	150,000	-	-
ACP Partners, LP ⁽⁶⁴⁾	75,000	*	75,000	-	-
ACP X, LP ⁽⁶⁵⁾	1,500,000	4.7%	1,500,000	-	-
George Karfunkel	1,800,000	5.6%	1,600,000	200,000	*
Herbert J. Conrad ⁽⁶⁶⁾	1,514,758	4.7%	1,125,000	389,758	1.2%
Jennifer Lorenzo	225,000	*	75,000	150,000	*
GJG Life Sciences LLC ⁽⁶⁷⁾	2,625,000	8.1%	2,625,000	-	-
Derek Sroufe	262,500	*	162,500	100,000	*
DIT Equity Investors, LLC ⁽⁶⁸⁾	375,000	1.2%	375,000	-	-
Edward M. Dunn	525,000	1.7%	425,000	100,000	*
BobCat Property Trust of Angel Fire, New Mexico ⁽⁶⁹⁾	750,000	2.4%	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	-	-
DIT Equity Holdings, LLC ⁽⁷⁰⁾	825,000	2.6%	275,000	550,000	1.7%
Aegis Capital Corp. ⁽⁷¹⁾	150,000	*	50,000	100,000	*
Salib Holdings, LLC ⁽⁷²⁾	837,500	2.6%	837,500	-	-

* Less than 1%.

⁽¹⁾ Share numbers include shares underlying warrants held by the selling stockholder.

- (2) Assumes the sale of all shares offered pursuant to this prospectus.
- (3) Share numbers include shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013.
- (4) A. Lauren Rhude is a trustee with voting and dispositive power over the shares held by the A. Lauren Rhude Trust.
- (5) Avrom Balsam and Nathaniel Abramson are natural persons with voting and dispositive power over the shares held by ABBA Properties Partnership.
- (6) Ali Bijan Rafie is a trustee with voting and dispositive power over the shares held by the Ali Bijan Rafie Trust.
- (7) Steven Ellis is a natural person with voting and dispositive power over the shares held by Arnold Estates LLC.
- (8) Steven G. Martin is a natural person with voting and dispositive power over the shares held by Aspire Capital Fund LLC.
- (9) William Belzberg is a natural person with voting and dispositive power over the shares held by Bel-Cal Joint Venture.
- (10) Nancy J. Cooper and Nicholas Ponzio are natural persons with voting and dispositive power over the shares held by Blue Ridge Financial Inc.
- (11) 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.
- (12) Todd Van Emburgh is a natural person with voting and dispositive power over the shares held by Collier Holdings LLC.
- (13) Charles Raymond Langston is a natural person with voting and dispositive power over the shares held by CrL Management LLC.
- (14) David Bocchi is a natural person with voting and dispositive power over the shares held by David Bocchi Inc.
- (15) 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.
- (16) Robert Burke is a natural person with voting and dispositive power over the shares held by FourJr. Investments LTD.
- (17) Frederick B Carson and Barbara Kim Carson are co-trustees with voting and dispositive power over the shares held by the Carson Living Trust.
- (18) Gary J. McAdam is a trustee with voting and dispositive power over the shares held by the Growth Ventures, Inc. Pension Plan & Trust.

- (19) 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.
- (20) 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.
- (21) Joshua S. Weiss is a natural person with voting and dispositive power over the shares held by JKW Family Ltd.
- (22) B. Ted Kosir and Stojka Kosir are trustees with voting and dispositive power over the shares held by the Kosir Living Trust.
- (23) 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.
- (24) Marvin Boehm is a trustee with voting and dispositive power over the shares held by the Marvin Boehm Family Trust.
- (25) Mary L. Marcus-West is a trustee with voting and dispositive power over the shares held by the Mary L. Marcus-West Declaration Trust.
- (26) Ralph Pastore is a natural person with voting and dispositive power over the shares held by MAT9 LLC and S.T. Organovo LLC.
- (27) 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.
- (28) Stephen Harrington is a natural person with voting and dispositive power over the shares held by Moggle Investors LLC.
- (29) Mr. Maher is a FINRA member.
- (30) Mr. Emad is a FINRA member.
- (31) 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.
- (32) 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.
- (33) Mr. Janssen is a FINRA member broker-dealer.
- (34) Julie Plank is a trustee with voting and dispositive power over the shares held by the Plank 2010 Family Trust.
- (35) Raffaele Gambardella and Phil Michals are natural persons with voting and dispositive power over the shares held by PPG Trading, Inc.
- (36) Timothy Moran is a natural person with voting and dispositive power over the shares held by Precedo Fund LP.
- (37) Ronald Lazar is a natural person with voting and dispositive power over the shares held by RL Capital Management Corp. and RL Capital Partners, LP.
- (38) Ronald Lazar is a natural person with voting and dispositive power over the shares held by RL Capital Management Corp. and RL Capital Partners, LP.

- (39) 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.
- (40) 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.
- (41) 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.
- (42) 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.
- (43) Ralph Pastore is a natural person with voting and dispositive power over the shares held by MAT9 LLC and S.T. Organovo LLC.
- (44) Jamie Safier is a natural person with voting and dispositive power over the shares held by Safier Enterprises LLC.
- (45) 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.
- (46) Jeremy Office is a natural person with voting and dispositive power over the shares held by SJO Worldwide, LLC.
- (47) Robert J. Eide is a natural person with voting and dispositive power over the shares held by Strategic Associates Ltd. Mr. Eide is chief executive officer of Aegis Capital Corp., a FINRA member.
- (48) Robert G. Mulchrone is a trustee with voting and dispositive power over the shares held by the Robert G. Mulchrone Trust.
- (49) Bryan J. Wollheim and Jaclyn S. Wollheim are co-trustee with voting and dispositive power over the shares held by the Wollheim Family Trust.
- (50) Mr. Lof is a FINRA member.
- (51) Jan Koe is a natural person with voting and dispositive power over the shares held by Vekoe Partners LLC.
- (52) Tara Keiter is a natural person with voting and dispositive power over the shares held by Vidonia Holdings, LLC.
- (53) Adam Wachtel is a natural person with voting and dispositive power over the shares held by Wachtel Ventures, LLC.
- (54) 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.
- (55) John McCarthy is a natural person with voting and dispositive power over the shares held by Wiltain Investors LLC.
- (56) Stefano Ferrari is a natural person with voting and dispositive power over the shares held by 1010 Holdings LLC.

- (57) 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.
- (58) Share numbers include shares of common stock that are registered in the name of Mr. Salib's individual retirement account.
- (59) John H Abeles is a natural person with voting and dispositive power over the shares held by Northlea Partners, LLLP.
- (60) 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.
- (61) Adam Stern is a natural person with voting and dispositive power over the shares held by Pavilion Capital Partners, LLC, SternAegis Advisers LLC and Piper Ventures Partners, LLC.
- (62) Adam Stern is a natural person with voting and dispositive power over the shares held by Pavilion Capital Partners, LLC, SternAegis Advisers LLC and Piper Ventures Partners, LLC.
- (63) Adam Stern is a natural person with voting and dispositive power over the shares held by Pavilion Capital Partners, LLC, SternAegis Advisers LLC and Piper Ventures Partners, LLC.
- (64) 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.
- (65) 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.
- (66) Share numbers include shares of common stock issuable upon exercise of options that are exercisable within sixty days of October 4, 2013.
- (67) Jennifer Lorenzo is a natural person with voting and dispositive power over the shares held by GJG Life Sciences LLC.
- (68) Howard Appel is a natural person with voting and dispositive power over the shares held by DIT Equity Investors, LLC and Wiltomo Redemption Foundation.
- (69) 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.
- (70) Kyung Won Lee is a natural person with voting and dispositive power over the shares held by DIT Equity Holdings, LLC.
- (71) Robert J. Eide is a natural person with voting and dispositive power over the shares held by Aegis Capital Corp., a FINRA Member.
- (72) Seon Yung Chang is a natural person with voting and dispositive 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 that participate in the sale of the common stock or interests therein may be “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, the Form 211 has not been filed 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 163 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 thereon and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION OF INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified to the fullest extent permitted under Delaware law. We may also purchase and maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a capacity, and such a policy may be obtained by us in the future.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of ours 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, we will, unless in the opinion of our 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 and will be governed by the final adjudication of such issue.

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. 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 the 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 and copy all or any portion of the registration statement without charge at the office of the SEC at the Public Reference Room at Station Place, 100 F Street, N.E., Washington, D.C. 20549. Copies of the registration statement may be obtained from the SEC at prescribed rates from the Public Reference Section of the SEC at such address. 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 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, INC.
(Formerly NEREUS BIOPHARMA LLC)
(A Development Stage Company)

Balance Sheets

	June 30,	December 31,
	2013	2012
	(UNAUDITED)	
ASSETS		
Current assets		
Cash	\$ 461,510	\$ 424,364
Prepaid expenses	<u>45,446</u>	<u>-</u>
Total current assets	506,956	424,364
Deferred issuance costs	<u>189,837</u>	<u>-</u>
Total assets	<u>\$ 696,793</u>	<u>\$ 424,364</u>
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT		
Current liabilities		
Accounts payable	\$ 273,075	\$ 60,327
Accrued expenses	43,368	-
Loans made by Founders	<u>-</u>	<u>24,100</u>
Total current liabilities	<u>316,443</u>	<u>84,427</u>
Commitments and contingencies		
Redeemable Convertible Preferred Stock, \$0.0001 par value:		
Series A, 6,484,481 shares authorized, 1,851,852 issued and outstanding at June 30, 2013		
925,926 issued and outstanding at December 31, 2012 (liquidation preference of \$1,000,000 and \$500,000 at June 30, 2013 and December 31, 2012, respectively)	952,389	456,529
Stockholders' deficit		
Common stock; 19,200,000 shares authorized, at \$0.0001 par value, 10,000,000 shares issued and outstanding	1,000	1,000
Deficit accumulated during the development stage	<u>(573,039)</u>	<u>(117,592)</u>
Total stockholders' deficit	<u>(572,039)</u>	<u>(116,592)</u>
Total liabilities and stockholders' deficit	<u>\$ 696,793</u>	<u>\$ 424,364</u>

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

Statements of Operations
(unaudited)

	For the Six Months Ended		Cumulative Period
	June 30,		From August 11,
	2013	2012	2011
	(Date of Inception)		to June 30,
	2013	2012	2013
Revenues	\$ -	\$ -	\$ -
Operating Expenses:			
Research and development	289,700	4,125	368,546
General and administrative	165,804	8,475	203,033
Total operating expenses	<u>455,504</u>	<u>12,600</u>	<u>571,579</u>
Other income	<u>(57)</u>	<u>-</u>	<u>(57)</u>
Net loss	<u>\$ (455,447)</u>	<u>\$ (12,600)</u>	<u>\$ (571,522)</u>
Basic loss and diluted loss per share	<u>\$ (0.05)</u>	<u>\$ N/A</u>	<u>\$ (0.06)</u>
Weighted average number of shares outstanding	<u>10,000,000</u>	<u>N/A</u>	<u>10,000,000</u>

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

Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(unaudited)

	Redeemable Convertible Preferred Stock		Common Stock		Membership Units	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	(Shares)	(Amount)	(Shares)	(Amount)			
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	<u>925,926</u>	<u>456,528</u>	<u>10,000,000</u>	<u>1,000</u>	<u>-</u>	<u>(117,592)</u>	<u>(116,592)</u>
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, 4th tranche	185,184	100,000					
Issuance cost paid in connection with Series A convertible preferred stock		(4,140)					
Net loss for the six months ended June 30, 2013						(455,447)	(455,447)
Stockholders' deficit	<u><u>1,851,852</u></u>	<u><u>\$ 952,389</u></u>	<u><u>10,000,000</u></u>	<u><u>\$ 1,000</u></u>	<u><u>-</u></u>	<u><u>\$ (573,039)</u></u>	<u><u>\$ (572,039)</u></u>

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

Statements of Cash Flows
(unaudited)

	(UNAUDITED)		Cumulative Period From August 11, 2011 (date of inception) to June 30, 2013
	June 30,		
	2013	2012	2013
Cash flows from operating activities:			
Net loss	\$ (455,447)	\$ (12,600)	\$ (571,522)
Adjustments to reconcile net loss to net cash used by operating activities:			
Amortization	3,577	-	3,577
Changes in operating assets and liabilities			
Prepaid expenses	(49,024)	-	(49,024)
Accrued expenses	43,368	-	(146,469)
Accounts payable	22,911	12,600	271,560
Net cash used in operating activities	<u>(434,615)</u>	<u>-</u>	<u>(491,878)</u>
Cash flows from financing activities:			
Loans provided by founders	-	-	24,100
Repayment of loans provided by founders	(24,100)	-	(24,100)
Proceeds from membership units issued for cash	-	-	2,000
Proceeds from common stock issued for cash	-	-	1,000
Proceeds from redeemable convertible preferred stock issued for cash	500,001	-	1,000,001
Stock issuance costs	(4,140)	-	(47,613)
Return of membership capital in LLC	-	-	(2,000)
Net cash provided by financing activities	<u>471,761</u>	<u>-</u>	<u>953,388</u>
Net increase in cash	37,146	-	461,510
Cash at beginning of period	<u>424,364</u>	<u>-</u>	<u>-</u>
Cash at end of period	<u>\$ 461,510</u>	<u>\$ -</u>	<u>\$ 461,510</u>

Note A - Company Information And History

[1] Corporate history:

Nereus Biopharma LLC was a Delaware entity established on August 11, 2011. On February 29, 2012, Nereus Biopharma, a Delaware LLC converted to Matinas Biopharma, Inc., ("Matinas" or the "Company") a Delaware corporation. All existing ownership units in Nereus were converted to common stock in Matinas. On December 14, 2012, the Company had its initial closing of its Series A Convertible Redeemable Preferred Stock issuing 925,926 shares at a purchase price of \$500,000. On February 1, 2013, four purchasers acquired 555,557 shares at a purchase price of \$300,001. On February 26, 2013, one purchaser acquired 185,185 shares at a purchase price of \$100,000. The last closing for Series A occurred on April 1, 2013 when one purchaser acquired 185,184 shares at a purchase price of \$100,000. As detailed in Note H, Subsequent Events, the Company closed a \$15 million private placement, which will allow it to accelerate development of its new omega-3 product candidate MAT9001. The Company is considered a development stage entity.

[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 believes that by capitalizing on its significant expertise and experience in the field of lipid science and the proven therapeutic benefits of omega-3 fatty acids in treating lipid disorders, the Company has designed a program to develop lead product candidate MAT 9001 and to establish significant differentiation over existing available therapies by demonstrating potent reductions in triglyceride levels and improvement of cholesterol and other important physiological parameters and thus address an unmet medical need for these classes of patients.

The Company is primarily focused on developing MAT9001 through approval with the United States Food and Drug Administration ("FDA"), with a first indication for the treatment of severe hypertriglyceridemia and a second indication for mixed dyslipidemia for patients already undergoing treatment with a statin, a commonly used class of cholesterol lowering medications. 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 program is similar to the clinical trial programs used by other pharmaceutical companies for FDA approval of other omega-3 fatty acid based products. By designing the MAT9001 development program in a manner consistent with the established FDA guidance, the Company believes the required clinical development program for MAT9001 is highly predictable and relatively lower in risk compared to other typical clinical development programs in the cardiovascular field.

Note B - Going Concern And Plan Of Operation

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, 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.

Note B - Going Concern And Plan Of Operation (continued)

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 year since its inception. Through June 30, 2013, the Company had an accumulated deficit of approximately \$573,000. The Company's operations have been financed through advances from officers and directors and from outside capital. The Company's net loss for the six months ended June 30, 2013 and June 30, 2012 was \$455,447 and \$12,600, respectively.

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 a human PK study and 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 late 2016, 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 the Company advances to pre-clinical and clinical trials and pursues FDA approval for MAT9001 for the reduction of non-HDL-C and triglycerides in patients with high triglycerides (TG 200-499 mg/dl) in combination with statin therapy, as well as the clinical outcome study for the reduction of morbidity and mortality in high risk cardiovascular patients. As a result, the Company expects to continue to incur substantial losses for the foreseeable future, and these losses will be increasing.

The Company's recurring losses from operations 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, 2012 with respect to this uncertainty. This going concern opinion could materially limit the Company's ability to raise additional funds through the issuance of new debt or equity securities or otherwise. Future reports on the Company's financial statements may include an explanatory paragraph with respect to the Company's ability to continue as a going concern. The perception that the Company may not be able to continue as a going concern may cause others to choose not to deal with the Company due to concerns about the Company's ability to meet its contractual obligations.

Subsequent to June 30, 2013 the Company, and its parent, Matinas BioPharma Holdings, Inc. were able to secure financing through a private placement. Ageis Capital Corp. served as the placement agent for this financing. The final close of this financing was on August 8, 2013 and amounted to \$15 million before legal expenses and placement fees associated with the financing (see Note H). Such funding is expected to be sufficient to fund the Company's operations until May 2014.

Note C - Summary Of Significant Accounting Policies

[1] 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.

[2] Basic net loss per common share:

Basic net loss per share of common stock is computed based on the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share of common stock is computed using the weighted average number of shares of common stock and potential dilutive common stock equivalents outstanding during the period. Potential dilutive common stock equivalents include shares issuable upon the conversion of preferred stock. Due to the net loss for the six months ended June 30, 2013 and 2012, the effect of the Company's potential dilutive common stock equivalents was anti-dilutive for each year; as a result, the basic and diluted weighted average number of common shares outstanding and net loss per common share are the same. Potentially dilutive common stock equivalents, which consist of convertible preferred stock were excluded from the net loss per share calculations due to their anti-dilutive effect amounted to 1,851,862 at June 30, 2013.

[3] Revenue recognition:

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

[4] 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.

[5] 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.

[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 carryforwards 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.

Note C - Summary Of Significant Accounting Policies (continued)

[6] Income taxes: (continued)

The Company adopted the provisions of ASC 740-10 and has analyzed its filing positions in 2011 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 June 30, 2013 and December 31, 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, all of its 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:

No stock options have been issued as of June 30, 2012. The Company has reserved 1,765,000 shares of common stock for issuance to officers, directors, employees and consultants pursuant to its 2012 Stock Plan. If and when issued, the Company will follow generally accepted accounting principles in accounting for stock based compensation. See note H.

Note D – Related Party Transactions

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.

Note E - Prepaid Expenses

In March 2013, the Company entered into a rights agreement with a manufacturer to insure the use of a dedicated GMP suite to produce API for MAT 9001 during the development phase. These right costs of approximately \$33,000 and \$12,000, paid during the quarters ended March 31, 2013 and June 30, 2013, respectively, are included in prepaid expenses and will be amortized over 20 months on a straight line basis.

Note F - Convertible Redeemable Preferred Stock

The Company classifies the convertible redeemable preferred stock outside of permanent equity based upon the terms of the instrument described below.

[1] Voting rights:

Holders of shares of Series A Convertible Redeemable Preferred Stock ("Preferred Stock") shall have the right to one vote for each share of common stock into which such Preferred Stock could be converted.

[2] Dividends:

Holders of shares of Series A Convertible Redeemable Preferred Stock shall first receive if declared, or simultaneously, a dividend on each outstanding share of Series A Convertible Redeemable Preferred Stock in an amount at least equal to dividends on common stock or any class or series that is convertible into common stock.

[3] Conversion:

Each share of Convertible Redeemable Preferred Stock shall be convertible, at the option of the holder, at any time after issuance, into such number of fully paid and non-assessable shares of common stock. The initial conversion price for each series of Convertible Redeemable Preferred Stock is equal to the original issuance price. The initial conversion price is however, subject to adjustment for certain dilutive issuances, splits and combinations.

Each outstanding share of Convertible Redeemable Preferred Stock shall automatically convert to common stock at the conversion rate then in effect upon an issuance of the Company's common stock pursuant to an underwritten public offering resulting in net proceeds to the Company of at least \$20,000,000 or the date specified by written consent or agreement of holders of at least 50% of the then outstanding shares of Convertible Redeemable Preferred Stock.

[4] Redemption:

Shares of Series A Convertible Redeemable Preferred Stock shall be 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 shall redeem, on a pro-rata basis in accordance with the number of shares of Series A Convertible Redeemable Preferred Stock owned by each holder.

[5] Liquidation preference:

Upon the closing of the sale, transfer, or other disposition of all, or substantially all of the Company's assets, or any other "Liquidation Event" as defined in the Company's certificate of incorporation, either voluntary or involuntary, holders of Preferred Stock shall be entitled to receive, prior and in preference to any distribution to holders of common stock. If the proceeds from any Liquidation Event are insufficient to pay the preferential amounts, then the entire proceeds available for distribution shall be paid ratably among the holders of Preferred Stock.

Note G - Income Taxes

At December 31, 2012, the Company had net operating loss carry forwards of approximately \$64,000 which may be offset against future taxable income through 2032. No net deferred tax assets are recorded at December 31, 2011 or 2012, as all deferred tax assets have been fully offset by a valuation allowance due to the uncertainty of future utilization.

Note H - Subsequent Events

The Company evaluated events after June 30, 2013 and through September 12, 2013, which is the date the financial statements were available to be issued.

[1] Private Placement Offering:

In June 2013, Matinas BioPharma Holdings, Inc. (“Holdings”) was formed by certain affiliates of Aegis Corp. and parties not affiliated with Matinas BioPharma, Inc. or the Placement Agent. On July 11, 2013 Matinas BioPharma Inc. entered into a merger agreement with Matinas Merger Sub, Inc. (“Merger Sub”), a newly formed wholly owned subsidiary of Holdings. With the initial closing of the Private Placement on July 30, 2013 Merger Sub merged with the Company and the Company became a wholly owned subsidiary of Matinas BioPharma Holdings, Inc. The officers and directors of the Company became the officers and directors of Holdings, which continued the business operations of Matinas BioPharma, Inc. utilizing the proceeds of the offering. Members of the Management Team and the Board were awarded stock options upon this closing (see Note C-7).

On July 30, 2013, we conducted the initial closing of a private placement offering (the “2013 Private Placement”) of an aggregate of 7,843,750 shares of our common stock Common Stock and warrants to purchase an aggregate of 3,921,875 shares of our common stock Common Stock with an exercise price of \$2.00 per share, which warrants are exercisable at any time prior to July 30, 2018 (the “Investor Warrants”). The final closing of the July 2013 Private Placement occurred on August 8, 2013 of an aggregate of 7,156,250 shares of Common Stock and 3,578,125 Investor Warrants. There were a total of 119 accredited investors in the July 2013 Private Placement. Aegis Capital Corp. acted as the Placement Agent for the July 2013 Private Placement. The gross proceeds to us from the July 2013 Private Placement were \$15 million.

Contemporaneously with this offering, the Company sold warrants to purchase an aggregate of 500,000 shares of common stock at an exercise price of \$2.00 per share to Herbert Conrad, the Company’s Chairman of the Board, for a purchase price of \$0.04 per warrant.

[2] Equity Incentive Pool:

A total equity incentive pool of 8,250,000 shares as been adopted by the Board and Shareholders. With the initial closing of financing on July 30, 2013, 735,000 Options were granted to Board members and 1,050,000 Options were awarded to members of the management team at an exercise price of \$0.94 per share. These options vest over 36 months on a monthly basis.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

Matinas BioPharma, Inc. (formerly Nereus BioPharma LLC)

We have audited the accompanying balance sheets of Matinas BioPharma, Inc. (formerly Nereus BioPharma LLC) (a development stage company) (the "Company") as of December 31, 2012 and December 31, 2011 and the related statements of operations, changes in stockholders' deficit and cash flows for the periods then ended and for the period from August 11, 2011 (date of inception) to December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included 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 also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Matinas BioPharma, Inc. as of December 31, 2012 and December 31, 2011, and the results of its operations and its cash flows for the periods then ended and for the period from August 11, 2011 (date of inception) to December 31, 2012 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 been operating at recurring losses from operations and has limited liquidity 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

Edison, New Jersey
June 4, 2013

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

Balance Sheets

	December 31,	
	2012	2011
ASSETS		
CURRENT ASSETS		
Cash	\$ 424,364	\$ 2,000
Total Current Assets	424,364	2,000
TOTAL ASSETS	\$ 424,364	\$ 2,000
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES		
Accounts payable	\$ 60,327	\$ 1,517
Loans made by Founders	24,100	-
Total Current Liabilities	84,427	1,517
COMMITMENTS AND CONTINGENCIES		
Redeemable Convertible Preferred Stock, \$0.0001 par value:		
Series A, 6,484,481 shares authorized, 925,926 issued and outstanding (liquidation preference of \$500,000)	456,529	-
STOCKHOLDERS' EQUITY (DEFICIT)		
LLC membership units	-	2,000
Common stock; 19,200,000 shares authorized, at \$0.0001 par value, 10,000,000 shares issued and outstanding, respectively	1,000	-
Deficit accumulated during the development stage	(117,592)	(1,517)
Total Stockholders' Equity (Deficit)	(116,592)	483
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)	\$ 424,364	\$ 2,000

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

Statements of Operations

	Year Ended December 31, 2012	From August 11, 2011 (Date of Inception) To December 31, 2011	Cumulative Period From August 11, 2011 (Date of Inception) To December 31, 2012
REVENUES	\$ -	\$ -	\$ -
OPERATING EXPENSES			
Research and development	78,846	1,093	79,939
General and administrative	37,229	424	37,653
Total Operating Expenses	<u>116,075</u>	<u>1,517</u>	<u>117,592</u>
NET LOSS	<u>\$ (116,075)</u>	<u>\$ (1,517)</u>	<u>\$ (117,592)</u>
BASIC LOSS AND DILUTED LOSS PER SHARE	<u>\$ (0.01)</u>	<u>\$ -</u>	<u>\$ (0.01)</u>
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	<u>10,000,000</u>	<u>-</u>	<u>10,000,000</u>

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

Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)

	Redeemable Convertible Preferred Stock		Common Stock		Membership Units	Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	(Shares)	(Amount)	(Shares)	(Amount)				
		\$		\$		\$	\$	\$
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	<u>925,926</u>	<u>\$ 456,528</u>	<u>10,000,000</u>	<u>\$ 1,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (117,592)</u>	<u>\$ (116,592)</u>

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

Statements of Cash Flows

	Year Ended December 31, 2012	From August 11, 2011 (Date of Inception) To December 31, 2011	From August 11, 2011 (Date of Inception) To December 31, 2012
CASH FLOWS FROM OPERATING ACTIVITIES			
Net loss	\$ (116,075)	\$ (1,517)	\$ (117,592)
Adjustments to reconcile net loss to net cash used by operating activities:			
Changes in operating assets and liabilities			
Accounts payable	58,811	1,517	60,328
Net Cash Used in Operating Activities	<u>(57,264)</u>	<u>-</u>	<u>(57,264)</u>
CASH FLOWS FROM INVESTING ACTIVITIES			
	-	-	-
CASH FLOWS FROM FINANCING ACTIVITIES			
Loans provided by founders	24,100		24,100
Proceeds from membership units issued for cash		2,000	2,000
Proceeds from redeemable convertible preferred stock issued for cash	500,000		500,000
Proceeds from common stock issued for cash	1,000		1,000
Stock issuance costs	(43,472)		(43,472)
Return of membership capital in LLC	(2,000)		(2,000)
Net Cash Provided by Financing Activities	<u>479,628</u>	<u>2,000</u>	<u>481,628</u>
NET CHANGE IN CASH	422,364	2,000	424,364
CASH AT BEGINNING OF PERIOD	2,000		-
CASH AT END OF PERIOD	\$ <u>424,364</u>	\$ <u>2,000</u>	\$ <u>424,364</u>

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

NOTE A - COMPANY INFORMATION AND HISTORY

[1] Corporate history:

Nereus Biopharma LLC was a Delaware entity established on August 11, 2011. On February 29, 2012, Nereus Biopharma, a Delaware LLC converted to Matinas Biopharma, Inc., (“Matinas or the Company”) a Delaware corporation. All existing ownership units in Nereus were converted to common stock in Matinas. On December 14, 2012, the Company had its initial closing of its Series A Convertible Redeemable Preferred Stock issuing 925,926 shares at a purchase price of \$ 500,000. The Company is considered a development stage entity.

[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 believes that by capitalizing on its significant expertise and experience in the field of lipid science and the proven therapeutic benefits of omega-3 fatty acids in treating lipid disorders, the Company has designed a program to develop lead product candidate MAT9001 and to establish significant differentiation over existing available therapies by demonstrating potent reductions in triglyceride levels and improvement of cholesterol and other important physiological parameters and thus address an unmet medical need for these classes of patients.

The Company is primarily focused on developing MAT9001 through approval with the United States Food and Drug Administration (“FDA”), with a first indication for the treatment of severe hypertriglyceridemia and a second indication for mixed dyslipidemia for patients already undergoing treatment with a statin, a commonly used class of cholesterol lowering medications.

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

NOTE B – LIQUIDITY AND PLAN OF OPERATION

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, 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.

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 year since its inception. Through December 31, 2012, the Company had an accumulated deficit of approximately \$ 118,000. The Company's operations have been financed through advances from officers and directors and from outside capital. The Company has not yet received sufficient funds to significantly develop or commercialize its technologies.

The Company does not expect to receive FDA approval prior to at least late 2016. 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 in 2013 – 2015 as the Company advances to pre-clinical and clinical trials and pursues FDA approval for MAT9001 for the reduction of non-HDL-C and triglycerides in patients with high triglycerides (TG 200-499 mg/dl) in combination with statin therapy, as well as the clinical outcome study for the reduction of morbidity and mortality in high risk cardiovascular patients. 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 uncertain when or if the Company will be able to achieve or sustain profitability. If the Company achieved profitability in the future, the Company may not be able to sustain profitability in subsequent periods. Failure to become and remain profitable would impair its ability to sustain operations and adversely affect the price of its common stock and its ability to raise capital.

The Company's recurring lack of sufficient capital to execute the development plan for MAT9001 raises 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, 2012 with respect to this uncertainty.

Subsequent to December 31, 2012, the Company signed a term sheet with Aegis Capital, an investment banking firm, to attempt to secure financing on behalf of the Company through a private placement. The timing, form and amount of financing, if any, is uncertain.

NOTE C – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

[1] 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.

[2] Basic loss per common share:

Basic loss per share is calculated by dividing the Company's net loss applicable to common shareholders by the weighted average number of common shares during the period. Diluted earnings per share is calculated by dividing the Company's net income available to common shareholders by the diluted weighted average number of shares outstanding during the year. Due to net losses at December 31, 2012 and 2011, the effect of the potential common shares resulting from convertible redeemable preferred stock was excluded, as the effect would have been anti-dilutive. Potentially dilutive common stock equivalents include convertible redeemable preferred stock which are convertible into the Company's common stock, which were excluded from the net loss per share calculations due to their anti-dilutive effect amounted to 925,926 for 2012.

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

NOTE C – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

[2] Basic loss per common share (continued):

	For the Year Ended December 31, 2012	From August 11, 2011 (Date of Inception) to December 31, 2011	Cumulative Period From August 11, 2011 (Date of Inception) To December 31, 2012
Net Loss (numerator)	\$ (116,075)	(1,517)	\$ (117,592)
Common Shares (denominator)	10,000,000	-	10,000,000
Net loss per share amount	<u>\$ (0.01)</u>	<u>-</u>	<u>\$ (0.01)</u>

[3] Revenue recognition:

The Company will develop an appropriate revenue recognition policy when planned principal operations commence.

[4] 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.

[5] 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.

[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 carryforwards 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.

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

NOTE C – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The Company adopted the provisions of ASC 740-10 and has analyzed its filing positions in 2011 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 matter in income tax expense. The Company had no accrual for interest or penalties as of December 31, 2011 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, all of its 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:

No stock options have been issued as of the date of this report. The Company has reserved 1,765,000 shares of Common Stock for issuance to officers, directors, employees and consultants pursuant to its 2012 Stock Plan. If and when issued, the Company will follow generally accepted accounting principles in accounting for stock based compensation.

[8] Recent accounting pronouncements:

In June 2011, the Financial Accounting Standards Board, ("FASB") issued ASU 2011-05, Comprehensive Income: Presentation of Comprehensive Income, with the intention of increasing its prominence in financial statements by eliminating the option to report other comprehensive income and its components in the statement of changes in stockholders' equity. The standard, which became effective for interim and annual periods ending after December 15, 2012, requires comprehensive income to be reported in either a single statement that presents the components of net income, the components of other comprehensive income, and total comprehensive income, or in two consecutive statements. The Company did not have any other comprehensive income related transactions during the years ended December 31, 2011 or 2012 and as such did not present required statements.

In February 2013, FASB issued ASU 2013-02, Other Comprehensive Income, with amendments that supersede ASU 2011-05 and ASU 2011-12 replacing the presentation requirements for reclassifications out of accumulated other comprehensive income for all public and private companies. These amendments require an entity to provide additional information about reclassifications out of accumulated other comprehensive income. Amendments in this update are effective on a prospective basis for reporting periods beginning after December 15, 2013 with early adoption permitted.

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

NOTE D – RELATED PARTY TRANSACTIONS

During 2012, the Company borrowed \$24,100 from its founders and shareholders. These loans were short term, non-collateralized and non-interest bearing. Subsequent to year end, these loans were repaid in full.

NOTE E – CONVERTIBLE REDEEMABLE PREFERRED STOCK

The Company classifies the convertible redeemable preferred stock outside of permanent equity based upon the terms of the instrument described below.

[1] Voting rights:

Holders of shares of Series A Convertible Redeemable Preferred Stock ("Preferred Stock") shall have the right to one vote for each share of Common Stock into which such Preferred Stock could be converted.

[2] Dividends:

Holders of shares of Series A Convertible Redeemable Preferred Stock shall first receive, or simultaneously, a dividend on each outstanding share of Series A Convertible Redeemable Preferred Stock in an amount at least equal to in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock.

[3] Conversion:

Each share of Convertible Redeemable Preferred Stock shall be convertible, at the option of the holder, at any time after issuance, into such number of fully paid and non-assessable shares of Common Stock. The initial conversion price for each series of Convertible Redeemable Preferred Stock is equal to the original issuance price. The initial conversion price is however, subject to adjustment for certain dilutive issuances, splits and combinations.

Each outstanding share of Convertible Redeemable Preferred Stock shall automatically convert to Common Stock at the conversion rate then in effect upon an issuance of the Company's Common Stock pursuant to an underwritten public offering resulting in net proceeds to the Company of at least \$20,000,000 or the date specified by written consent or agreement of holders of at least 50% of the then outstanding shares of Convertible Redeemable Preferred Stock.

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

NOTE E – CONVERTIBLE REDEEMABLE PREFERRED STOCK (CONTINUED)

[4] Redemption:

Shares of Series A Convertible Redeemable Preferred Stock shall be redeemed by the Corporation 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 Corporation at any time on or after October 2017, 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. Corporation shall redeem, on a pro rata basis in accordance with the number of shares of Series A Convertible Redeemable Preferred Stock owned by each holder.

[5] Liquidation preference:

Upon the closing of the sale, transfer, or other disposition of all, or substantially all of the Company's assets, or any other "Liquidation Event" as defined in the Company's certificate of incorporation, either voluntary or involuntary, holders of Preferred Stock shall be entitled to receive, prior and in preference to any distribution to holders of Common Stock. If the proceeds from any Liquidation Event are insufficient to pay the preferential amounts, then the entire proceeds available for distribution shall be paid ratably among the holders of Preferred Stock. The liquidation amount shall be the Series A Convertible Redeemable Preferred Stock original issue price plus any unpaid dividends.

NOTE F – INCOME TAXES

No net deferred tax assets are recorded at December 31, 2011 or 2012, as all deferred tax assets, consisting principally of net operating loss carryforwards in the amount of approximately \$92,000, have been fully offset by a valuation allowance due to the uncertainty of future utilization. The valuation allowance on the deferred tax assets at December 31, 2012 was approximately \$37,000. Pursuant to Section 382 of the Internal Revenue Code of 1986, the annual utilization of a company's net operating loss carryforwards may be limited if the company experiences a change in ownership of more than 50 percentage points within a three-year period. An ownership change occurs with respect to a corporation if it is a loss corporation on a testing date and, immediately after the close of the testing date, the percentage of stock of the corporation owned by one or more five-percent shareholders has increased by more than 50 percentage points over the lowest percentage of stock of such corporation owned by such shareholders at any time during the testing period.

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

NOTE G – SUBSEQUENT EVENTS

The Company has evaluated events after December 31, 2012 and through June 4, 2013, which is the date the financial statements were available to be issued.

On February 1, 2013, four purchasers acquired 555,557 shares of Series A Convertible Redeemable Preferred Stock at an aggregate purchase price of \$300,000. On February 26, 2013 one purchaser acquired 185,185 shares of Series A Convertible Redeemable Preferred Stock at a purchase price of \$100,000 and on April 1, 2013, one purchaser acquired 185,186 shares at a purchase price of \$ 100,000. Through the date of the issuance of the financial statements, the total of all closings regarding Series A Convertible Redeemable Preferred Stock amounts to 1,851,854 shares at a purchase price of \$1,000,001.

MATINAS BIOPHARMA HOLDINGS, INC.

**28,000,000 Shares
Common Stock**

PROSPECTUS

[], 2013

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	\$
Accounting Fees and Expenses	\$
Legal Fees and Expenses	\$
Miscellaneous Fees and Expenses	\$
Total	\$

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, 2010, 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 Matrinas 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.

Stock Options

Since January 1, 2010, the Company granted stock options under its 2013 Equity Compensation Plan to purchase an aggregate of 1,985,000 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
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**
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)*

* Filed herewith

** To be filed by amendment

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 _____ on _____, 2013.

MATINAS BIOPHARMA HOLDINGS, INC.

By: _____
Name: Roelof Rongen
Title: President & Chief Executive Officer

By: _____
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.

Person	Capacity	Date
_____ Roelof Rongen	President, Chief Executive Officer and Director (Principal Executive Officer)	_____, 2013
_____ Gary Gaglione	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	_____, 2013
_____ Herbert Conrad	Chairman of the Board	_____, 2013
_____ Stefano Ferrari	Director	_____, 2013
_____ Jerome Jabbour	Director	_____, 2013
_____ Adam K. Stern	Director	_____, 2013

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:10 PM 05/21/2013
FILED 05:55 PM 05/21/2013
SRV 130629082 - 5338407 FILE

CERTIFICATE OF INCORPORATION

OF

MATINAS BIOPHARMA HOLDINGS, INC.

ARTICLE I

The name of the Corporation is Matinas BioPharma Holdings, Inc.

ARTICLE II

The address of the registered office of the Corporation in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808, County of New Castle; and the name of the Corporation's Registered Agent at such address is Corporation Service Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law (the "DGCL").

ARTICLE IV

The name and mailing address of the Incorporator of the Corporation are Gina C. Monaco, Fox Rothschild LLP, 2000 Market Street, 20th Floor, Philadelphia, PA 19103-3222.

ARTICLE V

A. CAPITAL STOCK

The total number of shares of capital stock which the Corporation shall have authority to issue is One Hundred Sixty Million (160,000,000), of which (i) One Hundred Fifty Million (150,000,000) shares shall be a class designated as common stock, par value \$0.0001 per share (the "Common Stock"), and (ii) Ten Million Shares (10,000,000) shares shall be a class designated as preferred stock, par value \$0.0001 per share (the "Preferred Stock").

The number of authorized shares of Common Stock or Preferred Stock may from time to time be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority in voting power of the outstanding shares of stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), and no vote of the holders of any of the Common Stock or the Preferred Stock voting separately as a class shall be required therefor, unless a vote of any such holder is required pursuant to this Certificate (including pursuant to any certificate of designation of any series of Preferred Stock).

The powers, preferences and rights of, and the qualifications, limitations and restrictions upon, each class or series of stock shall be determined in accordance with, or as set forth below in, this Article V.

B. COMMON STOCK

1. Voting. Each holder of record of Common Stock, as such, shall have one vote for each share of Common Stock which is outstanding in his, her or its name on the books of the Corporation on all matters on which stockholders are entitled to vote generally. Except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate (including any certificate of designation relating to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate (including any certificate of designation relating to any series of Preferred Stock) or pursuant to the DGCL.

2. Dividends. Subject to applicable law and the rights, if any, of the holders of any outstanding series of Preferred Stock or any class or series of stock having a preference over or the right to participate with the Common Stock with respect to the payment of dividends, dividends may be declared and paid or set apart for payment upon the Common Stock out of any assets or funds of the Corporation legally available for the payment of dividends, but only when and as declared by the Board of Directors or any authorized committee thereof.

3. Liquidation. Upon the dissolution, liquidation or winding up of the Corporation, after payment or provision for payment of the debts and other liabilities of the Corporation and subject to the rights, if any, of the holders of any outstanding series of Preferred Stock or any class or series of stock having a preference over or the right to participate with the Common Stock with respect to the distribution of assets of the Corporation upon such dissolution, liquidation or winding up of the Corporation, the holders of Common Stock shall be entitled to receive the remaining assets of the Corporation available for distribution to its stockholders ratably in proportion to the number of shares held by them.

C. PREFERRED STOCK

The Board of Directors is hereby expressly authorized, by resolution or resolutions, to provide, out of the authorized, unissued shares of Preferred Stock, for one or more series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, and the powers (including voting powers, if any), preferences and relative, participating, optional and other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series of Preferred Stock. The powers, preferences and relative, participating, optional and other special rights of, and the qualifications, limitations or restrictions thereof, of each series of Preferred Stock, if any, may differ from those of any and all other series at any time outstanding. Except as otherwise required by law, holders of any series of Preferred Stock shall be entitled to only such voting rights, if any, as shall expressly be granted thereto by this Certificate (including any certificate of designation relating to such series of Preferred Stock).

ARTICLE VI

STOCKHOLDER ACTION

1. Written Consent of Stockholders in Lieu of Meeting. Except as otherwise provided herein, any action required by law to be taken at any annual or special meeting of stockholders of the Corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the Corporation by delivery to (a) its registered office in the State of Delaware by hand or by certified mail or registered mail, return receipt requested, (b) its principal place of business, or (c) an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Every written consent shall bear the date of signature of each stockholder who signs the consent and no written consent shall be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered in the manner required by this by-law to the Corporation, written consents signed by a sufficient number of holders to take action are delivered to the Corporation by delivery to (i) its registered office in the State of Delaware by hand or by certified or registered mail, return receipt requested, (ii) its principal place of business, or (iii) an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded, Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing as may be required by applicable law.

2. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Preferred Stock, special meetings of the stockholders of the Corporation may be called by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Board of Directors to be held at such date, time and place either within or without the State of Delaware as may be stated in the notice of the meeting. A special meeting of stockholders shall be called by the Secretary upon the written request, stated the purpose of the meeting, of stockholders who together own of record at least twenty percent (20%) in voting power of the outstanding shares of stock entitled to vote at such meeting.

ARTICLE VII

DIRECTORS

1. General. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided herein or required by law.

2. Election of Directors. Election of Directors need not be by written ballot unless the Bylaws of the Corporation (the "Bylaws") shall so provide.

3. Number of Directors; Term of Office. Except as otherwise provided for or fixed pursuant to the provisions of Article V of this Certificate (including any certificate of designation of any series of Preferred Stock) and this Article VII relating to the rights of the holders of any series of Preferred Stock to elect additional directors, the number of Directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The Directors, other than those who may be elected by the holders of any series of Preferred Stock, shall be elected at each annual meeting of stockholders for a term of one year. Each Director shall serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent Director.

During any period when the holders of any series of Preferred Stock have the right to elect additional Directors, then upon commencement and for the duration of the period during which such right continues: (i) the then otherwise total authorized number of Directors shall automatically be increased by such specified number of Directors, and the holders of such Preferred Stock shall be entitled to elect the additional Directors so provided for or fixed pursuant to said provisions, and (ii) each such additional Director shall serve until such Director's successor shall have been duly elected and qualified, or until such Director's right to hold such office terminates pursuant to said provisions, whichever occurs earlier, subject to his or her earlier death, resignation, retirement, disqualification or removal. Except as otherwise provided by the Board of Directors in the resolution or resolutions establishing such series, whenever the holders of any series of Preferred Stock having such right to elect additional Directors are divested of such right pursuant to the provisions of such stock, the terms of office of all such additional Directors elected by the holders of such stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional Directors, shall forthwith terminate and the total authorized number of directors of the Corporation shall be reduced accordingly.

4. Vacancies. Subject to the rights, if any, of the holders of any series of Preferred Stock to elect Directors and to fill vacancies in the Board of Directors relating thereto, any and all vacancies in the Board of Directors, however occurring, including, without limitation, by reason of an increase in size of the Board of Directors, or the death, resignation, disqualification or removal of a Director, shall be filled solely and exclusively by the affirmative vote of a majority of the remaining Directors then in office, even if less than a quorum of the Board of Directors, and not by the stockholders. Any Director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the Director for which the vacancy was created or occurred and until such Director's successor shall have been duly elected and qualified or until his or her earlier resignation, death or removal.

5. Removal. Subject to the rights, if any, of any series of Preferred Stock to elect Directors and to remove any Director whom the holders of any such stock have the right to elect, any Director (including persons elected by Directors to fill vacancies in the Board of Directors) may be removed from office (i) with cause or without cause and (ii) only by the affirmative vote of the holders of at least a majority in voting power of the shares then entitled to vote at an election of Directors.

ARTICLE VIII

LIMITATION OF LIABILITY

A Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director, except for liability (i) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the Director derived an improper personal benefit. If the DGCL is amended after the effective date of this Certificate to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Any repeal or modification of this Article VIII, shall not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a person serving as a Director at the time of such repeal or modification.

ARTICLE IX

AMENDMENT OF BYLAWS

1. Amendment by Directors. Except as otherwise provided by law, the Bylaws of the Corporation may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the Board.

2. Amendment by Stockholders. The Bylaws of the Corporation may be amended or repealed by the stockholders at any annual meeting of stockholders, or special meeting of stockholders called for such purpose as provided in the Bylaws, by the affirmative vote of the holders of at least a majority in voting power of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class.

ARTICLE X

AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend or repeal this Certificate in the manner now or hereafter prescribed by statute and this Certificate, and all rights conferred upon stockholders herein are granted subject to this reservation. In addition to any other vote required by law or this Certificate, the affirmative vote of the holders of at least a majority in voting power of the outstanding shares entitled to vote on such amendment or repeal, shall be required to amend or repeal any provision of Article VI, Article VII, Article VIII, Article IX or Article X of this Certificate.

ARTICLE XI

EXCLUSIVE JURISDICTION

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation; (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, creditors or other constituents; (iii) any action asserting a claim against the Corporation or any Director or officer of the Corporation arising pursuant to, or a claim against the Corporation or any Director or officer of the Corporation with respect to the interpretation or application of any provision of, the DGCL, this Certificate or the Bylaws of the Corporation; or (iv) any action asserting a claim governed by the internal affairs doctrine in each such case subject to said court having personal jurisdiction over the indispensable parties named as defendants therein; provided, that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state court sitting in the State of Delaware. To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice provisions of this Article XI.

THE UNDERSIGNED, being the Incorporator hereinabove named, for the purpose of forming a corporation pursuant to the Delaware General Corporation Law, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 21st day of a May, 2013.

/s/ Gina C. Monaco
Gina C. Monaco, Incorporator

BYLAWS

OF

MATINAS BIOPHARMA HOLDINGS, INC.

(the "Corporation")

ARTICLE I
Stockholders

SECTION 1.

(a) Annual Meeting. The annual meeting of stockholders (any such meeting being referred to in these Bylaws as an "Annual Meeting") shall be held at the hour, date and place, if any, within or without the United States which is fixed by the Board of Directors of the Corporation (the "Board of Directors") which time, date and place may subsequently be changed at any time by vote of the Board of Directors.

(b) Registered Office. The address of the registered office of Matinas BioPharma Holdings, Inc. (hereinafter called the "Corporation") in the State of Delaware shall be at Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The Corporation may have other offices, both within and without the State of Delaware, as the board of directors of the Corporation (the "Board of Directors") from time to time shall determine or the business of the Corporation may require.

(c) Books and Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be maintained on any information storage device or method; provided that the records so kept can be converted into clearly legible paper form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to applicable law.

SECTION 2. Notice of Stockholder Business and Nominations.

(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors and the proposal of other business to be considered by the stockholders may be brought before an Annual Meeting only (i) pursuant to the Corporation's notice of meeting (or any supplement thereto), (ii) by or at the direction of the Board of Directors or (iii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice provided for in this Bylaw, who is entitled to vote at the meeting, and who complies with the notice procedures set forth in this Bylaw as to such nomination or business. For the avoidance of doubt, the foregoing clause (iii) shall be the exclusive means for a stockholder to bring nominations or business properly before an Annual Meeting (other than matters properly brought under Rule 14a-8 (or any successor rule) under the Securities Exchange Act of 1934, as amended (with the rules and regulations promulgated thereunder, the "Exchange Act")), and such stockholder must comply with the notice and other procedures set forth in Article I, Section 2 of this Bylaw to bring such nominations or business properly before an Annual Meeting. In addition to the other requirements set forth in this Bylaw, for any proposal of business (other than the nomination of persons for election to the Board of Directors) to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (iii) of Article I, Section 2(a)(1) of this Bylaw, the stockholder must (i) have given Timely Notice (as defined below) thereof in writing to the Secretary of the Corporation, (ii) have provided any updates or supplements to such notice at the times and in the forms required by this Bylaw and (iii) together with the beneficial owner(s), if any, on whose behalf the nomination or business proposal is made, have acted in accordance with the representations set forth in the Solicitation Statement (as defined below) required by this Bylaw. To be timely, a stockholder's written notice shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the one-year anniversary of the preceding year's Annual Meeting; provided, however, that in the event the Annual Meeting is first convened more than thirty (30) days before or more than sixty (60) days after such anniversary date, or if no Annual Meeting were held in the preceding year, notice by the stockholder to be timely must be received by the Secretary of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made (such notice within such time periods shall be referred to as "Timely Notice"). Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the effective date of the Corporation's registration statement submitted with the U.S. Securities and Exchange Commission, a stockholder's notice shall be timely if received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the ninetieth (90th) day prior to the scheduled date of such Annual Meeting or the tenth (10th) day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. Such stockholder's Timely Notice shall set forth:

(A) as to each person whom the stockholder proposes to nominate for election or reelection as a director, all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected) provided, further, that the Corporation may require any proposed nominee to furnish such other information as the Corporation may reasonably require to determine the eligibility of such proposed nominee to serve as a director of the Corporation.;

(B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws, the language of the proposed amendment), the reasons for conducting such business at the meeting, and any material interest in such business of each Proposing Person (as defined below);

(C) (i) the name and address of the stockholder giving the notice, as they appear on the Corporation's books, and the names and addresses of the other Proposing Persons (if any) and (ii) as to each Proposing Person, the following information: (a) the class or series and number of all shares of capital stock of the Corporation which are, directly or indirectly, owned beneficially or of record by such Proposing Person or any of its affiliates or associates (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act), including any shares of any class or series of capital stock of the Corporation as to which such Proposing Person or any of its affiliates or associates has a right to acquire beneficial ownership at any time in the future, (b) all Synthetic Equity Interests (as defined below) in which such Proposing Person or any of its affiliates or associates, directly or indirectly, holds an interest including a description of the material terms of each such Synthetic Equity Interest, including without limitation, identification of the counterparty to each such Synthetic Equity Interest and disclosure, for each such Synthetic Equity Interest, as to (x) whether or not such Synthetic Equity Interest conveys any voting rights, directly or indirectly, in such shares to such Proposing Person, (y) whether or not such Synthetic Equity Interest is required to be, or is capable of being, settled through delivery of such shares and (z) whether or not such Proposing Person and/or, to the extent known, the counterparty to such Synthetic Equity Interest has entered into other transactions that hedge or mitigate the economic effect of such Synthetic Equity Interest, (c) any proxy (other than a revocable proxy given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to, directly or indirectly, vote any shares of any class or series of capital stock of the Corporation, (d) any rights to dividends or other distributions on the shares of any class or series of capital stock of the Corporation, directly or indirectly, owned beneficially by such Proposing Person that are separated or separable from the underlying shares of the Corporation, and (e) any performance-related fees (other than an asset based fee) that such Proposing Person, directly or indirectly, is entitled to based on any increase or decrease in the value of shares of any class or series of capital stock of the Corporation or any Synthetic Equity Interests (the disclosures to be made pursuant to the foregoing clauses (a) through (e) are referred to, collectively, as "Material Ownership Interests"), (iii) a description of the material terms of all agreements, arrangements or understandings (whether or not in writing) entered into by any Proposing Person or any of its affiliates or associates with any other person for the purpose of acquiring, holding, disposing or voting of any shares of any class or series of capital stock of the Corporation and (iv) any other information relating to such stockholder and beneficial owner, if any, required to be disclosed in a proxy statement or other filings required to be made in connection with the solicitation of proxies for, as applicable, the proposal and/or for the election of directors in an election contest pursuant to and in accordance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder;

(D) (i) a description of all agreements, arrangements or understandings by and among any of the Proposing Persons, or by and among any Proposing Persons and any other person (including with any proposed nominee(s)), pertaining to the nomination(s) or other business proposed to be brought before the meeting of stockholders (which description shall identify the name of each other person who is party to such an agreement, arrangement or understanding), and (ii) identification of the names and addresses of other stockholders (including beneficial owners) known by any of the Proposing Persons to support such nominations or other business proposal(s), and to the extent known the class and number of all shares of the Corporation's capital stock owned beneficially or of record by such other stockholder(s) or other beneficial owner(s); and

(E) a statement whether or not the stockholder giving the notice and/or the other Proposing Person(s), if any, will (i) deliver a proxy statement and form of proxy to holders of, in the case of a business proposal, at least the percentage of voting power of all of the shares of capital stock of the Corporation required under applicable law to approve the proposal or, in the case of a nomination or nominations, at least the percentage of voting power of all of the shares of capital stock of the Corporation reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder and/or (ii) otherwise solicit proxies or votes from stockholders in support of such proposal or nomination (such statement, the "Solicitation Statement").

For purposes of this Article I of these Bylaws, the term "Proposing Person" shall mean the following persons: (i) the stockholder of record providing the notice of nominations or business proposed to be brought before a stockholders' meeting, and (ii) the beneficial owner(s), if different, on whose behalf the nominations or business proposed to be brought before a stockholders' meeting is made. For purposes of this Section 2 of Article I of these Bylaws, the term "Synthetic Equity Interest" shall mean any transaction, agreement or arrangement (or series of transactions, agreements or arrangements), including, without limitation, any derivative, swap, hedge, repurchase or so-called "stock borrowing" agreement or arrangement, the purpose or effect of which is to, directly or indirectly: (a) give a person or entity economic benefit and/or risk similar to ownership of shares of any class or series of capital stock of the Corporation, in whole or in part, including due to the fact that such transaction, agreement or arrangement provides, directly or indirectly, the opportunity to profit or avoid a loss from any increase or decrease in the value of any shares of any class or series of capital stock of the Corporation, (b) mitigate loss to, reduce the economic risk of or manage the risk of share price changes for, any person or entity with respect to any shares of any class or series of capital stock of the Corporation, (c) otherwise provide in any manner the opportunity to profit or avoid a loss from any decrease in the value of any shares of any class or series of capital stock of the Corporation, or (d) increase or decrease the voting power of any person or entity with respect to any shares of any class or series of capital stock of the Corporation.

(3) A stockholder providing Timely Notice of nominations or business proposed to be brought before an Annual Meeting shall further update and supplement such notice, if necessary, so that the information (including, without limitation, the Material Ownership Interests information) provided or required to be provided in such notice pursuant to this Bylaw shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to such Annual Meeting, and such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the fifth (5th) business day after the record date for the Annual Meeting (in the case of the update and supplement required to be made as of the record date), and not later than the close of business on the eighth (8th) business day prior to the date of the Annual Meeting (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting).

(4) Notwithstanding anything in the second sentence of Article I, Section 2(a)(2) of this Bylaw to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with the second sentence of Article I, Section 2(a)(2), a stockholder's notice required by this Bylaw shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.

(5) Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting. Nominations for persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of meeting (i) by or at the direction of the Board of Directors or any committee thereof or (ii) provided that the Board of Directors has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 2 is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and upon such election and who complies with the notice procedures set forth in this Section 2. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by paragraph (a)(2) of this Section 2 shall be delivered to the Secretary at the principal executive offices of the Corporation not earlier than the close of business on the one hundred twentieth (120th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the public announcement of an adjournment or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(b) General.

(1) Except as otherwise expressly provided in any applicable rule or regulation promulgated under the Exchange Act, only such persons who are nominated in accordance with the provisions of this Bylaw shall be eligible for election and to serve as directors and only such business shall be conducted at a meeting as shall have been brought before the meeting in accordance with the provisions of this Bylaw. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this Bylaw. If prior to the meeting neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this Bylaw, the presiding officer of the meeting shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this Bylaw. If the Board of Directors or a designated committee thereof or the presiding officer, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this Bylaw, such proposal or nomination shall be disregarded and shall not be presented for action at the meeting.

(2) Except as otherwise required by any applicable law or rule or regulation promulgated under the Exchange Act, nothing in this Article I, Section 2 shall obligate the Corporation or the Board of Directors to include in any proxy statement or other stockholder communication distributed on behalf of the Corporation or the Board of Directors information with respect to any nominee for director or any other matter of business submitted by a stockholder.

(3) Notwithstanding the foregoing provisions of this Article I, Section 2, if the proposing stockholder (or a qualified representative of the stockholder) does not appear at the meeting to present a nomination or any business, such nomination or business shall be disregarded, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Article I, Section 2, to be considered a qualified representative of the proposing stockholder, a person must be authorized by a written instrument executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such written instrument or electronic transmission, or a reliable reproduction of the written instrument or electronic transmission, to the presiding officer at the meeting of stockholders.

(4) For purposes of this Bylaw, “public announcement” shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(5) Notwithstanding the foregoing provisions of this Bylaw, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Bylaw. Nothing in this Bylaw shall be deemed to affect any rights of (i) stockholders to have proposals included in the Corporation’s proxy statement pursuant to Rule 14a-8 (or any successor rule) under the Exchange Act and, to the extent required by such rule, have such proposals considered and voted on at an Annual Meeting or (ii) the holders of any series of Preferred Stock as specified in the Certificate of Incorporation of the Corporation (as the same may hereafter be amended and/or restated, the “Certificate”) (including any certificate of designation relating to any series of Preferred Stock).

(6) In addition to the requirements set forth elsewhere in these Bylaws, to be eligible to be a nominee for election or re-election as a director of the Corporation pursuant to a nomination under clause (iii) of Article I, Section 2(a)(1) and under clause (ii) of Article I, Section 2(a)(5) of this Bylaw, such proposed nominee or a person on such proposed nominee’s behalf must deliver, in accordance with the time periods for delivery of Timely Notice under Section 2(a)(2) of Article I and under clause (ii) of Article I, Section 2(a)(5) of this Bylaw, to the Secretary of the Corporation at the principal executive offices of the Corporation a completed and signed questionnaire with respect to the background and qualification of such proposed nominee and the background of any other person or entity on whose behalf the nomination is being made (which questionnaire shall be provided by the Secretary upon written request) and a written representation and agreement (in the form provided by the Secretary upon written request) that such proposed nominee (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such proposed nominee, if elected as a director of the Corporation, will act or vote on any issue or question (a “Voting Commitment”) that has not been disclosed to the Corporation or (B) any Voting Commitment that could limit or interfere with such proposed nominee’s fiduciary duties under applicable law, (ii) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation, and (iii) in such proposed nominee’s individual capacity and on behalf of any person or entity on whose behalf the nomination is being made, would be in compliance, if elected as a director of the Corporation, and will comply with, all applicable publicly disclosed corporate governance, code of conduct and ethics, conflict of interest, confidentiality, corporate opportunities, trading and any other policies and guidelines of the Corporation applicable to directors.

SECTION 3. Special Meetings. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Preferred Stock, special meetings of the stockholders of the Corporation may be called by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Board of Directors to be held at such date, time and place either within or without the State of Delaware as may be stated in the notice of the meeting. A special meeting of stockholders shall be called by the Secretary upon the written request, stated the purpose of the meeting, of stockholders who together own of record at least twenty percent (20%) in voting power of the outstanding shares of stock entitled to vote at such meeting. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

SECTION 4. Notice of Meetings; Adjournments.

(a) A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting, the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting) shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat as of the record date for determining the stockholders entitled to notice of the meeting by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such stockholder at the address of such stockholder as it appears on the Corporation’s stock transfer books. Without limiting the manner by which notice may otherwise be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law (“DGCL”).

(b) Notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall state the purpose or purposes for which the meeting has been called.

(c) Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed, or waiver of notice by electronic transmission is provided, before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance is for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

(d) The Board of Directors may postpone and reschedule any previously scheduled Annual Meeting or special meeting of stockholders, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I of these Bylaws or otherwise.

(e) When any meeting is convened, the presiding officer may adjourn the meeting. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place, notice need not be given of the adjourned meeting other than an announcement at the meeting at which the adjournment is taken of the hour, date and place, if any, to which the meeting is adjourned and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting; provided, however, that if the adjournment is for more than thirty (30) days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting, or, if after the adjournment a new record date is fixed for the adjourned meeting, the Board of Directors shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record as of the record date so fixed for notice of such adjourned meeting.

SECTION 5. Quorum. A majority in voting power of the shares entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If less than a quorum is present at a meeting, the holders of voting stock representing a majority of the voting power present at the meeting or the presiding officer may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 4 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally noticed. The stockholders present at a duly constituted meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. Voting and Proxies. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation as of the record date, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the DGCL. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. Except as otherwise limited therein or as otherwise provided by law, proxies authorizing a person to vote at a specific meeting shall entitle the persons authorized thereby to vote at any adjournment or postponement of such meeting, but they shall not be valid after final adjournment of such meeting.

SECTION 7. Action at Meeting. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast on such matter, except where a different vote is required by law, by the Certificate, by these Bylaws, by the rules or regulations of any stock exchange applicable to the Corporation, or pursuant to any regulation applicable to the Corporation or its securities, in which case, such different vote shall apply. For purposes of this Section 7, a majority of votes cast shall mean that the number of votes cast "for" a matter exceeds the number of votes cast "against" the matter (with "abstentions" and "broker nonvotes" not counted as a vote cast either "for" or "against" the matter). Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors.

SECTION 8. Stockholder Lists. The officer who has charge of the stock ledger shall prepare and make, at least ten (10) days before every Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting (provided, however, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date), arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting at least ten (10) days prior to the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of meeting or (ii) during ordinary business hours at the principal place of business of the Corporation. If the meeting is to be held at a place, then a list of stockholders entitled to vote at the meeting shall be produced and kept at the time and place of the meeting during the whole time thereof and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Except as otherwise provided by law, the stock ledger shall be the only evidence as to who are the stockholders entitled to examine the list of stockholders required by this Section 8 or to vote in person or by proxy at any meeting of stockholders.

SECTION 9. Conduct of Meeting. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting by the person presiding over the meeting. The Board of Directors may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the person presiding over any meeting of stockholders (referred to herein as the "presiding officer") shall have the right and authority to convene and (for any or no reason) to recess and/or adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of the presiding officer, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the presiding officer, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders entitled to vote at the meeting, their duly authorized and constituted proxies or such other persons as the presiding officer shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. The presiding officer at any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall, if the facts warrant, determine and declare to the meeting that a matter or business was not properly brought before the meeting and if the presiding officer should so determine, the presiding officer shall so declare to the meeting and any such matter or business not properly brought before the meeting shall not be transacted or considered. Unless and to the extent determined by the Board of Directors or the presiding officer, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

SECTION 10. Inspectors of Elections. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the presiding officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The presiding officer may review all determinations made by the inspectors, and in so doing the presiding officer shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the presiding officer, shall be subject to further review by any court of competent jurisdiction.

SECTION 11. Action Without Meeting. Except as otherwise provided in the Certificate, any action required or permitted to be taken by the stockholders of the Corporation must be effected only at a duly called Annual Meeting or special meeting of stockholders of the Corporation or may be effected by written consent.

ARTICLE II
Directors

SECTION 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided by the Certificate or required by law.

SECTION 2. Number and Terms. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. Qualification. No director need be a stockholder of the Corporation.

SECTION 4. Vacancies. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. Removal. Directors may be removed from office only in the manner provided in the Certificate.

SECTION 6. Resignation. A director may resign at any time by giving written notice, or notice by electronic transmission, to the Chairman of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. Regular Meetings. The regular annual meeting of the Board of Directors shall be held, without notice other than this Section 7, on the same date and at the same place as the Annual Meeting following the close of such meeting of stockholders. Other regular meetings of the Board of Directors may be held at such hour, date and place as the Board of Directors may by resolution from time to time determine and publicized among all directors.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called, orally or in writing or by electronic transmission, by or at the request of a majority of the directors, the Chairman of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place thereof.

SECTION 9. Notice of Meetings. Notice of the hour, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or by the Chairman of the Board, if one is elected, or the President or such other officer designated by the Chairman of the Board, if one is elected, or the President. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of electronic communication, sent to his or her business or home address, at least twenty-four (24) hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least three (3) business days in advance of the meeting. Such notice shall be deemed to be delivered when hand-delivered to such address, read to such director by telephone, deposited in the mail so addressed, with postage thereon prepaid if mailed, dispatched or transmitted if sent by facsimile transmission or by electronic mail or other form of electronic communications. A written waiver of notice signed, or an electronic waiver given, before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these Bylaws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. Quorum. At any meeting of the Board of Directors, a majority of the Board of Directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice. Any business which might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present.

SECTION 11. Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these Bylaws.

SECTION 12. Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors for all purposes.

SECTION 13. Manner of Participation. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these Bylaws.

SECTION 14. Presiding Director. The Board of Directors shall designate a representative to preside over all meetings of the Board of Directors, provided that if the Board of Directors does not so designate such a presiding director or such designated presiding director is unable to so preside or is absent, then the Chairman of the Board, if one is elected, shall preside over all meetings of the Board of Directors. If both the designated presiding director, if one is so designated, and the Chairman of the Board, if one is elected, are unable to preside or are absent, the Board of Directors shall designate an alternate representative to preside over a meeting of the Board of Directors.

SECTION 15. Committees. The Board of Directors may designate one or more committees, including, without limitation, a Compensation Committee, a Nominating & Corporate Governance Committee and an Audit Committee, and may delegate thereto some or all of its powers except those which by law, by the Certificate or by these Bylaws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these Bylaws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings and shall report its action to the Board of Directors. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in place of any such absent or disqualified member.

SECTION 16. Compensation of Directors. Directors shall receive such compensation for their services as shall be determined by the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees and who receive compensation for their services as such, shall not receive any salary or other compensation for their services as directors of the Corporation.

ARTICLE III
Officers

SECTION 1. Enumeration. The officers of the Corporation shall consist of a President, a Chief Executive Officer, a Secretary, a Treasurer and such other officers, including, without limitation, a Chairman of the Board of Directors, a Chief Financial Officer, and one or more Vice Presidents (including Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents and Assistant Secretaries, as the Board of Directors may determine.

SECTION 2. Election. At the regular annual meeting of the Board of Directors following the Annual Meeting, the Board of Directors shall elect the President, the Chief Executive Officer, the Secretary and the Treasurer. Other officers may be elected by the Board of Directors at such regular annual meeting of the Board of Directors or at any other regular or special meeting.

SECTION 3. Qualification. No officer need be a stockholder or a director. Any person may occupy more than one office of the Corporation at any time.

SECTION 4. Tenure. Except as otherwise provided by the Certificate or by these Bylaws, each of the officers of the Corporation shall hold office until the regular annual meeting of the Board of Directors following the next Annual Meeting and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

SECTION 5. Resignation. Any officer may resign by delivering his or her written resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 6. Removal. Except as otherwise provided by law, the Board of Directors may remove any officer with or without cause by the affirmative vote of a majority of the directors then in office.

SECTION 7. Absence or Disability. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 8. Vacancies. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 9. Chairman of the Board. The Chairman of the Board, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 10. Chief Executive Officer. The Chief Executive Officer shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 11. President. The President shall, subject to the direction of the Board of Directors, have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 12. Vice Presidents and Assistant Vice Presidents. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. Chief Financial Officer. The Chief Financial Officer, if one is elected, shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer.

SECTION 14. Secretary and Assistant Secretaries. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board of Directors) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary, shall have authority to affix it to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities. Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 15. Treasurer and Assistant Treasurers. The Treasurer shall have custody of all moneys and securities of the Corporation as are authorized and shall render from time to time an account of all such transactions. The Treasurer shall also perform such other duties and have such other powers as are commonly incident to the officer of Treasurer, or as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Treasurer, any Assistant Treasurer may perform his or her duties and responsibilities. Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 16. Other Powers and Duties. Subject to these Bylaws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

ARTICLE IV Capital Stock

SECTION 1. Certificates of Stock. The shares of the Corporation shall be represented by certificates in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by the Chairman of the Board, the Vice Chairman of the Board, the President or a Vice President and by the Treasurer, Assistant Treasurer, the Secretary or an Assistant Secretary. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law. Notwithstanding anything to the contrary provided in these Bylaws, the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares (except that the foregoing shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation), and by the approval and adoption of these Bylaws the Board of Directors has determined that all classes or series of the Corporation's stock may be uncertificated, whether upon original issuance, re-issuance, or subsequent transfer.

SECTION 2. Transfers. Subject to any restrictions on transfer pursuant to applicable federal or state securities law or as otherwise agreed to in writing and unless otherwise provided by the Board of Directors, shares of stock that are represented by a certificate may be transferred on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require. Shares of stock that are not represented by a certificate may be transferred on the books of the Corporation by submitting to the Corporation or its transfer agent such evidence of transfer and following such other procedures as the Corporation or its transfer agent may require.

SECTION 3. Record Holders. Except as may otherwise be required by law, by the Certificate or by these Bylaws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these Bylaws.

SECTION 4. Record Date.

(a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

(b) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall not be more than sixty (60) days prior to such action. If no such record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 5. Replacement of Certificates. In case of the alleged loss, destruction or mutilation of a certificate of stock of the Corporation, a duplicate certificate may be issued in place thereof, upon such terms as the Corporation may prescribe.

ARTICLE V

Indemnification and Advancement

SECTION 1. Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or an officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "Indemnitee"), whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith; provided, however, that, except with respect to proceedings to enforce rights to indemnification or an advancement of expenses or as otherwise required by law, the Corporation shall not be required to indemnify or advance expenses to any such Indemnitee in connection with a proceeding (or part thereof) initiated by such Indemnitee unless such proceeding (or part thereof) was authorized by the Board of Directors.

SECTION 2. Right to Advancement of Expenses. In addition to the right to indemnification conferred in Article V, Section 1 of this Bylaw, an Indemnitee shall also have the right to be paid by the Corporation the expenses (including attorney's fees) incurred in defending any such proceeding in advance of its final disposition (an "advancement of expenses"); provided, however, that, if the DGCL requires, an advancement of expenses incurred by an Indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such Indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such Indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "final adjudication") that such Indemnitee is not entitled to be indemnified for such expenses under this Section 2 or otherwise.

SECTION 3. Right of Indemnitees to Bring Suit. If a claim under Article V, Section 1 or 2 of this Bylaw is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, or if a claim for an advancement of expense is not paid in full within thirty (30) days after a statement or statements requesting such amounts to be advanced has been received by the Corporation, the Indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. To the fullest extent permitted by law, if successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Indemnitee shall also be entitled to be paid the expenses of prosecuting or defending such suit. In (i) any suit brought by the Indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the Indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) in any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that, the Indemnitee has not met any applicable standard for indemnification set forth in the DGCL. Neither the failure of the Corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the Indemnitee is proper in the circumstances because the Indemnitee has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the Corporation (including its directors who are not parties to such action, a committee of such directors, independent legal counsel, or its stockholders) that the Indemnitee has not met such applicable standard of conduct, shall create a presumption that the Indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the Indemnitee, be a defense to such suit. In any suit brought by the Indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the Indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article V or otherwise shall be on the Corporation.

SECTION 4. Indemnification of Employees and Agents of the Corporation. The Corporation may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification and to the advancement of expenses to any employee or agent of the Corporation to the fullest extent of the provisions of this Article V with respect to the indemnification and advancement of expenses of directors and officers of the Corporation.

SECTION 5. Non-Exclusivity of Rights. The rights to indemnification and to the advancement of expenses conferred in this Article V shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, the Certificate as amended from time to time, these Bylaws, any agreement, any vote of stockholders or disinterested directors or otherwise.

SECTION 6. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

SECTION 7. Indemnity Agreements. The Corporation may enter into indemnity agreements with any director or officer of the Corporation, with any employee or agent of the Corporation as the Board of Directors may designate and with any officer, director, employee or agent of subsidiaries as the Board of Directors may designate, such indemnity agreements to provide in substance that the Corporation will indemnify such persons as contemplated by this Article V, and to include any other substantive or procedural provisions regarding indemnification as are not inconsistent with the DGCL.

SECTION 8. Nature of Rights. The rights conferred upon Indemnitees in this Article V shall be contract rights and such rights shall continue as to an Indemnitee who has ceased to be a director, officer, employee, agent or trustee and shall inure to the benefit of the Indemnitee's heirs, executors and administrators. Any amendment, alteration or repeal of this Article V that adversely affects any right of an Indemnitee or its successors shall be prospective only and shall not limit, eliminate, or impair any such right with respect to any proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place prior to such amendment, alteration or repeal. The Corporation's obligation, if any, to indemnify or to advance expenses to any Indemnitee who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or nonprofit entity shall be reduced by any amount such Indemnitee may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, enterprise or non-profit enterprise.

SECTION 9. Severability. If any word, clause, provision or provisions of this Article V shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Article V (including, without limitation, each portion of any section of this Article V containing any such provision held to be invalid, illegal or unenforceable, that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (ii) to the fullest extent possible, the provisions of this Article V (including, without limitation, each such portion of any section of this Article V containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

ARTICLE VI Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. Seal. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. Execution of Instruments. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairman of the Board, if one is elected, the President, the Chief Executive Officer, the Chief Financial Officer, if one is elected, the Secretary, the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or appropriate committee of the Board may authorize.

SECTION 4. Voting of Securities. Unless the Board of Directors otherwise provides, Chairman of the Board, if one is elected, the President, the Chief Executive Officer, the Chief Financial Officer, if one is elected, the Secretary or the Treasurer may waive notice of and act on behalf of the Corporation, or appoint another person or persons to act as proxy or attorney in fact for the Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by the Corporation. The power so conferred upon such officers or other persons shall include, without limitation, the voting of any securities of any other entity held by the Corporation, including executing and delivery written consents with respect to such securities.

SECTION 5. Corporate Records. The original or attested copies of the Certificate, Bylaws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at an office of its counsel, at an office of its transfer agent or at such other place or places as may be designated from time to time by the Board of Directors.

SECTION 6. Amendment of Bylaws.

(a) Amendment by Directors. Except as provided otherwise by law, these Bylaws may be amended or repealed by the Board of Directors.

(b) Amendment by Stockholders. These Bylaws may be amended or repealed at any Annual Meeting, or special meeting of stockholders called for such purpose in accordance with these By-Laws, by the affirmative vote of holders of at least a majority in voting power of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class. Notwithstanding the foregoing, stockholder approval shall not be required unless mandated by the Certificate or other applicable law.

SECTION 7. Notices. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation.

Adopted May 21, 2013 and effective as of May 21, 2013.

NEITHER THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES ISSUABLE UPON THE EXERCISE OF THIS WARRANT HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS.

Effective Date: July 30, 2013

Void After: July 30, 2018

MATINAS BIOPHARMA HOLDINGS, INC.

SERIES 1 WARRANT TO PURCHASE COMMON STOCK

Matinas BioPharma Holdings, Inc., a Delaware corporation (the "**Company**"), for value received on [], 2013 (the "**Effective Date**"), hereby issues to [] (the "**Holder**" or "**Warrant Holder**") this Series 1 Warrant (the "**Warrant**") to purchase, [] shares (each such share as from time to time adjusted as hereinafter provided being a "**Warrant Share**" and all such shares being the "**Warrant Shares**") of the Company's Common Stock (as defined below), at the Exercise Price (as defined below), as adjusted from time to time as provided herein, on or before [], 2018 (the "**Expiration Date**"), all subject to the following terms and conditions. This Warrant is one of a series of warrants of like tenor that have been issued in connection with the Company's private offering solely to accredited investors of units in accordance with, and subject to, the terms and conditions described in the Subscription Agreement, attached to the Confidential Private Placement Memorandum of the Company dated July 11, 2013, as the same may be amended and supplemented from time to time (the "**Subscription Agreement**" and the "**Private Placement Memorandum**" respectively). In addition, the Company has issued other warrants of like tenor in connection with the transactions described in the Private Placement Memorandum (the "**Other Warrants**").

As used in this Warrant, (i) “**Business Day**” means any day other than Saturday, Sunday or any other day on which commercial banks in the City of New York, New York, are authorized or required by law or executive order to close; (ii) “**Common Stock**” means the common stock of the Company, par value \$0.0001 per share, including any securities issued or issuable with respect thereto or into which or for which such shares may be exchanged for, or converted into, pursuant to any stock dividend, stock split, stock combination, recapitalization, reclassification, reorganization or other similar event; (iii) “**Exercise Price**” means \$2.00 per share of Common Stock, subject to adjustment as provided herein; (iv) “**Trading Day**” means any day on which the Common Stock is traded (or available for trading) on its principal trading market; (v) “**Affiliate**” means any person that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, a person, as such terms are used and construed in Rule 144 promulgated under the Securities Act of 1933, as amended (the “**Securities Act**”) and (vi) “**Warrantholders**” means the holders of Warrants issued pursuant to the Subscription Agreement and Private Placement Memorandum.

1. DURATION AND EXERCISE OF WARRANTS

(a) Exercise Period. The Holder may exercise this Warrant in whole or in part on any Business Day on or before 5:00 P.M., Eastern Time, on the Expiration Date, at which time this Warrant shall become void and of no value.

(b) Exercise Procedures.

(i) While this Warrant remains outstanding and exercisable in accordance with Section 1(a), in addition to the manner set forth in Section 1(b)(ii) below, the Holder may exercise this Warrant in whole or in part at any time and from time to time by:

(A) delivery to the Company of a duly executed copy of the Notice of Exercise attached as **Exhibit A**;

(B) surrender of this Warrant to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder; and

(C) payment of the then-applicable Exercise Price per share multiplied by the number of Warrant Shares being purchased upon exercise of the Warrant (such amount, the “**Aggregate Exercise Price**”) made in the form of cash, or by certified check, bank draft or money order payable in lawful money of the United States of America or in the form of a Cashless Exercise to the extent permitted in Section 1(b)(ii) below.

(ii) In addition to the provisions of Section 1(b)(i) above, if any time commencing 300 days after the Effective Date, a registration statement covering the resale of the Warrant Shares by the Holder is not effective with the Securities and Exchange Commission (the “**SEC**”), the Holder may, in its sole discretion, exercise all or any part of the Warrant in a “cashless” or “net-issue” exercise (a “**Cashless Exercise**”) by delivering to the Company (1) the Notice of Exercise and (2) the original Warrant, pursuant to which the Holder shall surrender the right to receive upon exercise of this Warrant, a number of Warrant Shares having a value (as determined below) equal to the Aggregate Exercise Price, in which case, the number of Warrant Shares to be issued to the Holder upon such exercise shall be calculated using the following formula:

$$X = \frac{Y * (A - B)}{A}$$

with: X = the number of Warrant Shares to be issued to the Holder
Y = the number of Warrant Shares with respect to which the Warrant is being exercised
A = the fair value per share of Common Stock on the date of exercise of this Warrant
B = the then-current Exercise Price of the Warrant

Solely for the purposes of this paragraph, “**fair value**” per share of Common Stock shall mean the average Closing Price (as defined below) per share of Common Stock for the twenty (20) trading days immediately preceding the date on which the Notice of Exercise is deemed to have been sent to the Company. “**Closing Price**” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on the New York Stock Exchange, the NYSE MKT, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market or any other national securities exchange, the closing price per share of the Common Stock for such date (or the nearest preceding date) on the primary eligible market or exchange on which the Common Stock is then listed or quoted; (b) if prices for the Common Stock are then quoted on the OTC Bulletin Board or any tier of the OTC Markets, the closing bid price per share of the Common Stock for such date (or the nearest preceding date) so quoted; or (c) if prices for the Common Stock are then reported in the “Pink Sheets” published by the National Quotation Bureau Incorporated (or a similar organization or agency succeeding to its functions of reporting prices), the most recent closing bid price per share of the Common Stock so reported. If the Common Stock is not publicly traded as set forth above, the “fair value” per share of Common Stock shall be reasonably and in good faith determined by the Board of Directors of the Company as of the date which the Notice of Exercise is deemed to have been sent to the Company.

Notwithstanding the foregoing, provided that a registration statement covering the resale of the Warrant Shares by the Holder has (x) been declared effective by the SEC and (y) remained effective for a period of one year, any Cashless Exercise right hereunder shall thereupon terminate.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a cashless exercise transaction shall be deemed to have been acquired by the Holder, and the holding period for such shares shall be deemed to have commenced, on the date this Warrant was originally issued.

(iii) Upon the exercise of this Warrant in compliance with the provisions of this Section 1(b), and except as limited pursuant to the last paragraph of Section 1(b)(ii), the Company shall promptly issue and cause to be delivered to the Holder a certificate for the Warrant Shares purchased by the Holder. Each exercise of this Warrant shall be effective immediately prior to the close of business on the date (the “**Date of Exercise**”) that the conditions set forth in Section 1(b) have been satisfied, as the case may be. On the first Business Day following the date on which the Company has received each of the Notice of Exercise and the Aggregate Exercise Price (or notice of a Cashless Exercise in accordance with Section 1(b)(ii)) (the “**Exercise Delivery Documents**”), the Company shall transmit an acknowledgment of receipt of the Exercise Delivery Documents to the Company’s transfer agent (the “**Transfer Agent**”). On or before the third Business Day following the date on which the Company has received all of the Exercise Delivery Documents (the “**Share Delivery Date**”), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit Withdrawal Agent Commission system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Notice of Exercise, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. Upon delivery of the Exercise Delivery Documents, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the certificates evidencing such Warrant Shares.

(iv) If the Company shall fail for any reason or for no reason to issue to the Holder, within three (3) Business Days of receipt of the Exercise Delivery Documents, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company’s share register or to credit the Holder’s balance account with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder’s exercise of this Warrant, and if on or after such Business Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a “**Buy-In**”), then the Company shall, (A) pay in cash to the Holder the amount, if any, by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the “**Buy-In Amount**”) plus the amount paid by the Holder to the Company as the exercise price for the Warrant Shares exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock, and paid the Company \$5,000 as the exercise price, the Holder’s cash outlay would be a total of \$16,000; and if the aggregate sales price of the shares giving rise to such Buy-In obligation was \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$6,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

(c) Partial Exercise. This Warrant shall be exercisable, either in its entirety or, from time to time, for part only of the number of Warrant Shares referenced by this Warrant. If this Warrant is submitted in connection with any exercise pursuant to Section 1 and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the actual number of Warrant Shares being acquired upon such an exercise, then the Company shall as soon as practicable and in no event later than five (5) Business Days after any exercise and at its own expense, issue a new Warrant of like tenor representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised.

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 16.

2. ISSUANCE OF WARRANT SHARES

(a) The Company covenants that all Warrant Shares will, upon issuance in accordance with the terms of this Warrant, be (i) duly authorized, fully paid and non-assessable, and (ii) free from all liens, charges and security interests, with the exception of claims arising through the acts or omissions of any Holder and except as arising from applicable Federal and state securities laws.

(b) The Company shall register this Warrant upon records to be maintained by the Company for that purpose in the name of the record holder of such Warrant from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner thereof for the purpose of any exercise thereof, any distribution to the Holder thereof and for all other purposes.

(c) The Company will not, by amendment of its certificate of incorporation, by-laws or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but will at all times in good faith assist in the carrying out of all the provisions of this Warrant and in the taking of all action necessary or appropriate in order to protect the rights of the Holder to exercise this Warrant, or against impairment of such rights.

3. ADJUSTMENTS OF EXERCISE PRICE, NUMBER AND TYPE OF WARRANT SHARES

(a) The Exercise Price and the number of shares purchasable upon the exercise of this Warrant shall be subject to adjustment from time to time upon the occurrence of certain events described in this Section 3; provided, that notwithstanding the provisions of this Section 3, the Company shall not be required to make any adjustment if and to the extent that such adjustment would require the Company to issue a number of shares of Common Stock in excess of its authorized but unissued shares of Common Stock, less all amounts of Common Stock that have been reserved for issue upon the conversion of all outstanding securities convertible into shares of Common Stock and the exercise of all outstanding options, warrants and other rights exercisable for shares of Common Stock. If the Company does not have the requisite number of authorized but unissued shares of Common Stock to make any adjustment, the Company shall use its commercially best efforts to obtain the necessary stockholder consent to increase the authorized number of shares of Common Stock to make such an adjustment pursuant to this Section 3.

(i) Subdivision or Combination of Stock. In case the Company shall at any time subdivide (whether by way of stock dividend, stock split or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced and the number of Warrant Shares shall be proportionately increased, and conversely, in case the outstanding shares of Common Stock of the Company shall be combined (whether by way of stock combination, reverse stock split or otherwise) into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares shall be proportionately decreased. The Exercise Price and the Warrant Shares, as so adjusted, shall be readjusted in the same manner upon the happening of any successive event or events described in this Section 3(a)(i).

(ii) Dividends in Stock, Property, Reclassification. If at any time, or from time to time, all of the holders of Common Stock (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received or become entitled to receive, without payment therefore:

(A) any shares of stock or other securities that are at any time directly or indirectly convertible into or exchangeable for Common Stock, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution, or

(B) additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, combination of shares or similar corporate rearrangement (other than shares of Common Stock issued as a stock split or adjustments in respect of which shall be covered by the terms of Section 3(a)(i) above),

then and in each such case, the Exercise Price and the number of Warrant Shares to be obtained upon exercise of this Warrant shall be adjusted proportionately, and the Holder hereof shall, upon the exercise of this Warrant, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of stock and other securities and property (including cash in the cases referred to above) that such Holder would hold on the date of such exercise had such Holder been the holder of record of such Common Stock as of the date on which holders of Common Stock received or became entitled to receive such shares or all other additional stock and other securities and property. The Exercise Price and the Warrant Shares, as so adjusted, shall be readjusted in the same manner upon the happening of any successive event or events described in this Section 3(a)(ii).

(iii) Reorganization, Reclassification, Consolidation, Merger or Sale. If any recapitalization, reclassification or reorganization of the capital stock of the Company, or any consolidation or merger of the Company with another corporation, or the sale of all or substantially all of its assets or other transaction shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities, or other assets or property (an “**Organic Change**”), then, as a condition of such Organic Change, lawful and adequate provisions shall be made by the Company whereby the Holder hereof shall thereafter have the right to purchase and receive (in lieu of the shares of the Common Stock of the Company immediately theretofore purchasable and receivable upon the exercise of the rights represented by this Warrant) such shares of stock, securities or other assets or property as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such stock immediately theretofore purchasable and receivable assuming the full exercise of the rights represented by this Warrant. In the event of any Organic Change, appropriate provision shall be made by the Company with respect to the rights and interests of the Holder of this Warrant to the end that the provisions hereof (including, without limitation, provisions for adjustments of the Exercise Price and of the number of shares purchasable and receivable upon the exercise of this Warrant and registration rights) shall thereafter be applicable, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise hereof. The Company will not affect any such consolidation, merger or sale unless, prior to the consummation thereof, the successor corporation (if other than the Company) resulting from such consolidation or merger or the corporation purchasing such assets shall assume by written instrument reasonably satisfactory in form and substance to the Holder executed and mailed or delivered to the registered Holder hereof at the last address of such Holder appearing on the books of the Company, the obligation to deliver to such Holder such shares of stock, securities or assets as, in accordance with the foregoing provisions, such Holder may be entitled to purchase. If there is an Organic Change, then the Company shall cause to be mailed to the Holder at its last address as it shall appear on the books and records of the Company, at least 10 calendar days before the effective date of the Organic Change, a notice stating the date on which such Organic Change is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares for securities, cash, or other property delivered upon such Organic Change; provided, that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder is entitled to exercise this Warrant during the 10-day period commencing on the date of such notice to the effective date of the event triggering such notice. In any event, the successor corporation (if other than the Company) resulting from such consolidation or merger or the corporation purchasing such assets shall be deemed to assume such obligation to deliver to such Holder such shares of stock, securities or assets even in the absence of a written instrument assuming such obligation to the extent such assumption occurs by operation of law.

(b) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 3, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each Holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall promptly furnish or cause to be furnished to such Holder a like certificate setting forth: (i) such adjustments and readjustments; and (ii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

(c) Certain Events. If any event occurs as to which the other provisions of this Section 3 are not strictly applicable but the lack of any adjustment would not fairly protect the purchase rights of the Holder under this Warrant in accordance with the basic intent and principles of such provisions, or if strictly applicable would not fairly protect the purchase rights of the Holder under this Warrant in accordance with the basic intent and principles of such provisions, then the Company's Board of Directors will, in good faith, make an appropriate adjustment to protect the rights of the Holder; provided, that no such adjustment pursuant to this Section 3(c) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 3.

4. REDEMPTION OF WARRANTS

(a) General. Prior to the Expiration Date, the Company shall have the option, subject to the conditions set forth herein, to redeem all of the Warrants then outstanding upon not less than thirty (30) days nor more than sixty (60) days prior written notice to the Warrant Holders at any time provided that, at the time of delivery of such notice (i) there is an effective registration statement covering the resale of the Warrant Shares, and (ii) the closing bid price of the Company's Common Stock for each of the twenty (20) consecutive Trading Days prior to the date of the notice of redemption is at least \$5.00, as proportionately adjusted to reflect any stock splits, stock dividends, combination of shares or like events. Notwithstanding the foregoing, the Company shall not be entitled to redeem the Warrants pursuant to this Section 4 unless the Company also redeems all of the Other Warrants then outstanding.

(b) Notice. Notice of redemption will be effective upon mailing in accordance with this Section and such date may be referred to below as the "**Notice Date**." Notice of redemption shall be mailed by first class mail, postage prepaid, by the Company not less than 30 days prior to the date fixed for redemption to the Holders of the Warrants to be redeemed at their last addresses as they shall appear on the registration books. Any notice mailed in the manner herein provided shall be conclusively presumed to have been duly given whether or not the Holder received such notice.

(c) Redemption Date and Redemption Price. The notice of redemption shall state the date set for redemption, which date shall be not less than thirty (30) days, or more than sixty (60) days, from the Notice Date (the "**Redemption Date**"). The Company shall not mail the notice of redemption unless all funds necessary to pay for redemption of the Warrants to be redeemed shall have first been set aside by the Company for the benefit of the Warrant Holders so as to be and continue to be available therefor. The redemption price to be paid to the Warrant Holders will be \$0.0001 for each share of Common Stock of the Company to which the Warrant Holder would then be entitled upon exercise of the Warrant being redeemed, as adjusted from time to time as provided herein (the "**Redemption Price**").

(d) Exercise. Following the Notice Date, the Warrant Holders may exercise their Warrants in accordance with Section 1 of this Warrant between the Notice Date and 5:00 p.m. Eastern Time on the Redemption Date and such exercise shall be timely if the form of election to purchase duly executed and the Warrant Exercise Price for the shares of Common Stock to be purchased are actually received by the Company at its principal offices prior to 5:00 p.m. Eastern Time on the Redemption Date.

(e) Mailing. If any Warrant Holder does not wish to exercise any Warrant being redeemed, he should mail such Warrant to the Company at its principal offices after receiving the notice of redemption. On and after 5:00 p.m. Eastern Time on the Redemption Date, notwithstanding that any Warrant subject to redemption shall not have been surrendered for redemption, the obligation evidenced by all Warrants not surrendered for redemption or effectively exercised shall be deemed no longer outstanding, and all rights with respect thereto shall forthwith cease and terminate, except only the right of the holder of each Warrant subject to redemption to receive the Redemption Price for each share of Common Stock to which he would be entitled if he exercised the Warrant upon receiving notice of redemption of the Warrant subject to redemption held by him.

5. TRANSFERS AND EXCHANGES OF WARRANT AND WARRANT SHARES

(a) Registration of Transfers and Exchanges. Subject to Section 5(c), upon the Holder's surrender of this Warrant, with a duly executed copy of the Form of Assignment attached as **Exhibit B**, to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder, the Company shall register the transfer of all or any portion of this Warrant. Upon such registration of transfer, the Company shall issue a new Warrant, in substantially the form of this Warrant, evidencing the acquisition rights transferred to the transferee and a new Warrant, in similar form, evidencing the remaining acquisition rights not transferred, to the Holder requesting the transfer.

(b) Warrant Exchangeable for Different Denominations. The Holder may exchange this Warrant for a new Warrant or Warrants, in substantially the form of this Warrant, evidencing in the aggregate the right to purchase the number of Warrant Shares which may then be purchased hereunder, each of such new Warrants to be dated the date of such exchange and to represent the right to purchase such number of Warrant Shares as shall be designated by the Holder. The Holder shall surrender this Warrant with duly executed instructions regarding such re-certification of this Warrant to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder.

(c) Restrictions on Transfers. This Warrant may not be transferred at any time without (i) registration under the Securities Act or (ii) an exemption from such registration and a written opinion of legal counsel addressed to the Company that the proposed transfer of the Warrant may be effected without registration under the Securities Act, which opinion will be in form and from counsel reasonably satisfactory to the Company.

(d) Permitted Transfers and Assignments. Notwithstanding any provision to the contrary in this Section 5, the Holder may transfer, with or without consideration, this Warrant or any of the Warrant Shares (or a portion thereof) to the Holder's Affiliates (as such term is defined under Rule 144 of the Securities Act) without obtaining the opinion from counsel that may be required by Section 5(c)(ii), provided, that the Holder delivers to the Company and its counsel certification, documentation, and other assurances reasonably required by the Company's counsel to enable the Company's counsel to render an opinion to the Company's Transfer Agent that such transfer does not violate applicable securities laws.

6. MUTILATED OR MISSING WARRANT CERTIFICATE

If this Warrant is mutilated, lost, stolen or destroyed, upon request by the Holder, the Company will, at its expense, issue, in exchange for and upon cancellation of the mutilated Warrant, or in substitution for the lost, stolen or destroyed Warrant, a new Warrant, in substantially the form of this Warrant, representing the right to acquire the equivalent number of Warrant Shares; provided, that, as a prerequisite to the issuance of a substitute Warrant, the Company may require satisfactory evidence of loss, theft or destruction as well as an indemnity from the Holder of a lost, stolen or destroyed Warrant.

7. PAYMENT OF TAXES

The Company will pay all transfer and stock issuance taxes attributable to the preparation, issuance and delivery of this Warrant and the Warrant Shares (and replacement Warrants) including, without limitation, all documentary and stamp taxes; provided, however, that the Company shall not be required to pay any tax in respect of the transfer of this Warrant, or the issuance or delivery of certificates for Warrant Shares or other securities in respect of the Warrant Shares to any person or entity other than to the Holder.

8. FRACTIONAL WARRANT SHARES

No fractional Warrant Shares shall be issued upon exercise of this Warrant. The Company, in lieu of issuing any fractional Warrant Share, shall round up the number of Warrant Shares issuable to nearest whole share.

9. NO STOCK RIGHTS AND LEGEND

No holder of this Warrant, as such, shall be entitled to vote or be deemed the holder of any other securities of the Company that may at any time be issuable on the exercise hereof, nor shall anything contained herein be construed to confer upon the holder of this Warrant, as such, the rights of a stockholder of the Company or the right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or give or withhold consent to any corporate action or to receive notice of meetings or other actions affecting stockholders (except as provided herein), or to receive dividends or subscription rights or otherwise (except as provide herein).

Each certificate for Warrant Shares initially issued upon the exercise of this Warrant, and each certificate for Warrant Shares issued to any subsequent transferee of any such certificate, shall be stamped or otherwise imprinted with a legend in substantially the following form:

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS.”

10. REGISTRATION RIGHTS

The Holder shall be entitled to the registration rights as are contained in the Registration Rights Agreement, the provisions of which are deemed incorporated herein by reference.

11. NOTICES

All notices, consents, waivers, and other communications under this Warrant must be in writing and will be deemed given to a party when (a) delivered to the appropriate address by hand or by nationally recognized overnight courier service (costs prepaid); (b) sent by facsimile or e-mail with confirmation of transmission by the transmitting equipment; (c) received or rejected by the addressee, if sent by certified mail, return receipt requested, if to the registered Holder hereof; or (d) seven days after the placement of the notice into the mails (first class postage prepaid), to the Holder at the address, facsimile number, or e-mail address furnished by the registered Holder to the Company in accordance with the Subscription Agreement by and between the Company and the Holder, or if to the Company, to it at 915 Klosterman Road East, Tarpon Springs, FL 34689, Attention: Roelof Rongen (or to such other address, facsimile number, or e-mail address as the Holder or the Company as a party may designate by notice the other party).

12. SEVERABILITY

If a court of competent jurisdiction holds any provision of this Warrant invalid or unenforceable, the other provisions of this Warrant will remain in full force and effect. Any provision of this Warrant held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

13. BINDING EFFECT

This Warrant shall be binding upon and inure to the sole and exclusive benefit of the Company, its successors and assigns, the registered Holder or Holders from time to time of this Warrant and the Warrant Shares.

14. SURVIVAL OF RIGHTS AND DUTIES

This Warrant shall terminate and be of no further force and effect on the earlier of 5:00 P.M., Eastern Time, on the Expiration Date or the date on which this Warrant has been exercised in full.

15. GOVERNING LAW

This Warrant will be governed by and construed under the laws of the State of New York without regard to conflicts of laws principles that would require the application of any other law.

16. DISPUTE RESOLUTION

In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two Business Days of receipt of the Notice of Exercise giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two Business Days, submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

17. NOTICES OF RECORD DATE

Upon (a) any establishment by the Company of a record date of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or right or option to acquire securities of the Company, or any other right, or (b) any capital reorganization, reclassification, recapitalization, merger or consolidation of the Company with or into any other corporation, any transfer of all or substantially all the assets of the Company, or any voluntary or involuntary dissolution, liquidation or winding up of the Company, or the sale, in a single transaction, of a majority of the Company's voting stock (whether newly issued, or from treasury, or previously issued and then outstanding, or any combination thereof), the Company shall mail to the Holder at least ten (10) Business Days, or such longer period as may be required by law, prior to the record date specified therein, a notice specifying (i) the date established as the record date for the purpose of such dividend, distribution, option or right and a description of such dividend, option or right, (ii) the date on which any such reorganization, reclassification, transfer, consolidation, merger, dissolution, liquidation or winding up, or sale is expected to become effective and (iii) the date, if any, fixed as to when the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, transfer, consolidation, merger, dissolution, liquidation or winding up.

18. RESERVATION OF SHARES

The Company shall reserve and keep available out of its authorized but unissued shares of Common Stock for issuance upon the exercise of this Warrant, free from pre-emptive rights, such number of shares of Common Stock for which this Warrant shall from time to time be exercisable. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation. Without limiting the generality of the foregoing, the Company covenants that it will use commercially reasonable efforts to take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and use commercially reasonable efforts to obtain all such authorizations, exemptions or consents, including but not limited to consents from the Company's stockholders or Board of Directors or any public regulatory body, as may be necessary to enable the Company to perform its obligations under this Warrant.

19. NO THIRD PARTY RIGHTS

This Warrant is not intended, and will not be construed, to create any rights in any parties other than the Company and the Holder, and no person or entity may assert any rights as third-party beneficiary hereunder.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed as of the date first set forth above.

MATINAS BIOPHARMA HOLDINGS, INC.

By: _____

Name: Roelof Rongen

Title: President and Chief Executive Officer

EXHIBIT A

NOTICE OF EXERCISE

(To be executed by the Holder of Warrant if such Holder desires to exercise Warrant)

To Matinas BioPharma Holdings, Inc.:

The undersigned hereby irrevocably elects to exercise this Warrant and to purchase thereunder, _____ full shares of Matinas BioPharma Holdings, Inc. common stock issuable upon exercise of the Warrant and delivery of:

(1) \$_____ (in cash as provided for in the foregoing Warrant) and any applicable taxes payable by the undersigned pursuant to such Warrant; and

(2) _____ shares of Common Stock (pursuant to a Cashless Exercise in accordance with Section 1(b)(ii) of the Warrant) (check here if the undersigned desires to deliver an unspecified number of shares equal the number sufficient to effect a Cashless Exercise [___]).

The undersigned requests that certificates for such shares be issued in the name of:

(Please print name, address and social security or federal employer
identification number (if applicable))

If the shares issuable upon this exercise of the Warrant are not all of the Warrant Shares which the Holder is entitled to acquire upon the exercise of the Warrant, the undersigned requests that a new Warrant evidencing the rights not so exercised be issued in the name of and delivered to:

(Please print name, address and social security or federal employer
identification number (if applicable))

Name of Holder (print): _____
(Signature): _____
(By:) _____
(Title): _____
Dated: _____

EXHIBIT B

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers to each assignee set forth below all of the rights of the undersigned under the Warrant (as defined in and evidenced by the attached Warrant) to acquire the number of Warrant Shares set opposite the name of such assignee below and in and to the foregoing Warrant with respect to said acquisition rights and the shares issuable upon exercise of the Warrant:

Name of Assignee	Address	Number of Shares

If the total of the Warrant Shares are not all of the Warrant Shares evidenced by the foregoing Warrant, the undersigned requests that a new Warrant evidencing the right to acquire the Warrant Shares not so assigned be issued in the name of and delivered to the undersigned.

Name of Holder (print): _____
(Signature): _____
(By:): _____
(Title): _____
Dated: _____

NEITHER THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES ISSUABLE UPON THE EXERCISE OF THIS WARRANT HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS.

Effective Date: August __, 2013

Void After: August __, 2018

MATINAS BIOPHARMA HOLDINGS, INC.

PLACEMENT AGENT WARRANT

Matinas BioPharma Holdings, Inc., a Delaware corporation (the "**Company**"), for value received on August __, 2013 (the "**Effective Date**"), hereby issues to _____ (the "**Holder**") this Warrant (the "**Warrant**") to purchase, _____ shares (each such share as from time to time adjusted as hereinafter provided being a "**Warrant Share**" and all such shares being the "**Warrant Shares**") of the Company's Common Stock (as defined below), at the Exercise Price (as defined below), as adjusted from time to time as provided herein, on or before July 30, 2018 (the "**Expiration Date**"), all subject to the following terms and conditions. This Warrant is being issued pursuant to that certain Placement Agency Agreement dated July 13, 2013 among the Company, Matinas BioPharma, Inc. and Aegis Capital Corp. (the "**Placement Agency Agreement**") and in connection with the Company's private offering to accredited investors of its securities in accordance with, and subject to, the terms and conditions described in that certain Confidential Private Placement Memorandum, dated July 13, 2013, as the same may be amended and supplemented from time to time (the "**Private Placement Memorandum**"). Unless otherwise defined in this Warrant, terms appearing in initial capitalized form shall have the meaning ascribed to them in the Private Placement Memorandum.

As used in this Warrant, (i) “**Business Day**” means any day other than Saturday, Sunday or any other day on which commercial banks in the City of New York, New York, are authorized or required by law or executive order to close; (ii) “**Common Stock**” means the common stock of the Company, par value \$0.0001 per share, including any securities issued or issuable with respect thereto or into which or for which such shares may be exchanged for, or converted into, pursuant to any stock dividend, stock split, stock combination, recapitalization, reclassification, reorganization or other similar event; (iii) “**Exercise Price**” means \$1.00 per share of Common Stock, subject to adjustment as provided herein; (iv) “**Trading Day**” means any day on which the Common Stock is traded on the primary national or regional stock exchange on which the Common Stock is listed, or if not so listed, the OTCQX, the OTCBB, or any other market quoted by the Pink Sheets LLC (or any successors to any of the foregoing), if quoted thereon, is open for the transaction of business; and (v) “**Affiliate**” means any person that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, a person, as such terms are used and construed in Rule 144 promulgated under the Securities Act of 1933, as amended (the “**Securities Act**”).

1. DURATION AND EXERCISE OF WARRANTS

(a) Exercise Period. The Holder may exercise this Warrant in whole or in part on any Business Day on or before 5:00 P.M., Eastern Time, on the Expiration Date, at which time this Warrant shall become void and of no value.

(b) Exercise Procedures.

(i) While this Warrant remains outstanding and exercisable in accordance with Section 1(a), in addition to the manner set forth in Section 1(b)(ii) below, the Holder may exercise this Warrant in whole or in part at any time and from time to time by:

(A) delivery to the Company of a duly executed copy of the Notice of Exercise attached as **Exhibit A**;

(B) surrender of this Warrant to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder; and

(C) payment of the then-applicable Exercise Price per share multiplied by the number of Warrant Shares being purchased upon exercise of the Warrant (such amount, the “**Aggregate Exercise Price**”) made in the form of cash, or by certified check, bank draft or money order payable in lawful money of the United States of America or in the form of a Cashless Exercise to the extent permitted in Section 1(b)(ii) below.

(ii) At any time, the Holder may, in its sole discretion, exercise all or any part of the Warrant in a “cashless” or “net-issue” exercise (a “**Cashless Exercise**”) by delivering to the Company (1) the Notice of Exercise and (2) the original Warrant, pursuant to which the Holder shall surrender the right to receive upon exercise of this Warrant, a number of Warrant Shares having a value (as determined below) equal to the Aggregate Exercise Price, in which case, the number of Warrant Shares to be issued to the Holder upon such exercise shall be calculated using the following formula:

$$X = \frac{Y * (A - B)}{A}$$

with: X = the number of Warrant Shares to be issued to the Holder
Y = the number of Warrant Shares with respect to which the Warrant is being exercised
A = the fair value per share of Common Stock on the date of exercise of this Warrant
B = the then-current Exercise Price of the Warrant

Solely for the purposes of this paragraph, “fair value” per share of Common Stock shall mean (A) the average of the closing sales prices, as quoted on the primary national or regional stock exchange on which the Common Stock is listed, or, if not listed, the OTC Bulletin Board and/or the OTCQB or the OTCQX, if quoted thereon, on the twenty (20) trading days immediately preceding the date on which the Notice of Exercise is deemed to have been sent to the Company, or (B) if the Common Stock is not publicly traded as set forth above, as reasonably and in good faith determined by the Board of Directors of the Company as of the date which the Notice of Exercise is deemed to have been sent to the Company.

Notwithstanding the foregoing provisions of this Section 1(b)(ii), the Holder may not make a Cashless Exercise if and to the extent that such exercise would require the Company to issue a number of shares of Common Stock in excess of its authorized but unissued shares of Common Stock, less all amounts of Common Stock that have been reserved for issue upon the conversion of all outstanding securities convertible into shares of Common Stock and the exercise of all outstanding options, warrants and other rights exercisable for shares of Common Stock. If the Company does not have the requisite number of authorized but unissued shares of Common Stock to permit the Holder to make a Cashless Exercise, the Company shall use commercially reasonable efforts to obtain the necessary stockholder consent to increase the authorized number of shares of Common Stock to permit such Holder to make a Cashless Exercise pursuant to this Section 1(b)(ii).

(iii) Upon the exercise of this Warrant in compliance with the provisions of this Section 1(b), and except as limited pursuant to the last paragraph of Section 1(b)(ii), the Company shall promptly issue and cause to be delivered to the Holder a certificate for the Warrant Shares purchased by the Holder. Each exercise of this Warrant shall be effective immediately prior to the close of business on the date (the “**Date of Exercise**”) that the conditions set forth in Section 1(b) have been satisfied, as the case may be. On the first Business Day following the date on which the Company has received each of the Notice of Exercise and the Aggregate Exercise Price (or notice of a Cashless Exercise in accordance with Section 1(b)(ii)) (the “**Exercise Delivery Documents**”), the Company shall transmit an acknowledgment of receipt of the Exercise Delivery Documents to the Company’s transfer agent (the “**Transfer Agent**”) (it being understood that the term Transfer Agent shall be deemed to include the Secretary or other officer of the Company, if the Company does not have a Transfer Agent at the time of any exercise of this Warrant). On or before the third Business Day following the date on which the Company has received all of the Exercise Delivery Documents (the “**Share Delivery Date**”), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit Withdrawal Agent Commission system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Notice of Exercise, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. Upon delivery of the Exercise Delivery Documents, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the certificates evidencing such Warrant Shares. If this Warrant is submitted in connection with any exercise pursuant to Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the actual number of Warrant Shares being acquired upon such an exercise, then the Company shall as soon as practicable and in no event later than three (3) Business Days after any exercise and at its own expense, issue a new Warrant of like tenor representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised.

(iv) If the Company shall fail for any reason or for no reason to issue to the Holder, within three (3) Business Days of receipt of the Exercise Delivery Documents, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or to credit the Holder's balance account with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant, and if on or after such Business Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "**Buy-In Amount**") plus the amount paid by the Holder to the Company as the exercise price for the Warrant Shares exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock, and paid the Company \$5,000 as the exercise price, the Holder's cash outlay would be a total of \$16,000; and if the aggregate sales price of the shares giving rise to such Buy-In obligation was \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$6,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

(c) Partial Exercise. This Warrant shall be exercisable, either in its entirety or, from time to time, for part only of the number of Warrant Shares referenced by this Warrant. If this Warrant is exercised in part, the Company shall issue, at its expense, a new Warrant, in substantially the form of this Warrant, referencing such reduced number of Warrant Shares that remain subject to this Warrant.

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and, provided the Company is then subject to the reporting obligations of the Exchange Act, resolve such dispute in accordance with Section 15.

2. ISSUANCE OF WARRANT SHARES

(a) The Company covenants that all Warrant Shares will, upon issuance in accordance with the terms of this Warrant, be (i) duly authorized, fully paid and non-assessable, and (ii) free from all liens, charges and security interests, with the exception of claims arising through the acts or omissions of any Holder and except as arising from applicable Federal and state securities laws.

(b) The Company shall register this Warrant upon records to be maintained by the Company for that purpose in the name of the record holder of such Warrant from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner thereof for the purpose of any exercise thereof, any distribution to the Holder thereof and for all other purposes.

(c) The Company will not, by amendment of its certificate of incorporation, by-laws or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but will at all times in good faith assist in the carrying out of all the provisions of this Warrant and in the taking of all action necessary or appropriate in order to protect the rights of the Holder to exercise this Warrant, or against impairment of such rights.

3. ADJUSTMENTS OF EXERCISE PRICE, NUMBER AND TYPE OF WARRANT SHARES

(a) The Exercise Price and the number of shares purchasable upon the exercise of this Warrant shall be subject to adjustment from time to time upon the occurrence of certain events described in this Section 3(a); provided, that notwithstanding the provisions of this Section 3, the Company shall not be required to make any adjustment if and to the extent that such adjustment would require the Company to issue a number of shares of Common Stock in excess of its authorized but unissued shares of Common Stock, less all amounts of Common Stock that have been reserved for issue upon the conversion of all outstanding securities convertible into shares of Common Stock and the exercise of all outstanding options, warrants and other rights exercisable for shares of Common Stock. If the Company does not have the requisite number of authorized but unissued shares of Common Stock to make any adjustment, the Company shall use its commercially best efforts to obtain the necessary stockholder consent to increase the authorized number of shares of Common Stock to make such an adjustment pursuant to this Section 3(a).

(i) Subdivision or Combination of Stock. In case the Company shall at any time subdivide (whether by way of stock dividend, stock split or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced and the number of Warrant Shares shall be proportionately increased, and conversely, in case the outstanding shares of Common Stock of the Company shall be combined (whether by way of stock combination, reverse stock split or otherwise) into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares shall be proportionately decreased. The Exercise Price and the Warrant Shares, as so adjusted, shall be readjusted in the same manner upon the happening of any successive event or events described in this Section 3(a)(i).

(ii) Dividends in Stock, Property, Reclassification. If at any time, or from time to time, all of the holders of Common Stock (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received or become entitled to receive, without payment therefore:

(A) any shares of stock or other securities that are at any time directly or indirectly convertible into or exchangeable for Common Stock, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution, or

(B) additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, combination of shares or similar corporate rearrangement (other than shares of Common Stock issued as a stock split or adjustments in respect of which shall be covered by the terms of Section 3(a)(i) above),

then and in each such case, the Exercise Price and the number of Warrant Shares to be obtained upon exercise of this Warrant shall be adjusted proportionately, and the Holder hereof shall, upon the exercise of this Warrant, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of stock and other securities and property (including cash in the cases referred to above) that such Holder would hold on the date of such exercise had such Holder been the holder of record of such Common Stock as of the date on which holders of Common Stock received or became entitled to receive such shares or all other additional stock and other securities and property. The Exercise Price and the Warrant Shares, as so adjusted, shall be readjusted in the same manner upon the happening of any successive event or events described in this Section 3(a)(ii).

(iii) Reorganization, Reclassification, Consolidation, Merger or Sale. If any recapitalization, reclassification or reorganization of the capital stock of the Company, or any consolidation or merger of the Company with another corporation, or the sale of all or substantially all of its assets or other transaction shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities, or other assets or property (an “**Organic Change**”), then, as a condition of such Organic Change, lawful and adequate provisions shall be made by the Company whereby the Holder hereof shall thereafter have the right to purchase and receive (in lieu of the shares of the Common Stock of the Company immediately theretofore purchasable and receivable upon the exercise of the rights represented by this Warrant) such shares of stock, securities or other assets or property as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such stock immediately theretofore purchasable and receivable assuming the full exercise of the rights represented by this Warrant. In the event of any Organic Change, appropriate provision shall be made by the Company with respect to the rights and interests of the Holder of this Warrant to the end that the provisions hereof (including, without limitation, provisions for adjustments of the Exercise Price and of the number of shares purchasable and receivable upon the exercise of this Warrant) shall thereafter be applicable, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise hereof. The Company will not effect any such consolidation, merger or sale unless, prior to the consummation thereof, the successor corporation (if other than the Company) resulting from such consolidation or merger or the corporation purchasing such assets shall assume by written instrument reasonably satisfactory in form and substance to the Holder executed and mailed or delivered to the registered Holder hereof at the last address of such Holder appearing on the books of the Company, the obligation to deliver to such Holder such shares of stock, securities or assets as, in accordance with the foregoing provisions, such Holder may be entitled to purchase. If there is an Organic Change, then the Company shall cause to be mailed to the Holder at its last address as it shall appear on the books and records of the Company, at least 10 calendar days before the effective date of the Organic Change, a notice stating the date on which such Organic Change is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares for securities, cash, or other property delivered upon such Organic Change; provided, that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. The Holder is entitled to exercise this Warrant during the 10-day period commencing on the date of such notice to the effective date of the event triggering such notice. In any event, the successor corporation (if other than the Company) resulting from such consolidation or merger or the corporation purchasing such assets shall be deemed to assume such obligation to deliver to such Holder such shares of stock, securities or assets even in the absence of a written instrument assuming such obligation to the extent such assumption occurs by operation of law.

(b) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment pursuant to this Section 3, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each Holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall promptly furnish or cause to be furnished to such Holder a like certificate setting forth: (i) such adjustments and readjustments; and (ii) the number of shares and the amount, if any, of other property which at the time would be received upon the exercise of the Warrant.

(c) Certain Events. If any event occurs as to which the other provisions of this Section 3 are not strictly applicable but the lack of any adjustment would not fairly protect the purchase rights of the Holder under this Warrant in accordance with the basic intent and principles of such provisions, or if strictly applicable would not fairly protect the purchase rights of the Holder under this Warrant in accordance with the basic intent and principles of such provisions, then the Company's Board of Directors will, in good faith, make an appropriate adjustment to protect the rights of the Holder; provided, that no such adjustment pursuant to this Section 3(c) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 3.

4. TRANSFERS AND EXCHANGES OF WARRANT AND WARRANT SHARES

(a) Registration of Transfers and Exchanges. Subject to Section 4(c), upon the Holder's surrender of this Warrant, with a duly executed copy of the Form of Assignment attached as **Exhibit B**, to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder, the Company shall register the transfer of all or any portion of this Warrant. Upon such registration of transfer, the Company shall issue a new Warrant, in substantially the form of this Warrant, evidencing the acquisition rights transferred to the transferee and a new Warrant, in similar form, evidencing the remaining acquisition rights not transferred, to the Holder requesting the transfer.

(b) Warrant Exchangeable for Different Denominations. The Holder may exchange this Warrant for a new Warrant or Warrants, in substantially the form of this Warrant, evidencing in the aggregate the right to purchase the number of Warrant Shares which may then be purchased hereunder, each of such new Warrants to be dated the date of such exchange and to represent the right to purchase such number of Warrant Shares as shall be designated by the Holder. The Holder shall surrender this Warrant with duly executed instructions regarding such re-certification of this Warrant to the Secretary of the Company at its principal offices or at such other office or agency as the Company may specify in writing to the Holder.

(c) Restrictions on Transfers. This Warrant may not be transferred at any time without (i) registration under the Securities Act or (ii) an exemption from such registration and a written opinion of legal counsel addressed to the Company that the proposed transfer of the Warrant may be effected without registration under the Securities Act, which opinion will be in form and from counsel reasonably satisfactory to the Company.

(d) Permitted Transfers and Assignments. Notwithstanding any provision to the contrary in this Section 4, the Holder may transfer, with or without consideration, this Warrant or any of the Warrant Shares (or a portion thereof) to the Holder's Affiliates (as such term is defined under Rule 144 of the Securities Act) without obtaining the opinion from counsel that may be required by Section 4(c)(ii), provided, that the Holder delivers to the Company and its counsel certification, documentation, and other assurances reasonably required by the Company's counsel to enable the Company's counsel to render an opinion to the Company's Transfer Agent that such transfer does not violate applicable securities laws.

(e) Permitted Designees. Notwithstanding anything contained herein, the Company shall, upon written instructions from the Holder to be delivered to the Company within ninety (90) calendar days following the date of the issuance of this Replacement Selling Agent Warrant, transfer all or a portion of this Warrant to officers, directors, employees and other associated persons of the Holder and other registered dealers, agents and finders (collectively, "Permitted Designees"). Such transfer shall be effective upon delivery of this Warrant and the form of assignment attached hereto as Exhibit B, accompanied by an (i) investment letter in form and substance satisfactory to the Company and (ii) such other assurances reasonably required by the Company to ensure that such transfer does not violate applicable securities laws.

5. MUTILATED OR MISSING WARRANT CERTIFICATE

If this Warrant is mutilated, lost, stolen or destroyed, upon request by the Holder, the Company will, at its expense, issue, in exchange for and upon cancellation of the mutilated Warrant, or in substitution for the lost, stolen or destroyed Warrant, a new Warrant, in substantially the form of this Warrant, representing the right to acquire the equivalent number of Warrant Shares; provided, that, as a prerequisite to the issuance of a substitute Warrant, the Company may require satisfactory evidence of loss, theft or destruction as well as an indemnity from the Holder of a lost, stolen or destroyed Warrant.

6. PAYMENT OF TAXES

The Company will pay all transfer and stock issuance taxes attributable to the preparation, issuance and delivery of this Warrant and the Warrant Shares (and Replacement Selling Agent Warrant) including, without limitation, all documentary and stamp taxes; provided, however, that the Company shall not be required to pay any tax in respect of the transfer of this Warrant, or the issuance or delivery of certificates for Warrant Shares or other securities in respect of the Warrant Shares to any person or entity other than to the Holder.

7. FRACTIONAL WARRANT SHARES

No fractional Warrant Shares shall be issued upon exercise of this Warrant. The Company, in lieu of issuing any fractional Warrant Share, shall round up the number of Warrant Shares issuable to nearest whole share.

8. NO STOCK RIGHTS AND LEGEND

No holder of this Warrant, as such, shall be entitled to vote or be deemed the holder of any other securities of the Company that may at any time be issuable on the exercise hereof, nor shall anything contained herein be construed to confer upon the holder of this Warrant, as such, the rights of a stockholder of the Company or the right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or give or withhold consent to any corporate action or to receive notice of meetings or other actions affecting stockholders (except as provided herein), or to receive dividends or subscription rights or otherwise (except as provide herein).

Each certificate for Warrant Shares initially issued upon the exercise of this Warrant, and each certificate for Warrant Shares issued to any subsequent transferee of any such certificate, shall be stamped or otherwise imprinted with a legend in substantially the following form:

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS.”

9. REGISTRATION UNDER THE SECURITIES ACT OF 1933

In connection with any Organic Change in which the Company is not the surviving corporation, the Company shall cause the surviving corporation to provide registration rights with respect to the resale of the Warrant Shares (or the warrant shares issuable upon the exercise of the warrant that is exchanged for this Warrant at the time of the closing of such Organic Change) under the Securities Act which are equal to any registration rights that are granted to any purchasers of securities that are sold at the time of the Organic Change.

10. NOTICES

All notices, consents, waivers, and other communications under this Warrant must be in writing and will be deemed given to a party when (a) delivered to the appropriate address by hand or by nationally recognized overnight courier service (costs prepaid); (b) sent by facsimile or e-mail with confirmation of transmission by the transmitting equipment; (c) received or rejected by the addressee, if sent by certified mail, return receipt requested, if to the registered Holder hereof; or (d) seven days after the placement of the notice into the mails (first class postage prepaid), to the Holder at the address, facsimile number, or e-mail address furnished by the registered Holder to the Company in accordance with the Subscription Agreement by and between the Company and the Holder, or if to the Company, to it at 915 Klosterman Road East, Tarpon Springs, FL 34689, Attention: Roelof Rongen, Chief Executive Officer (or to such other address, facsimile number, or e-mail address as the Holder or the Company as a party may designate by notice the other party).

11. SEVERABILITY

If a court of competent jurisdiction holds any provision of this Warrant invalid or unenforceable, the other provisions of this Warrant will remain in full force and effect. Any provision of this Warrant held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

12. BINDING EFFECT

This Warrant shall be binding upon and inure to the sole and exclusive benefit of the Company, its successors and assigns, the registered Holder or Holders from time to time of this Warrant and the Warrant Shares.

13. SURVIVAL OF RIGHTS AND DUTIES

This Warrant shall terminate and be of no further force and effect on the earlier of 5:00 P.M., Eastern Time, on the Expiration Date or the date on which this Warrant has been exercised in full.

14. GOVERNING LAW

This Warrant will be governed by and construed under the laws of the State of New York without regard to conflicts of laws principles that would require the application of any other law.

15. DISPUTE RESOLUTION

In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two Business Days of receipt of the Notice of Exercise giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, and provided that the Company is then subject to the reporting obligations of the Exchange Act, then the Company shall, within two Business Days, submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

16. NOTICES OF RECORD DATE

Upon (a) any establishment by the Company of a record date of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or right or option to acquire securities of the Company, or any other right, or (b) any capital reorganization, reclassification, recapitalization, merger or consolidation of the Company with or into any other corporation, any transfer of all or substantially all the assets of the Company, or any voluntary or involuntary dissolution, liquidation or winding up of the Company, or the sale, in a single transaction, of a majority of the Company's voting stock (whether newly issued, or from treasury, or previously issued and then outstanding, or any combination thereof), the Company shall mail to the Holder at least ten (10) Business Days, or such longer period as may be required by law, prior to the record date specified therein, a notice specifying (i) the date established as the record date for the purpose of such dividend, distribution, option or right and a description of such dividend, option or right, (ii) the date on which any such reorganization, reclassification, transfer, consolidation, merger, dissolution, liquidation or winding up, or sale is expected to become effective and (iii) the date, if any, fixed as to when the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, transfer, consolidation, merger, dissolution, liquidation or winding up.

17. RESERVATION OF SHARES

The Company shall reserve and keep available out of its authorized but unissued shares of Common Stock for issuance upon the exercise of this Warrant, free from pre-emptive rights, such number of shares of Common Stock for which this Warrant shall from time to time be exercisable. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation. Without limiting the generality of the foregoing, the Company covenants that it will use commercially reasonable efforts to take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and use commercially reasonable efforts to obtain all such authorizations, exemptions or consents, including but not limited to consents from the Company's stockholders or Board of Directors or any public regulatory body, as may be necessary to enable the Company to perform its obligations under this Warrant.

18. NO THIRD PARTY RIGHTS

This Warrant is not intended, and will not be construed, to create any rights in any parties other than the Company and the Holder, and no person or entity may assert any rights as third-party beneficiary hereunder.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed as of the date first set forth above.

MATINAS BIOPHARMA HOLDINGS, INC.

By: _____
Name: Roel Rongen
Title: Chief Executive Officer

EXHIBIT A

NOTICE OF EXERCISE

(To be executed by the Holder of Warrant if such Holder desires to exercise Warrant)

To Matinas BioPharma Holdings, Inc.:

The undersigned hereby irrevocably elects to exercise this Warrant and to purchase thereunder, _____ full shares of Matinas BioPharma Holdings, Inc. Common Stock issuable upon exercise of the Warrant and delivery of:

(1) \$_____ (in cash as provided for in the foregoing Warrant) and any applicable taxes payable by the undersigned pursuant to such Warrant; and

(2) a Warrant for _____ shares of Common Stock (pursuant to a Cashless Exercise in accordance with Section 1(b)(ii) of the Warrant) (check here if the undersigned desires to deliver a Warrant for an unspecified number of shares equal to the number sufficient to effect a Cashless Exercise [___]).

The undersigned requests that certificates for such shares be issued in the name of:

(Please print name, address and social security or federal employer identification number (if applicable))

If the shares issuable upon this exercise of the Warrant are not all of the Warrant Shares which the Holder is entitled to acquire upon the exercise of the Warrant, the undersigned requests that a new Warrant evidencing the rights not so exercised be issued in the name of and delivered to:

(Please print name, address and social security or federal employer identification number (if applicable))

Name of Holder (print): _____
(Signature): _____
(By:): _____
(Title:): _____
Dated: _____

EXHIBIT B

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers to each assignee set forth below all of the rights of the undersigned under the Warrant (as defined in and evidenced by the attached Warrant) to acquire the number of Warrant Shares set opposite the name of such assignee below and in and to the foregoing Warrant with respect to said acquisition rights and the shares issuable upon exercise of the Warrant:

Name of Assignee	Address	Number of Shares
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If the total of the Warrant Shares are not all of the Warrant Shares evidenced by the foregoing Warrant, the undersigned requests that a new Warrant evidencing the right to acquire the Warrant Shares not so assigned be issued in the name of and delivered to the undersigned.

Name of Holder (print):	_____
(Signature):	_____
(By:)	_____
(Title:)	_____
Dated:	_____

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “**Agreement**”) is made and entered into effective as of July 30, 2013 (the “**Effective Date**”) between Matinas BioPharma Holdings, Inc., a Delaware corporation (the “**Company**”), and the persons who have executed the signature page(s) hereto (each, a “**Purchaser**” and collectively, the “**Purchasers**”).

RECITALS:

WHEREAS, the Company has entered into an Agreement and Plan of Merger with Matinas BioPharma, Inc., a Delaware corporation (“**Matinas**”), pursuant to which a newly organized, wholly-owned subsidiary of the Company has merged with and into Matinas, with Matinas remaining as the surviving entity and a wholly-owned subsidiary of the Company (the “**Merger**”);

WHEREAS, simultaneously with the Merger and to provide the capital required by the Company for working capital and other purposes, the Company has offered in compliance with Rule 506 of Regulation D and/or Regulation S of the Securities Act (as defined herein), to investors in a private placement transaction (the “**PPO**”), units (“**Units**”) of its securities, each Unit consisting of Two Hundred Fifty Thousand (250,000) shares of Common Stock (the “**Investor Shares**”) and One Hundred Twenty Five Thousand (125,000) Series 1 warrants (the “**Investor Warrants**”) to purchase One Hundred Twenty Five Thousand shares of Common Stock;

WHEREAS, simultaneously with the initial closing, the Company completed a private placement of warrants (the “**Private Placement Warrants**”) to purchase 500,000 shares of Common Stock at a price of \$0.04 per warrant to the holders of Matinas’ Series A Preferred Stock immediately prior to the consummation of the Merger (the “**Warrant Private Placement Holders**”);

WHEREAS, the initial closing of the PPO and the closing of the Merger have taken place on the Effective Date;

WHEREAS, in connection with the Merger and the PPO, the Company agreed to provide certain registration rights related to the Investor Shares and the shares of Common Stock issuable upon exercise of the Investor Warrants, on the terms set forth herein;

WHEREAS, in connection with the Merger and the PPO, the Company agreed to issue warrants to purchase 1,000,000 shares of Common Stock of the Company (the “**Matinas Holders Warrants**”) to the Matinas Holders along with certain registration rights related to the shares of Common Stock issuable upon exercise of the Matinas Holders Warrants;

WHEREAS, in connection with the formation of the Company, the Company issued warrants to purchase 4,000,000 shares of Common Stock of the Company (the “**Formation Holders Warrants**”) to the Formation Holders (as defined herein) along with certain registration rights related to the shares of Common Stock issuable upon exercise of the Formation Holders Warrants.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants, and conditions set forth herein, the parties mutually agree as follows:

1. Certain Definitions. As used in this Agreement, the following terms shall have the following respective meanings:

“Approved Market” means the Over-the-Counter Bulletin Board, the OTC Markets, the Nasdaq Stock Market, the New York Stock Exchange or the American Stock Exchange.

“Blackout Period” means, with respect to a registration, a period, in each case commencing on the day immediately after the Company notifies the Purchasers that they are required, because of the occurrence of an event of the kind described in Section 4(f) hereof, to suspend offers and sales of Registrable Securities during which the Company, in the good faith judgment of its board of directors, determines (because of the existence of, or in anticipation of, any acquisition, financing activity, or other transaction involving the Company, or the unavailability for reasons beyond the Company’s control of any required financial statements, disclosure of information which is in its best interest not to publicly disclose, or any other event or condition of similar significance to the Company) that the registration and distribution of the Registrable Securities to be covered by such Registration Statement, if any, would be seriously detrimental to the Company and its stockholders and ending on the earlier of (1) the date upon which the material non-public information commencing the Blackout Period is disclosed to the public or ceases to be material and (2) such time as the Company notifies the selling Holders that the Company will no longer delay such filing of the Registration Statement, recommence taking steps to make such Registration Statement effective, or allow sales pursuant to such Registration Statement to resume.

“Business Day” means any day of the year, other than a Saturday, Sunday, or other day on which the Commission is required or authorized to close.

“Commission” means the U. S. Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

“Common Stock” means the common stock, par value \$0.0001 per share, of the Company and any and all shares of capital stock or other equity securities of: (i) the Company which are added to or exchanged or substituted for the Common Stock by reason of the declaration of any stock dividend or stock split, the issuance of any distribution or the reclassification, readjustment, recapitalization or other such modification of the capital structure of the Company; and (ii) any other corporation, now or hereafter organized under the laws of any state or other governmental authority, with which the Company is merged, which results from any consolidation or reorganization to which the Company is a party, or to which is sold all or substantially all of the shares or assets of the Company, if immediately after such merger, consolidation, reorganization or sale, the Company or the stockholders of the Company own equity securities having in the aggregate more than 50% of the total voting power of such other corporation.

“Effective Date” has the meaning given it in the preamble to this Agreement.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Family Member” means (a) with respect to any individual, such individual’s spouse, any descendants (whether natural or adopted), any trust all of the beneficial interests of which are owned by any of such individuals or by any of such individuals together with any organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, the estate of any such individual, and any corporation, association, partnership or limited liability company all of the equity interests of which are owned by those above described individuals, trusts or organizations and (b) with respect to any trust, the owners of the beneficial interests of such trust.

“Formation Holders” means the Holders set forth on Annex B hereto.

“Formation Holders Warrants” has the meaning given in the recitals of this Agreement.

“Holder” means each Purchaser (including, for purposes of this definition, each Formation Holder and each Matinas Holder) or any of such Purchaser’s respective successors and Permitted Assignees who acquire rights in accordance with this Agreement with respect to any Registrable Securities directly or indirectly from a Purchaser or from any Permitted Assignee.

“Initial Registration Statement” means the initial Registration Statement filed pursuant to this Agreement.

“Investor Shares” has the meaning given it in the recitals of this Agreement.

“Investor Warrants” has the meaning given it in the recitals of this Agreement.

“Majority Holders” means at any time Holders representing a majority of the Registrable Securities.

“Matinas Holders” means the Holders set forth on Annex A hereto.

“Matinas Holders Warrants” has the meaning given in the recitals of this Agreement.

“Permitted Assignee” means (a) with respect to a partnership, its partners or former partners in accordance with their partnership interests, (b) with respect to a corporation, its stockholders in accordance with their interest in the corporation, (c) with respect to a limited liability company, its members or former members in accordance with their interest in the limited liability company, (d) with respect to an individual party, any Family Member of such party, (e) an entity that is controlled by, controls, or is under common control with a transferor, or (f) a party to this Agreement.

“Piggyback Registration” means, in any registration of Common Stock as set forth in Section 3(b), the ability of holders of Registrable Securities to include Registrable Securities in such registration.

“Private Placement Warrants” has the meaning given in the recitals of this Agreement.

“Redemption Notice” has the meaning given it in Section 3(f) of this Agreement.

The terms “register,” “registered,” and “registration” refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

“Registrable Securities” means the Investor Shares and the Registrable Warrant Shares but excluding, subject to Section 3(e), (i) any Registrable Securities that have been publicly sold or may be sold immediately without registration under the Securities Act either pursuant to Rule 144(k) of the Securities Act or otherwise; (ii) any Registrable Securities sold by a person in a transaction pursuant to a registration statement filed under the Securities Act, or (iii) any Registrable Securities that are at the time subject to an effective registration statement under the Securities Act.

“Registrable Warrant Shares” means the shares of Common Stock issued or issuable to each Holder upon exercise of the Investor Warrants, the Formation Holders Warrants, the Matinas Holders Warrants or the Private Placement Warrants, as the case may be.

“Registration Default Date” means the date that is 150 days after the date the Registration Statement is actually filed with the Commission.

“Registration Default Period” means the period following the Registration Default Date during which any Registration Event occurs and is continuing.

“Registration Event” means the occurrence of any of the following events:

- Date;
- (a) the Company fails to file with the Commission the Registration Statement on or before the Registration Filing Date;
 - (b) the Registration Statement is not declared effective by the Commission on or before the Registration Default Date;
 - (c) after the SEC Effective Date, sales cannot be made pursuant to the Registration Statement for any reason (including without limitation by reason of a stop order, or the Company’s failure to update the Registration Statement) except as excused pursuant to Section 3(e); or
 - (d) the Common Stock generally or the Registrable Securities specifically are not listed or included for quotation on an Approved Market, or trading of the Common Stock is suspended or halted on the Approved Market, which at the time constitutes the principal market for the Common Stock, for more than two full, consecutive Trading Days; provided, however, a Registration Event shall not be deemed to occur if all or substantially all trading in equity securities (including the Common Stock) is suspended or halted on the Approved Market for any length of time.

“Registration Filing Date” means the date that is 60 days after date of the final closing of the PPO.

“Registration Statement” means the registration statement that the Company is required to file pursuant to this Agreement to register the Registrable Securities.

“Release Date” has the meaning given it in Section 3(f) of this Agreement.

“Rule 144” means Rule 144 promulgated by the Commission under the Securities Act.

“Rule 145” means Rule 145 promulgated by the Commission under the Securities Act.

“Rule 415” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same purpose and effect as such Rule.

“Securities Act” means the Securities Act of 1933, as amended, or any similar federal statute promulgated in replacement thereof, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

“SEC Effective Date” means the date the Registration Statement is declared effective by the Commission.

“Trading Day” means (a) if the Common Stock is listed or quoted on an Approved Market, then any day during which securities are generally eligible for trading on the Approved Market, or (b) if the Common Stock is not then listed or quoted and traded on an Approved Market, then any business day.

“Transfer” has the meaning given it in Section 3(f) of this Agreement.

“Warrant Private Placement Holders” has the meaning given in the recitals of this Agreement.

2. Term. This Agreement shall continue in full force and effect for a period of one year from the SEC Effective Date, unless terminated sooner hereunder.

3. Registration.

(a) Registration on Form S-1. Not later than the Registration Filing Date, the Company shall file with the Commission a Registration Statement on Form S-1, or other applicable form, relating to the resale by the Holders of all of the Registrable Securities, and the Company shall use its commercially reasonable efforts to cause such Registration Statement to be declared effective prior to the Registration Default Date.

(b) Piggyback Registration. In addition to the Company agreement pursuant to Section 3(a) above, if the Company shall determine to register for sale for cash any of its Common Stock, for its own account or for the account of others (other than the Holders), other than (i) a registration relating solely to employee benefit plans or securities issued or issuable to employees, consultants (to the extent the securities owned or to be owned by such consultants could be registered on Form S-8) or any of their Family Members (including a registration on Form S-8) or (ii) a registration relating solely to a Securities Act Rule 145 transaction or a registration on Form S-4 in connection with a merger, acquisition, divestiture, reorganization or similar event, the Company shall promptly give to the Holders written notice thereof (and in no event shall such notice be given less than 20 calendar days prior to the filing of such registration statement), and shall, subject to Section 3(c), include as a Piggyback Registration all of the Registrable Securities specified in a written request delivered by the Holder thereof within 10 calendar days after receipt of such written notice from the Company. However, the Company may, without the consent of the Holders, withdraw such registration statement prior to its becoming effective if the Company or such other stockholders have elected to abandon the proposal to register the securities proposed to be registered thereby.

(c) Underwriting. If a Piggyback Registration is for a registered public offering that is to be made by an underwriting, the Company shall so advise the Holders of the Registrable Securities eligible for inclusion in such Registration Statement pursuant to Sections 3(b). In that event, the right of any Holder to Piggyback Registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to sell any of their Registrable Securities through such underwriting shall (together with the Company and any other stockholders of the Company selling their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter selected for such underwriting by the Company or the selling stockholders, as applicable. Notwithstanding any other provision of this Section, if the underwriter or the Company determines that marketing factors require a limitation on the number of shares of Common Stock or the amount of other securities to be underwritten, the underwriter may exclude some or all Registrable Securities from such registration and underwriting. The Company shall so advise all Holders (except those Holders who failed to timely elect to include their Registrable Securities through such underwriting or have indicated to the Company their decision not to do so), and indicate to each such Holder the number of shares of Registrable Securities that may be included in the registration and underwriting, if any. The number of shares of Registrable Securities to be included in such registration and underwriting shall be allocated among such Holders as follows:

(i) If the Piggyback Registration was initiated by the Company, the number of shares that may be included in the registration and underwriting shall be allocated first to the Company and then, subject to obligations and commitments existing as of the date hereof, to all selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata basis according to the number of shares requested to be included therein; and

(ii) If the Piggyback Registration was initiated by the exercise of demand registration rights by a stockholder or stockholders of the Company (other than the Holders), then the number of shares that may be included in the registration and underwriting shall be allocated first to such selling stockholders who exercised such demand and then, subject to obligations and commitments existing as of the date hereof, to all other selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata basis according to the number of shares requested to be included therein.

No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration and no liquidated damages as set forth in Section 3(d) shall accrue with respect to such excluded securities. If any Holder disapproves of the terms of any such underwriting, such Holder may elect to withdraw such Holder's Registrable Securities therefrom by delivering a written notice to the Company and the underwriter. The Registrable Securities so withdrawn from such underwriting shall also be withdrawn from such registration; provided, however, that, if by the withdrawal of such Registrable Securities, a greater number of Registrable Securities held by other Holders may be included in such registration (up to the maximum of any limitation imposed by the underwriters), then the Company shall offer to all Holders who have included Registrable Securities in the registration the right to include additional Registrable Securities pursuant to the terms and limitations set forth herein in the same proportion used above in determining the underwriter limitation.

(d) Occurrence of Registration Event. If a Registration Event occurs, then the Company will make payments to each Holder of Registrable Securities (a "**Qualified Purchaser**"), as liquidated damages for the amount of damages to the Qualified Purchaser by reason thereof, at a rate equal to 0.50% of the purchase price per Unit paid by such Holder in the PPO for the Registrable Securities then held by each Qualified Purchaser for each full period of 30 days of the Registration Default Period (which shall be pro-rated for any period less than 30 days); provided, however, if a Registration Event occurs (or is continuing), liquidated damages shall be paid only with respect to that portion of the Qualified Purchaser's Registrable Securities that cannot then be immediately resold in reliance on Rule 144. Notwithstanding the foregoing, the maximum amount of liquidated damages that may be paid to any Qualified Purchaser pursuant to this Section 3(d) shall be an amount equal to 6% of the purchase price per Unit paid by such Holder in the PPO for the Registrable Securities held by such Qualified Purchaser at the time of the first occurrence of a Registration Event. Each such payment shall be due and payable within five days after the end of each full 30-day period of the Registration Default Period until the termination of the Registration Default Period and within five days after such termination. Such payments shall constitute the Qualified Purchaser's exclusive remedy for such events. If the Company fails to pay any partial liquidated damages or refund pursuant to this Section in full within seven days after the date payable, the Company will pay interest thereon at a rate of 2% per annum (or such lesser maximum amount that is permitted to be paid by applicable law) to the Holder, accruing daily from the date such partial liquidated damages are due until such amounts, plus all such interest thereon, are paid in full. The Registration Default Period shall terminate upon (i) the filing of the Registration Statement in the case of clause (a) of the definition of Registration Event, (ii) the SEC Effective Date in the case of clause (b) of the definition of Registration Event, (iii) the ability of the Qualified Purchaser to effect sales pursuant to the Registration Statement in the case of clause (c) of the definition of Registration Event, and (iv) the listing or inclusion and/or trading of the Common Stock on an Approved Market, as the case may be, in the case of clause (d) of the definition of Registration Event. The amounts payable as liquidated damages pursuant to this Section 3(d) shall be payable in lawful money of the United States.

(e) Notwithstanding the provisions of Section 3(d) above:

(1)(a) if the Commission does not declare the Registration Statement effective on or before the Registration Default Date, or (b) if the Commission allows the Registration Statement to be declared effective at any time before or after the Registration Default Date, subject to the withdrawal of certain Registrable Securities from the Registration Statement, and the reason for (a) or (b) is the Commission's determination that (x) the offering of any of the Registrable Securities constitutes a primary offering of securities by the Company, (y) Rule 415 may not be relied upon for the registration of the resale of any or all of the Registrable Securities, and/or (z) a Holder of any Registrable Securities must be named as an underwriter, the Holders understand and agree that in the case of (b) the Company may reduce, on a *pro rata* basis, the total number of Registrable Securities to be registered on behalf of each such Holder, and, in the case of (a) or (b), that a Holder shall not be entitled to any liquidated damages with respect to the Registrable Securities not registered for the reason set forth in (a), or so reduced on a *pro rata* basis as set forth in (b). In any such *pro rata* reduction, the number of Registrable Securities to be registered on such Registration Statement will first be reduced by (i) first, all of the Registrable Securities held by the Formation Holders, (ii) second, all of the Registrable Securities held by the Matinas Holders and the Warrant Private Placement Holders on a pro-rata basis and (iii) third, the Registrable Securities represented by the Registrable Warrant Shares, other than the Formation Holders Warrants, the Matinas Holders Warrants and the Private Placement Warrants (applied, in the case that some Registrable Warrant Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Registrable Warrant Shares held by such Holders on a fully diluted basis), and (iv) fourth, Registrable Securities represented by Investor Shares (applied, in the case that some Investor Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Investor Shares held by such Holders). In addition, any such affected Holder shall be entitled to Piggyback Registration rights after the Registration Statement is declared effective by the Commission until such time as: (AA) all Registrable Securities have been registered pursuant to an effective Registration Statement, (BB) the Registrable Securities may be resold without restriction pursuant to Rule 144 of the Securities Act, or (CC) the Holder agrees to be named as an underwriter in any such registration statement. The Holders acknowledge and agree the provisions of this paragraph may apply to more than one Registration Statement; and

(2) For not more than thirty (30) consecutive days or for a total of not more than sixty (60) days in any twelve (12) month period, the Company may suspend the use of any prospectus included in any Registration Statement contemplated by this Section in the event that the Company determines in good faith that such suspension is necessary to (A) delay the disclosure of material non-public information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the affected Registration Statement or the related prospectus so that such Registration Statement or prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the prospectus in light of the circumstances under which they were made, not misleading, including in connection with the filing of a post-effective amendment to such Registration Statement in connection with the Company's filing of an Annual Report on Form 10-K for any fiscal year (an "Allowed Delay"); provided, that the Company shall promptly (a) notify each Holder in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Holder) disclose to such Holder any material non-public information giving rise to an Allowed Delay, (b) advise the Holders in writing to cease all sales under the Registration Statement until the end of the Allowed Delay and (c) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

In the event of an Allowed Delay, the liquidated damages set forth in Section 3(d) shall not accrue during such Allowed Delay.

(f) Holdback Agreements .. From and after the SEC Effective Date, each Holder understands that (i) it shall not sell, offer, pledge, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, grant any right or warrant to purchase, lend or otherwise transfer or encumber, directly or indirectly, any shares of the Registrable Securities (“**Transfer**”), nor shall such Holder enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any shares of the Registrable Securities until the Release Date (as defined below); provided that such Holder shall be permitted to Transfer up to one-third of such Holder’s Registrable Securities held by it as of the SEC Effective Date at any time on or after the SEC Effective Date, and (ii) following the Release Date, it shall be entitled to sell the remaining Registrable Securities held by such Holder. Each Holder hereby covenants and agrees that (x) it shall abide by the restrictions set forth above and (y) the Company shall be entitled to place “stop transfer” instructions with the Company’s transfer agent in compliance with the above restrictions. For purposes of this clause (f), the term “**Release Date**” shall mean the earlier of (i) one year from the date the Registration Statement is filed with the Commission, or (ii) ninety (90) days following the closing of an underwritten public offering of the Company’s securities; provided, that in the event the Company delivers a notice of redemption to the Holders of the Investor Warrants (pursuant to the terms of the Investor Warrants) (the “**Redemption Notice**”), the restrictions set forth above shall terminate effective on the date of delivery of the Redemption Notice.

4. Registration Procedures for Registrable Securities. The Company will keep each Holder reasonably advised as to the filing and effectiveness of the Registration Statement. At its expense with respect to the Registration Statement, the Company will:

(a) prepare and file with the Commission with respect to the Registrable Securities, a Registration Statement on Form S-1, or any other form for which the Company then qualifies or which counsel for the Company shall deem appropriate and which form shall be available for the sale of the Registrable Securities in accordance with the intended methods of distribution thereof, and use its commercially reasonable efforts to cause such Registration Statement to become effective and shall remain effective for a period of one year or for such shorter period ending on the earlier to occur of (i) the date as of which all of the Holders as selling stockholders thereunder may sell all of the Registrable Securities registered for resale thereon without restriction pursuant to Rule 144 (or any successor rule thereto) promulgated under the Securities Act or (ii) the date when all of the Registrable Securities registered thereunder shall have been sold (the “**Effectiveness Period**”). Thereafter, the Company shall be entitled to withdraw such Registration Statement and the Purchasers shall have no further right to offer or sell any of the Registrable Securities registered for resale thereon pursuant to the respective Registration Statement (or any prospectus relating thereto);

(b) if the Registration Statement is subject to review by the Commission, respond in a commercially reasonable manner to all comments and diligently pursue resolution of any comments to the satisfaction of the Commission;

(c) prepare and file with the Commission such amendments and supplements to such Registration Statement as may be necessary to keep such Registration Statement effective during the Effectiveness Period;

(d) furnish, without charge, to each Holder of Registrable Securities covered by such Registration Statement (i) a reasonable number of copies of such Registration Statement (including any exhibits thereto other than exhibits incorporated by reference), each amendment and supplement thereto as such Holder may reasonably request, (ii) such number of copies of the prospectus included in such Registration Statement (including each preliminary prospectus and any other prospectus filed under Rule 424 of the Securities Act) as such Holders may reasonably request, in conformity with the requirements of the Securities Act, and (iii) such other documents as such Holder may require to consummate the disposition of the Registrable Securities owned by such Holder, but only during the Effectiveness Period;

(e) use its commercially reasonable efforts to register or qualify such registration under such other applicable securities laws of such jurisdictions as any Holder of Registrable Securities covered by such Registration Statement reasonably requests and as may be necessary for the marketability of the Registrable Securities (such request to be made by the time the applicable Registration Statement is deemed effective by the Commission) and do any and all other acts and things necessary to enable such Holder to consummate the disposition in such jurisdictions of the Registrable Securities owned by such Holder; provided, that the Company shall not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this paragraph, (ii) subject itself to taxation in any such jurisdiction, or (iii) consent to general service of process in any such jurisdiction.

(f) notify each Holder of Registrable Securities, the disposition of which requires delivery of a prospectus relating thereto under the Securities Act, of the happening of any event (as promptly as practicable after becoming aware of such event), which comes to the Company's attention, that will after the occurrence of such event cause the prospectus included in such Registration Statement, if not amended or supplemented, to contain an untrue statement of a material fact or an omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading and the Company shall promptly thereafter prepare and furnish to such Holder a supplement or amendment to such prospectus (or prepare and file appropriate reports under the Exchange Act) so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, unless suspension of the use of such prospectus otherwise is authorized herein or in the event of a Blackout Period, in which case no supplement or amendment need be furnished (or Exchange Act filing made) until the termination of such suspension or Blackout Period;

(g) comply, and continue to comply during the Effectiveness Period, in all material respects with the Securities Act and the Exchange Act and with all applicable rules and regulations of the Commission with respect to the disposition of all securities covered by such Registration Statement;

(h) as promptly as practicable after becoming aware of such event, notify each Holder of Registrable Securities being offered or sold pursuant to the Registration Statement of the issuance by the Commission of any stop order or other suspension of effectiveness of the Registration Statement;

(i) use its commercially reasonable efforts to cause all the Registrable Securities covered by the Registration Statement to be quoted on the OTC Bulletin Board or such other Approved Market on which securities of the same class or series issued by the Company are then listed or traded;

(j) provide a transfer agent and registrar, which may be a single entity, for the shares of Common Stock at all times;

(k) if requested by the Holders, cooperate with the Holders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be delivered to a transferee pursuant to the Registration Statement, which certificates shall be free, to the extent permitted by applicable law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holders may request;

(l) during the Effectiveness Period, refrain from bidding for or purchasing any Common Stock or any right to purchase Common Stock or attempting to induce any person to purchase any such security or right if such bid, purchase or attempt would in any way limit the right of the Holders to sell Registrable Securities by reason of the limitations set forth in Regulation M of the Exchange Act; and

(m) take all other reasonable actions necessary to expedite and facilitate the disposition by the Holders of the Registrable Securities pursuant to the Registration Statement.

5. Suspension of Offers and Sales. Each Holder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 4(f) hereof or of the commencement of a Blackout Period, such Holder shall discontinue the disposition of Registrable Securities included in the Registration Statement until such Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 4(f) hereof or notice of the end of the Blackout Period, and, if so directed by the Company, such Holder shall deliver to the Company (at the Company's expense) all copies (including, without limitation, any and all drafts), other than permanent file copies, then in such Holder's possession, of the prospectus covering such Registrable Securities current at the time of receipt of such notice.

6. Registration Expenses. The Company shall pay all expenses in connection with any registration obligation provided herein, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of counsel for the Company and of its independent accountants; provided, that, in any registration, each party shall pay for its own underwriting discounts and commissions and transfer taxes. Except as provided in this Section and Section 9, the Company shall not be responsible for the expenses of any attorney or other advisor employed by a Holder.

7. Assignment of Rights. No Holder may assign its rights under this Agreement to any party without the prior written consent of the Company; provided, however, that any Holder may assign its rights under this Agreement without such consent to a Permitted Assignee as long as (a) such transfer or assignment is effected in accordance with applicable securities laws; (b) such transferee or assignee agrees in writing to become subject to the terms of this Agreement; and (c) such Holder notifies the Company in writing of such transfer or assignment, stating the name and address of the transferee or assignee and identifying the Registrable Securities with respect to which such rights are being transferred or assigned.

8. Information by Holder. A Holder with Registrable Securities included in any registration shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required in order to comply with any applicable law or regulation in connection with the registration of such Holder's Registrable Securities or any qualification or compliance with respect to such Holder's Registrable Securities and referred to in this Agreement. A form of Selling Stockholder Questionnaire is attached as Exhibit A hereto for such purposes.

9. Indemnification.

(a) In the event of the offer and sale of Registrable Securities under the Securities Act, the Company shall, and hereby does, indemnify and hold harmless, to the fullest extent permitted by law, each Holder, its directors, officers, partners, each other person who participates as an underwriter in the offering or sale of such securities, and each other person, if any, who controls or is under common control with such Holder or any such underwriter within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, and expenses to which the Holder or any such director, officer, partner or underwriter or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, insofar as such losses, claims, damages, liabilities or expenses (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any untrue statement of any material fact contained in any registration statement prepared and filed by the Company under which Registrable Securities were registered under the Securities Act, any preliminary prospectus, final prospectus or summary prospectus contained therein, or any amendment or supplement thereto, or any omission to state therein a material fact required to be stated or necessary to make the statements therein in light of the circumstances in which they were made not misleading, or any violation or alleged violation of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with this Agreement; and the Company shall reimburse the Holder, and each such director, officer, partner, underwriter and controlling person for any legal or any other expenses reasonably incurred by them in connection with investigating, defending or settling any such loss, claim, damage, liability, action or proceeding; provided, that such indemnity agreement found in this Section 9(a) shall in no event exceed the net proceeds from the PPO received by the Company; and provided further, that the Company shall not be liable in any such case (i) to the extent that any such loss, claim, damage, liability (or action or proceeding in respect thereof) or expense arises out of or is based upon an untrue statement in or omission from such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement in reliance upon and in conformity with written information furnished to the Company by the Holder specifically for use in the preparation thereof or (ii) if the person asserting any such loss, claim, damage, liability (or action or proceeding in respect thereof) who purchased the Registrable Securities that are the subject thereof did not receive a copy of an amended preliminary prospectus or the final prospectus (or the final prospectus as amended or supplemented) at or prior to the written confirmation of the sale of such Registrable Securities to such person because of the failure of such Holder or underwriter to so provide such amended preliminary or final prospectus and the untrue statement or omission of a material fact made in such preliminary prospectus was corrected in the amended preliminary or final prospectus (or the final prospectus as amended or supplemented). Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Holders, or any such director, officer, partner, underwriter or controlling person and shall survive the transfer of such shares by the Holder.

(b) As a condition to including Registrable Securities in any registration statement filed pursuant to this Agreement, each Holder agrees to be bound by the terms of this Section 9 and to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors and officers, and each other person, if any, who controls the Company within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which the Company or any such director or officer or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, to the extent arising out of or based solely upon: (x) such Holder's failure to comply with the prospectus delivery requirements of the Securities Act or (y) any untrue or alleged untrue statement of a material fact contained in any registration statement, any prospectus, or any form of prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading (i) to the extent, but only to the extent, that such untrue statement or omission is contained in any information so furnished in writing by such Holder to the Company specifically for inclusion in the registration statement or such prospectus or (ii) to the extent that (1) such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such Holder expressly for use in the Registration Statement, such prospectus or such form of prospectus or in any amendment or supplement thereto or (2) in the case of an occurrence of an event of the type specified in Section 4(f) hereof, the use by such Holder of an outdated or defective prospectus after the Company has notified such Holder in writing that the prospectus is outdated or defective and prior to the receipt by such Holder of the advice contemplated in Section 4(f). In no event shall the liability of any selling Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c) Promptly after receipt by an indemnified party of notice of the commencement of any action or proceeding involving a claim referred to in this Section (including any governmental action), such indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the indemnifying party of the commencement of such action; provided, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations under this Section, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an indemnified party, unless in the reasonable judgment of counsel to such indemnified party a conflict of interest between such indemnified and indemnifying parties may exist or the indemnified party may have defenses not available to the indemnifying party in respect of such claim, the indemnifying party shall be entitled to participate in and to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof, unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties arises in respect of such claim after the assumption of the defenses thereof or the indemnifying party fails to defend such claim in a diligent manner, other than reasonable costs of investigation. Neither an indemnified nor an indemnifying party shall be liable for any settlement of any action or proceeding effected without its consent. No indemnifying party shall, without the consent of the indemnified party, consent to entry of any judgment or enter into any settlement, which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. Notwithstanding anything to the contrary set forth herein, and without limiting any of the rights set forth above, in any event any party shall have the right to retain, at its own expense, counsel with respect to the defense of a claim.

(d) If an indemnifying party does or is not permitted to assume the defense of an action pursuant to Sections 9(c) or in the case of the expense reimbursement obligation set forth in Sections 9(a) and (b), the indemnification required by Sections 9(a) and 9(b) shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills received or expenses, losses, damages, or liabilities are incurred.

(e) If the indemnification provided for in Section 9(a) or 9(b) is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall (i) contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense as is appropriate to reflect the proportionate relative fault of the indemnifying party on the one hand and the indemnified party on the other (determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission relates to information supplied by the indemnifying party or the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission), or (ii) if the allocation provided by clause (i) above is not permitted by applicable law or provides a lesser sum to the indemnified party than the amount hereinafter calculated, not only the proportionate relative fault of the indemnifying party and the indemnified party, but also the relative benefits received by the indemnifying party on the one hand and the indemnified party on the other, as well as any other relevant equitable considerations. No indemnified party guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any indemnifying party who was not guilty of such fraudulent misrepresentation.

(f) Other Indemnification. Indemnification similar to that specified in this Section (with appropriate modifications) shall be given by the Company and each Holder of Registrable Securities with respect to any required registration or other qualification of securities under any federal or state law or regulation or governmental authority other than the Securities Act.

10. Rule 144. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the Commission that may at any time permit the Holders to sell the Registrable Securities to the public without registration, the Company agrees: (i) to make and keep public information available as those terms are understood in Rule 144, (ii) to file with the Commission in a timely manner all reports and other documents required to be filed by an issuer of securities registered under the Securities Act or the Exchange Act pursuant to Rule 144, (iii) as long as any Holder owns any Registrable Securities, to furnish in writing upon such Holder's request a written statement by the Company that it has complied with the reporting requirements of Rule 144 and of the Securities Act and the Exchange Act, and to furnish to such Holder a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as may be reasonably requested in availing such Holder of any rule or regulation of the Commission permitting the selling of any such Registrable Securities without registration and (iv) undertake any additional actions commercially reasonably necessary to maintain the availability of the use of Rule 144.

11. Corporate Existence. So long as any Holder owns any Registrable Securities, the Company shall not directly or indirectly consummate any merger, reorganization, restructuring, reverse stock split, consolidation, sale of all or substantially all of the Company's assets or any similar transaction or related transactions (each such transaction, an "**Organizational Change**"), unless, prior to the consummation of an Organizational Change, the Company obtains the written consent of the Majority Holders.

12. Independent Nature of Each Purchaser's Obligations and Rights. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser, and each Purchaser shall not be responsible in any way for the performance of the obligations of any other Purchaser under this Agreement. Nothing contained herein and no action taken by any Purchaser pursuant hereto, shall be deemed to constitute such Purchasers as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by this Agreement. Each Purchaser shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Purchaser to be joined as an additional party in any proceeding for such purpose.

13. Other Registration Rights. The Company shall not grant any additional registration rights other than those contemplated herein without the consent of the Majority Holders prior to the effectiveness of the Registration Statement other than, in the case of the Company (i) a registration relating solely to employee benefit plans or securities issued or issuable to employees, consultants (to the extent the securities owned or to be owned by such consultants could be registered on Form S-8) or any of their Family Members (including a registration on Form S-8) or (ii) a registration on Form S-4 in connection with a merger, acquisition, divestiture, reorganization or similar event

14. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of New York, both substantive and remedial, without regard to New York conflicts of law principles. Any judicial proceeding brought against either of the parties to this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the courts of the State of New York, New York County, or in the United States District Court for the Southern District of New York and, by its execution and delivery of this Agreement, each party to this Agreement accepts the jurisdiction of such courts. The foregoing consent to jurisdiction shall not be deemed to confer rights on any person other than the parties to this Agreement.

(b) Remedies. In the event of a breach by the Company or by a Holder of any of their respective obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, shall be entitled to specific performance of its rights under this Agreement. The Company and each Holder agree that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall not assert or shall waive the defense that a remedy at law would be adequate.

(c) Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, Permitted Assignees, executors and administrators of the parties hereto.

(d) No Inconsistent Agreements. The Company has not entered, as of the date hereof, and shall not enter, on or after the date of this Agreement, into any agreement with respect to its securities that would have the effect of impairing the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof.

(e) Entire Agreement. This Agreement constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(f) Notices, etc. All notices or other communications which are required or permitted under this Agreement shall be in writing and sufficient if delivered by hand, by facsimile transmission, by registered or certified mail, postage pre -paid, by electronic mail, or by courier or overnight carrier, to the persons at the addresses set forth below (or at such other address as may be provided hereunder), and shall be deemed to have been delivered as of the date so delivered:

If to the Company to:

Matinas BioPharma Holdings, Inc.
915 Klosterman Road East
Tarpon Springs, FL 34689
Attention: Roelof Rongen, President & CEO
E-mail: rrongen@matinasbiopharma.com

with copy to:

Lowenstein Sandler LLP
1251 Avenue of the Americas
New York, NY 10020
Attn: Steven M. Skolnick, Esq.
Facsimile: (973) 597 2477

If to the Purchasers:

To each Purchaser at the address set forth on the signature page hereto or at such other address as any party shall have furnished to the other parties in writing.

(g) Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any Holder, upon any breach or default of the Company under this Agreement, shall impair any such right, power or remedy of such Holder nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of any similar breach or default thereunder occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any Holder of any breach or default under this Agreement, or any waiver on the part of any Holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

(h) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. In the event that any signature is delivered by facsimile transmission or electronic transmission via .PDF file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic signature page were an original thereof.

(i) Severability. In the case any provision of this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(j) Amendments. The provisions of this Agreement may be amended at any time and from time to time, and particular provisions of this Agreement may be waived, with and only with an agreement or consent in writing signed by the Company and the Majority Holders; provided, that Section 3(e) shall not be amended without the written consent of (a) the Matinas Holders representing a majority of the Matinas Holders Warrants and (b) the Formation Holders representing a majority of the Formation Holders Warrants. The Purchasers acknowledge that by the operation of this Section, the Majority Holders may have the right and power to diminish or eliminate all rights of the Purchasers under this Agreement.

(k) Limitation on Subsequent Registration Rights. After the date of this Agreement and prior to the SEC Effective Date, the Company shall not, without the prior written consent of the Majority Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would grant such holder registration rights senior or equal to those granted to the Holders hereunder.

[SIGNATURE PAGES FOLLOW]

This Registration Right Agreement is hereby executed as of the date first above written.

COMPANY

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Roelof Ronger

Name: Roelof Ronger

Title: President & Chief Executive Officer

EACH PURCHASER'S SIGNATURE TO THE SUBSCRIPTION AGREEMENT DATED OF EVEN DATE HERewith SHALL CONSTITUTE THE PURCHASER'S SIGNATURE TO THIS REGISTRATION RIGHTS AGREEMENT.

Matinas Holders

[Intentionally Omitted]

Formation Holders

[Intentionally Omitted]

Exhibit A

Selling Stockholder Questionnaire

[See Attached.]

PLACEMENT AGENCY AGREEMENT

July 11, 2013

Aegis Capital Corp.
810 Seventh Ave, 11th Floor
New York, NY 10019

Re: Matinas BioPharma, Inc. and Matinas BioPharma Holdings, Inc.

Ladies and Gentlemen:

This Placement Agency Agreement ("**Agreement**") sets forth the terms upon which Aegis Capital Corp., a New York corporation, and a registered broker-dealer and member of the Financial Industry Regulatory Authority ("**FINRA**") (the "**Placement Agent**"), shall be engaged by Matinas BioPharma, Inc., a Delaware corporation ("**Matinas**") and Matinas BioPharma Holdings, Inc., a Delaware corporation ("**Newco**"), to act as exclusive Placement Agent in connection with the private placement (the "**Offering**") of units ("**Units**") of securities of Newco, each Unit consisting of (i) 250,000 shares of common stock, par value \$0.0001 per share (the "**Common Stock**"), of Newco (the "**Shares**") and (ii) 125,000 warrants (the "**Warrants**"), with each Warrant entitling the holder to purchase one share of Common Stock for a five-year period at an exercise price of \$2.00 per share. The Offering will consist of a minimum of 24 Units (\$6,000,000) (the "**Minimum Amount**") and a maximum of 36 Units (\$9,000,000) (the "**Maximum Amount**"). In the event the Offering is oversubscribed, Matinas and the Placement Agent may, in their mutual discretion, sell up to 24 additional Units for an additional aggregate purchase price of \$6,000,000 (the "**Over-allotment**"). Concurrently with the initial closing of the Offering, a wholly-owned subsidiary of Newco will merge with and into Matinas and, with the proceeds of the Offering, will continue the existing operations of Matinas as a wholly owned subsidiary of Newco (the "**Merger**").

As part of or in conjunction with the Merger, Newco will issue shares of its Common Stock and warrants to (i) Matinas's then-existing securityholders as the consideration in the Merger pursuant to the terms of the Merger Agreement dated the date hereof among Matinas, Newco and a subsidiary of Newco (the "**Merger Agreement**") and (ii) the investors in the Offering as further described in the Memorandum (as hereinafter defined). As used in this Agreement, unless the context otherwise requires, the term "**Company**" refers to Newco and Matinas on a combined basis after giving effect to the Offering and the Merger.

The purchase price for the Units will be \$250,000 per Unit (the "**Offering Price**"), with a minimum investment of one Unit; *provided, however,* that subscriptions for lesser amounts may be accepted in Matinas's and Placement Agent's joint discretion. The Placement Agent shall accept subscriptions only from persons or entities who qualify as "accredited investors," as such term is defined in Rule 501 of Regulation D ("**Regulation D**") as promulgated by the United States Securities and Exchange Commission (the "**SEC**") under Section 4(2) of the Securities Act of 1933, as amended (the "**Act**"). The Units will be offered until the earlier of (i) the termination of the Offering as provided herein, (ii) the time that all Units offered in the Offering are sold or (iii) September 9, 2013 ("**Initial Offering Period**"), which date may be extended by the Placement Agent and Matinas in their joint discretion until October 9, 2013 (this additional period and the Initial Offering Period shall be referred to as the "**Offering Period**"). The date on which the Offering expires or is terminated shall be referred to as the "**Termination Date.**" The current stockholders of Matinas shall have the right to invest in the Offering in an amount to at least maintain their pro rata ownership of Matinas following the Merger and immediately prior to the First Closing (as defined below in Section 4(e)).

With respect to the Offering, Matinas and Newco shall provide the Placement Agent, on terms set forth herein, the right to offer and sell all of the Units being offered. Purchases of Units may be made by the Placement Agent and its officers, directors, employees and affiliates. All such purchases, together with purchases by officers, directors, employees and affiliates of Matinas or Newco, may be used to satisfy the Minimum Amount if the Minimum Amount has not been subscribed for on or before the end of the Offering Period. It is understood that no sale shall be regarded as effective unless and until accepted by the Company. The Company may, in its sole discretion, accept or reject, in whole or in part, any prospective investment in the Units or allot to any prospective subscriber less than the number of Units that such subscriber desires to purchase.

The Offering will be made by Newco solely pursuant to the Memorandum, which at all times will be in form and substance reasonably acceptable to Newco, Matinas, the Placement Agent and their respective counsel and contain such legends and other information as Newco, Matinas, the Placement Agent and their respective counsel, may, from time to time, deem necessary and desirable to be set forth therein. “**Memorandum**” as used in this Agreement means Newco’s Confidential Private Placement Memorandum dated on or about July 11, 2013, inclusive of all annexes, and all amendments, supplements and appendices thereto.

1. Appointment of Placement Agent. On the basis of the representations and warranties provided herein, and subject to the terms and conditions set forth herein, the Placement Agent is appointed as exclusive Placement Agent for Matinas and Newco during the Offering Period to assist Matinas and Newco in finding qualified subscribers for the Offering. Subject to the consent of Matinas, which will not be unreasonably withheld, delayed or conditioned, the Placement Agent may sell Units through other broker-dealers who are FINRA members and may reallocate all or a portion of the Agent Compensation (as defined in Section 3(b) below) it receives to such other broker-dealers. On the basis of such representations and warranties and subject to such terms and conditions, the Placement Agent hereby accepts such appointment and agrees to perform its services hereunder diligently and in good faith and in a professional and businesslike manner and to use its reasonable efforts to assist Matinas and Newco in (A) finding subscribers of Units who qualify as “accredited investors,” as such term is defined in Rule 501 of Regulation D, and (B) completing the Offering. The Placement Agent has no obligation to purchase any of the Units. Unless sooner terminated in accordance with this Agreement, the engagement of the Placement Agent hereunder shall continue until the later of the Termination Date or the Final Closing (as defined below).

2. Representations, Warranties and Covenants of Matinas. The representations and warranties of Matinas (as used in this Section 2, “Matinas” refers to Matinas BioPharma, Inc. and its subsidiaries) contained in this Section 2 are true and correct as of the date of this Agreement and Matinas covenants as follows, as applicable.

(a) The Memorandum has been prepared by Matinas, in conformity with all applicable laws, and is in compliance in all material respects with Regulation D and Section 4(2) of the Act and the requirements of all other rules and regulations (the “**Regulations**”) of the SEC relating to offerings of the type contemplated by the Offering, and the applicable securities laws and the rules and regulations of those jurisdictions wherein the Placement Agent notifies Matinas that the Units are to be offered and sold excluding any foreign jurisdictions. The Units will be offered and sold pursuant to the registration exemption provided by Regulation D and Section 4(2) of the Act as a transaction not involving a public offering and the requirements of any other applicable state securities laws and the respective rules and regulations thereunder in those United States jurisdictions in which the Placement Agent notifies Matinas that the Units are being offered for sale. None of Matinas, its affiliates, or any person acting on its or their behalf (other than the Placement Agent, its affiliates or any person acting on its behalf, in respect of which no representation is made) has taken nor will it take any action that conflicts with the conditions and requirements of, or that would make unavailable with respect to the Offering, the exemption(s) from registration available pursuant to Rule 506 of Regulation D or Section 4(2) of the Act, or knows of any reason why any such exemption would be otherwise unavailable to it. None of Matinas, its predecessors or affiliates has been subject to any order, judgment or decree of any court of competent jurisdiction temporarily, preliminarily or permanently enjoining such person for failing to comply with Section 503 of Regulation D. Except for the sale of shares of its Series A preferred stock, Matinas has not, for a period of six months prior to the commencement of the offering of Units, sold, offered for sale or solicited any offer to buy any of its securities in a manner that would be integrated with the offer and sale of the Units pursuant to this Agreement and would cause the exemption from registration set forth in Rule 506 of Regulation D to become unavailable with respect to the offer and sale of the Units pursuant to this Agreement in the United States.

(b) The Memorandum does not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading: provided, however, the foregoing does not apply to any statements or omissions made solely in reliance on and in conformity with written information furnished to Matinas by Newco or the Placement Agent specifically for use in the preparation thereof. To the knowledge of Matinas, none of the statements, documents, certificates or other items made, prepared or supplied by Matinas with respect to the transactions contemplated hereby contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained therein not misleading in light of the circumstances in which they were made. There is no fact which Matinas has not disclosed in the Memorandum and of which Matinas is aware that materially adversely affects or that could reasonably be expected to have a material adverse effect on the (i) assets, liabilities, results of operations, condition (financial or otherwise), business or business prospects of Matinas or (ii) ability of Matinas to perform its obligations under this Agreement. Notwithstanding anything to the contrary herein, Matinas makes no representation or warranty with respect to any estimates, projections and other forecasts and plans (including the reasonableness of the assumptions underlying such estimates, projections and other forecasts and plans) that may have been delivered to the Placement Agent or its representatives or that are contained in the Memorandum, except that such estimates, projections and other forecasts and plans have been prepared in good faith on the basis of assumptions stated therein, which assumptions were believed to be reasonable at the time of such preparation.

(c) Matinas is duly organized and validly existing in good standing under the laws of the jurisdiction in which it was formed, and has the requisite power and authority to own its properties and to carry on its business as now being conducted. Matinas is not a party to any joint venture and does not directly or indirectly own or hold capital stock or an equity or similar interest in any entity. Matinas is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Matinas Material Adverse Effect. As used in this Agreement, **“Matinas Material Adverse Effect”** means any material adverse effect on the business, properties, assets, operations, results of operations or condition (financial or otherwise) of Matinas, taken as a whole, or on the transactions contemplated hereby and the other Matinas Transaction Documents (as defined below) or by the agreements and instruments to be entered into in connection herewith or therewith, or on the authority or ability of Matinas to perform its obligations under the Matinas Transaction Documents (as defined below). Except as set forth in the Memorandum, Matinas owns, directly or indirectly, all of the capital stock or other equity interests of each subsidiary free and clear of any liens (other than Permitted Encumbrances), and all the issued and outstanding securities of capital stock of each subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. **“Permitted Encumbrances”** shall mean (a) mechanic’s, materialmen’s, and similar liens, securing payment of sums not yet due and payable and for which an appropriate reserve has been established, (b) liens for taxes not yet delinquent or for taxes that the taxpayer is contesting in good faith through appropriate proceedings and for which an appropriate reserve has been established in the financial statements of such taxpayer, (c) purchase money liens and liens securing rental payments under capital lease arrangements, and (d) other liens arising in the ordinary course of business and not incurred in connection with the borrowing of money.

(d) Matinas has all requisite corporate power and authority to conduct its business as presently conducted and as proposed to be conducted (as described in the Memorandum), to enter into and perform its obligations under this Agreement, the Subscription Agreement substantially in the form of Annex A to the Memorandum (the **“Subscription Agreement”**), the Registration Rights Agreement substantially in the form of Annex B to the Memorandum (the **“Registration Rights Agreement”**), and the other agreements contemplated hereby (this Agreement, the Subscription Agreement, the Registration Rights Agreement and the other agreements contemplated hereby that Matinas is executing and delivering hereunder are collectively referred to herein as the **“Matinas Transaction Documents”**). Prior to the First Closing, each of the Matinas Transaction Documents (other than this Agreement, which has already been authorized) will have been duly authorized. This Agreement has been duly authorized, executed and delivered and constitutes, and each of the other Matinas Transaction Documents, upon due execution and delivery, will constitute, valid and binding obligations of Matinas, enforceable against Matinas in accordance with their respective terms (i) except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect related to laws affecting creditors’ rights generally, including the effect of statutory and other laws regarding fraudulent conveyances and preferential transfers, and except that no representation is made herein regarding the enforceability of Matinas’s obligations to provide indemnification and contribution remedies under the securities laws and (ii) subject to the limitations imposed by general equitable principles (regardless of whether such enforceability is considered in a proceeding at law or in equity).

(e) None of the execution and delivery of or performance by Matinas under this Agreement or any of the other Matinas Transaction Documents or the consummation of the transactions herein or therein contemplated conflicts with or violates, or will result in the creation or imposition of, any lien, charge or other encumbrance upon any of the assets of Matinas under any agreement or other instrument to which Matinas is a party or by which Matinas or its assets may be bound, or any term of the certificate of incorporation or by-laws of Matinas, or any license, permit, judgment, decree, order, statute, rule or regulation applicable to Matinas or any of its assets, except in the case of a conflict, violation, lien, charge or other encumbrance (except with respect to Matinas's Certificate of Incorporation or By-laws) which would not reasonably be expected to have a Matinas Material Adverse Effect.

(f) Matinas's financial statements, together with the related notes, if any, included in the Memorandum, present fairly, in all material respects, the financial position of Matinas as of the dates specified and the results of operations for the periods covered thereby. Such financial statements and related notes were prepared substantially in accordance with United States generally accepted accounting principles applied on a consistent basis throughout the periods indicated, except that the unaudited financial statements omit full notes, and except for normal year end adjustments. Except as set forth in such financial statements or otherwise disclosed in the Memorandum, Matinas has no known material liabilities of any kind, whether accrued, absolute or contingent, or otherwise, and subsequent to the date of the Memorandum and prior to the date of the First Closing it shall not enter into any material transactions or commitments without promptly thereafter notifying the Placement Agent in writing of any such material transaction or commitment. The other financial and statistical information with respect to Matinas and any pro forma information and related notes included in the Memorandum present fairly in all material respects the information shown therein on a basis consistent with the financial statements of Matinas included in the Memorandum. Matinas does not know of any facts, circumstances or conditions which could materially adversely affect its operations, earnings or prospects that have not been fully disclosed in the Memorandum.

(g) Except as disclosed in the Memorandum, since the date of Matinas' most recent financial statements contained in the Memorandum, there has been no Matinas Material Adverse Effect. Except as disclosed in the Memorandum, since the date of the Company's most recent financial statements contained in the memorandum, Matinas has not (i) declared or paid any dividends, (ii) sold any assets, individually or in the aggregate, in excess of \$75,000 outside of the ordinary course of business or (iii) had capital expenditures, individually or in the aggregate, in excess of \$75,000. Matinas has not taken any steps to seek protection pursuant to any bankruptcy law nor does Matinas have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so.

(h) Except as disclosed in the Memorandum, Matinas (i) has no outstanding Indebtedness (as defined below) in excess of \$75,000, (ii) is not a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument would result in a Material Adverse Effect, or (iii) is not in violation of any term of or in default under any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect. For purposes of this Agreement: (x) **“Indebtedness”** of any Person means without duplication, (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services including (without limitation) **“Capital Leases”** (as defined under GAAP) (other than trade payables entered into in the ordinary course of business), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) except for obligations owed to service providers of Matinas in connection with this Offering, all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above of at least \$75,000; (y) **“Contingent Obligation”** means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto; and (z) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(i) The conduct of business by Matinas as presently and proposed to be conducted is not subject to continuing oversight, supervision, regulation or examination by any governmental official or body of the United States, or any other jurisdiction wherein Matinas conducts or proposes to conduct such business, except as described in the Memorandum. Matinas has obtained all material licenses, permits and other governmental authorizations necessary to conduct its business as presently conducted. Matinas has not received any notice of any violation of, or noncompliance with, any federal, state, local or foreign laws, ordinances, regulations and orders (including, without limitation, those relating to environmental protection, occupational safety and health, securities laws, equal employment opportunity, consumer protection, credit reporting, **“truth-in-lending”**, and warranties and trade practices) applicable to its business, the violation of, or noncompliance with, would have an Matinas Material Adverse Effect, and Matinas knows of no facts or set of circumstances which could give rise to such a notice.

(j) No default by Matinas or, to the knowledge of Matinas, any other party, exists in the due performance under any material agreement to which Matinas is a party or to which any of its assets is subject (collectively, the “**Matinas Agreements**”). The Matinas Agreements disclosed in the Memorandum are the only material agreements to which Matinas is bound or by which its assets are subject, are accurately described in the Memorandum and are in full force and effect in accordance with their respective terms, subject to any applicable bankruptcy, insolvency or other laws affecting the rights of creditors generally and to general equitable principles and the availability of specific performance.

(k) Matinas owns all right, title and interest in, or possesses adequate and enforceable rights to use, all patents, patent applications, trademarks, service marks, copyrights, rights, licenses, franchises, trade secrets, confidential information, processes and formulations necessary for the conduct of its business as now conducted (collectively, the “**Intangibles**”). To the knowledge of Matinas, Matinas has not infringed upon the rights of others with respect to the Intangibles and, except as disclosed in the Memorandum, Matinas has not received notice that it has or may have infringed or is infringing upon the rights of others with respect to the Intangibles, or any written notice of conflict with the asserted rights of others with respect to the Intangibles. To the knowledge of Matinas, no others have infringed upon the rights of Matinas with respect to the Intangibles. Except as set forth in the Memorandum, none of Matinas’ Intangibles have expired or terminated, or are expected to expire or terminate, within three years from the date of this Agreement.

(l) Matinas is not a party to any collective bargaining agreement nor does it employ any member of a union. No executive officer of Matinas (as defined in Rule 501(f) of the Act) has notified Matinas that such officer intends to leave Matinas or otherwise terminate such officer's employment with Matinas. No executive officer of Matinas, to the knowledge of Matinas, is in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject Matinas to any liability with respect to any of the foregoing matters. Matinas is in compliance with all federal, state, local and foreign laws and regulations respecting labor, employment and employment practices and benefits, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Matinas Material Adverse Effect.

(m) Subsequent to the respective dates as of which information is given in the Memorandum, Matinas has operated its business in the ordinary course and, except as may otherwise be set forth in the Memorandum, there has been no: (i) Matinas Material Adverse Effect; (ii) transaction otherwise than in the ordinary course of business consistent with past practice; (iii) issuance of any securities (debt or equity) or any rights to acquire any such securities other than pursuant to equity incentive plans approved by its Board of Directors; (iv) damage, loss or destruction, whether or not covered by insurance, with respect to any asset or property of Matinas; or (v) agreement to permit any of the foregoing.

(n) Except as set forth in the Memorandum, there are no actions, suits, claims, hearings or proceedings pending before any court or governmental authority or, to the knowledge of Matinas, threatened, against Matinas, or involving its assets or any of its officers or directors (in their capacity as such) which, if determined adversely to Matinas or such officer or director, could reasonably be expected to have an Matinas Material Adverse Effect or adversely affect the transactions contemplated by this Agreement or the Merger Agreement (as hereinafter defined) or the enforceability thereof.

(o) Matinas is not: (i) in violation of its Certificate of Incorporation or By-laws; (ii) in default of any indenture, mortgage, deed of trust, note or other agreement or instrument to which Matinas is a party or by which it is or may be bound or to which any of its assets may be subject, the default of which could reasonably be expected to have an Matinas Material Adverse Effect; (iii) in violation of any statute, rule or regulation applicable to Matinas, the violation of which would have an Matinas Material Adverse Effect; or (iv) in violation of any judgment, decree or order of any court or governmental body having jurisdiction over Matinas and specifically naming Matinas, which violation or violations individually, or in the aggregate, could reasonably be expected to have an Matinas Material Adverse Effect.

(p) Except as disclosed in the Memorandum, as of the date of this Agreement, no current or former stockholder, director, officer or employee of Matinas, nor, to the knowledge of Matinas, any affiliate of any such person is presently, directly or indirectly through his affiliation with any other person or entity, a party to any loan from Matinas or any other transaction (other than as an employee) with Matinas providing for the furnishing of services by, or rental of any personal property from, or otherwise requiring cash payments to any such person.

(q) Except as disclosed in the Memorandum, Matinas has filed, on a timely basis, each federal, state, local and foreign tax return, report and declarations that were required to be filed, or has requested an extension therefor and has paid all taxes and all related assessments, charges, penalties and interest to the extent that the same have become due. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of Matinas know of no basis for any such claim. Matinas has not executed a waiver with respect to the statute of limitations relating to the assessment or collection of any foreign, federal, state or local tax. To Matinas' knowledge, none of Matinas' tax returns is presently being audited by any taxing authority. No liens have been filed and no claims are being asserted by or against Matinas with respect to any taxes (other than liens for taxes not yet due and payable). Matinas has not received notice of assessment or proposed assessment of any taxes claimed to be owed by it or any other Person on its behalf. Matinas is not a party to any tax sharing or tax indemnity agreement or any other agreement of a similar nature that remains in effect. Matinas has complied in all material respects with all applicable legal requirements relating to the payment and withholding of taxes and, within the time and in the manner prescribed by law, has withheld from wages, fees and other payments and paid over to the proper governmental or regulatory authorities all amounts required.

(r) Neither Matinas, nor any director, officer, agent, employee or other Person acting on behalf of Matinas has, in the course of its actions for, or on behalf of, Matinas (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

(s) Matinas is not obligated to pay, and has not obligated the Placement Agent to pay, a finder's or origination fee in connection with the Offering (other than to the Placement Agent), and hereby agrees to indemnify the Placement Agent from any such claim made by any other person as more fully set forth in Section 8 hereof. Matinas has not offered for sale or solicited offers to purchase the Units except for negotiations with the Placement Agent.

(t) Until the earlier of (i) the Termination Date and (ii) the Final Closing (as hereinafter defined), Matinas will not issue any press release, grant any interview, or otherwise communicate with the media in any manner whatsoever with respect to the Offering without the Placement Agent's prior consent, which consent will not unreasonably be withheld, delayed or conditioned.

(u) For the benefit of the Placement Agent, Matinas hereby incorporates by reference all of the representations and warranties contained in Article III, and its covenants contained in Article V, of that certain Agreement and Plan of Merger and Reorganization to be entered into prior to the Closing by and among Newco, Matinas and Matinas Merger Sub, Inc. (the "**Merger Agreement**"), in each case with the same force and effect as if specifically set forth herein.

(v) No representation or warranty contained in Section 2 of this Agreement contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements herein not misleading in the context of such representations and warranties.

2A. Representations, Warranties and Covenants of Newco. The representations and warranties of Newco (as used in this Section 2A, "Newco" refers to Matinas BioPharma Holdings, Inc. and its subsidiaries) contained in this Section 2A are true and correct as of the date of this Agreement.

(a) The Memorandum has been prepared in conformity with all applicable laws, and is in compliance in all material respects with Regulation D, the Act and the requirements of all other Regulations of the SEC relating to offerings of the type contemplated by the Offering, and the applicable securities laws and the rules and regulations of those jurisdictions wherein the Placement Agent notifies Newco that the Units are to be offered and sold excluding any foreign jurisdictions. The Units will be offered and sold pursuant to the registration exemptions provided by Regulation D and Section 4(2) of the Act as a transaction not involving a public offering and the requirements of any other applicable state securities laws and the respective rules and regulations thereunder in those United States jurisdictions in which the Placement Agent notifies Newco that the Units are being offered for sale. None of Newco, its affiliates, or any person acting on its or their behalf (other than the Placement Agent, its affiliates or any person acting on its behalf, in respect of which no representation is made) has taken nor will it take any action that conflicts with the conditions and requirements of, or that would make unavailable with respect to the Offering, the exemption(s) from registration available pursuant to Rule 506 of Regulation D or Section 4(2) of the Act, or knows of any reason why any such exemption would be otherwise unavailable to it. None of Newco, its predecessors or affiliates has been subject to any order, judgment or decree of any court of competent jurisdiction temporarily, preliminarily or permanently enjoining such person for failing to comply with Section 503 of Regulation D. Except for issuances of securities of Newco to its founders in connection with its formation, Newco has not, for a period of six months prior to the commencement of the offering of Units, sold, offered for sale or solicited any offer to buy any of its securities in a manner that would be integrated with the offer and sale of the Units pursuant to this Agreement, would cause the exemption from registration set forth in Rule 506 of Regulation D to become unavailable with respect to the offer and sale of the Units pursuant to this Agreement in the United States.

(b) Newco is duly organized and validly existing in good standing under the laws of the jurisdiction in which it was formed, and has the requisite power and authority to own its properties and to carry on its business as now being conducted. Newco is not a party to any joint venture and does not directly or indirectly own or hold capital stock or an equity or similar interest in any entity. Newco is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Newco Material Adverse Effect. As used in this Agreement, “**Newco Material Adverse Effect**” means any material adverse effect on the business, properties, assets, operations, results of operations or condition (financial or otherwise) of Newco, taken as a whole, or on the transactions contemplated hereby and the other Newco Transaction Documents (as defined below) or by the agreements and instruments to be entered into in connection herewith or therewith, or on the authority or ability of Newco to perform its obligations under the Newco Transaction Documents (as defined below). Except as set forth in the Memorandum, Newco owns, directly or indirectly, all of the capital stock or other equity interests of each subsidiary free and clear of any liens (other than Permitted Encumbrances), and all the issued and outstanding securities of capital stock of each subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. “**Permitted Encumbrances**” shall mean (a) mechanic’s, materialmen’s, and similar liens, securing payment of sums not yet due and payable and for which an appropriate reserve has been established, (b) liens for taxes not yet delinquent or for taxes that the taxpayer is contesting in good faith through appropriate proceedings and for which an appropriate reserve has been established in the financial statements of such taxpayer, (c) purchase money liens and liens securing rental payments under capital lease arrangements, and (d) other liens arising in the ordinary course of business and not incurred in connection with the borrowing of money.

(c) As to Newco only, the Memorandum does not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading: provided, however, the foregoing does not apply to any statements or omissions made solely in reliance on and in conformity with written information furnished to Newco by Matinas or the Placement Agent specifically for use in the preparation thereof. To the knowledge of Newco, none of the statements, documents, certificates or other items made, prepared or supplied by Newco with respect to the transactions contemplated hereby contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained therein not misleading in light of the circumstances in which they were made. There is no fact which Newco has not disclosed in the Memorandum and of which Newco is aware that materially adversely affects or that could reasonably be expected to have a Newco Material Adverse Effect. Notwithstanding anything to the contrary herein, Newco makes no representation or warranty with respect to any estimates, projections and other forecasts and plans (including the reasonableness of the assumptions underlying such estimates, projections and other forecasts and plans) that may have been delivered to the Placement Agent or its representatives by Newco, except that such estimates, projections and other forecasts and plans have been prepared in good faith on the basis of assumptions stated therein, which assumptions were believed to be reasonable at the time of such preparation.

(d) Newco has all requisite corporate power and authority to conduct its business as presently conducted and as proposed to be conducted (as described in the Memorandum), to enter into and perform its obligations under this Agreement, the Subscription Agreement, the Registration Rights Agreement, and the other agreements contemplated hereby (this Agreement, the Subscription Agreement, the Registration Rights Agreement and the other agreements contemplated hereby that Newco is executing and delivering hereunder are collectively referred to herein as the “**Newco Transaction Documents**”) and subject to necessary Board and stockholder approvals, to issue, sell and deliver the Units, the shares of Common Stock underlying the Units, and the shares of Common Stock issuable upon exercise of the Warrants (the “**Warrant Shares**”), the Agent Warrants (as defined in Section 3(b)) and the Agent Warrant Shares (as defined in Section 3(b)). Prior to the First Closing, each of the Newco Transaction Documents will have been duly authorized. This Agreement has been duly authorized, executed and delivered and constitutes, and each of the other Newco Transaction Documents, upon due execution and delivery, will constitute, valid and binding obligations of Newco, enforceable against Newco in accordance with their respective terms (i) except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect related to laws affecting creditors’ rights generally, including the effect of statutory and other laws regarding fraudulent conveyances and preferential transfers, and except that no representation is made herein regarding the enforceability of Newco’s obligations to provide indemnification and contribution remedies under the securities laws and (ii) subject to the limitations imposed by general equitable principles (regardless of whether such enforceability is considered in a proceeding at law or in equity).

(e) None of the execution and delivery of, or performance by Newco under this Agreement or any of the other Newco Transaction Documents or the consummation of the transactions herein or therein contemplated conflicts with or violates, or will result in the creation or imposition of, any lien, charge or other encumbrance upon any of the assets of Newco under any agreement or other instrument to which Newco is a party or by which Newco or its assets may be bound, or any term of the certificate of incorporation or by-laws of Newco, or any license, permit, judgment, decree, order, statute, rule or regulation applicable to Newco or any of its assets, except in the case of a conflict, violation, lien, charge or other encumbrance (except with respect to Newco's certificate of incorporation or by-laws) which would not, or could not reasonably be expected to, have a Newco Material Adverse Effect.

(f) As of the date of the First Closing, Newco will have the authorized and outstanding capital stock as set forth under the heading "Capitalization" in the Memorandum. All outstanding shares of capital stock of Newco are duly authorized, validly issued and outstanding, fully paid and nonassessable. Except as described in the Memorandum, as of the date of the First Closing: (i) there will be no outstanding options, stock subscription agreements, warrants or other rights permitting or requiring Newco or others to purchase or acquire any shares of capital stock or other equity securities of Newco or to pay any dividend or make any other distribution in respect thereof; (ii) there will be no securities issued or outstanding which are convertible into or exchangeable for any of the foregoing and there are no contracts, commitments or understandings, whether or not in writing, to issue or grant any such option, warrant, right or convertible or exchangeable security; (iii) no shares of stock or other securities of Newco are reserved for issuance for any purpose; (iv) there will be no voting trusts or other contracts, commitments, understandings, arrangements or restrictions of any kind with respect to the ownership, voting or transfer of shares of stock or other securities of Newco, including, without limitation, any preemptive rights, rights of first refusal, proxies or similar rights, and (v) no person holds a right to require Newco to register any securities of Newco under the Act or to participate in any such registration. As of the date of the First Closing, the issued and outstanding shares of capital stock of Newco will conform in all material respects to all statements in relation thereto contained in the Memorandum and the Memorandum describes all material terms and conditions thereof. All issuances by Newco of its securities have been, at the times of their issuance, exempt from registration under the Act and any applicable state securities laws.

(g) Immediately prior to the First Closing, the shares of Common Stock underlying the Units, the Warrants, the Warrant Shares, the Agent Warrants and the Agent Warrant Shares will have been duly authorized and, when issued and delivered against payment therefor as provided in the Newco Transaction Documents, will be validly issued, fully paid and nonassessable. No holder of any of the shares of Common Stock underlying the Units, the Warrants, the Warrant Shares, the Agent Warrants or the Agent Warrant Shares will be subject to personal liability solely by reason of being such a holder, and except as described in the Memorandum, none of the shares of Common Stock underlying the Units, the Warrants, the Warrant Shares, the Agent Warrants or the Agent Warrant Shares are subject to preemptive or similar rights of any stockholder or security holder of Newco or an adjustment under the antidilution or exercise rights of any holders of any outstanding shares of capital stock, options, warrants or other rights to acquire any securities of Newco. Immediately prior to the First Closing, a sufficient number of authorized but unissued shares of Common Stock will have been reserved for issuance upon the exercise of the Warrants and the Agent Warrants.

(h) No consent, authorization or filing of or with any court or governmental authority is required in connection with the issuance or the consummation of the transactions contemplated herein or in the other Newco Transaction Documents, except for required filings with the SEC and the applicable state securities commissions relating specifically to the Offering (all of which filings will be duly made by, or on behalf of, Newco), other than those which are required to be made after the First Closing (all of which will be duly made on a timely basis).

(i) Subsequent to the respective dates as of which information is given in the Memorandum, Newco has operated its business in the ordinary course and, except as may otherwise be set forth in the Memorandum, there has been no: (i) Newco Material Adverse Effect; (ii) transaction otherwise than in the ordinary course of business consistent with past practice; (iii) issuance of any securities (debt or equity) or any rights to acquire any such securities other than pursuant to equity incentive plans approved by its Board of Directors; (iv) damage, loss or destruction, whether or not covered by insurance, with respect to any asset or property of Newco; or (v) agreement to permit any of the foregoing.

(j) Except as set forth in the Memorandum, there are no actions, suits, claims, hearings or proceedings pending before any court or governmental authority or, to the knowledge of Newco, threatened, against Newco, or involving its assets or any of its officers or directors (in their capacity as such) which, if determined adversely to Newco or such officer or director, could not reasonably be expected to have a Newco Material Adverse Effect or adversely affect the transactions contemplated by this Agreement or the Merger Agreement or the enforceability thereof.

(k) Newco is not obligated to pay, and has not obligated the Placement Agent to pay, a finder's or origination fee in connection with the Offering (other than to the Placement Agent), and hereby agrees to indemnify the Placement Agent from any such claim made by any other person as more fully set forth in Section 8 hereof. Newco has not offered for sale or solicited offers to purchase the Units except for negotiations with the Placement Agent. Except as set forth in the Memorandum, no other person has any right to participate in any offer, sale or distribution of Newco's securities to which the Placement Agent's rights, described herein, shall apply.

(l) Neither the sale of the Units by Newco nor its use of the proceeds thereof will violate the Trading with the Enemy Act, as amended, or any of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto. Without limiting the foregoing, Newco is not (a) a person whose property or interests in property are blocked pursuant to Section 1 of Executive Order 13224 of September 23, 2001 Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism (66 Fed. Reg. 49079 (2001)) or (b) a person who engages in any dealings or transactions, or be otherwise associated, with any such person. Newco and its subsidiaries, if any, are in compliance, in all material respects, with the USA Patriot Act of 2001 (signed into law October 26, 2001).

(m) Until the earlier of (i) the Termination Date and (ii) the Final Closing (as hereinafter defined), Newco will not issue any press release, grant any interview, or otherwise communicate with the media in any manner whatsoever with respect to the Offering without the Placement Agent's prior consent, which consent will not unreasonably be withheld, delayed or conditioned.

(n) Newco is in the process of establishing internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(o) Newco is in the process of establishing "disclosure controls and procedures" (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "**Exchange Act**")), which (i) are designed to ensure that material information relating to Newco is made known to Newco's principal executive officer and its principal financial officer by others within those entities, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared, and (ii) such disclosure controls and procedures are effective to perform the functions for which they were established. Newco is not aware of any fraud, whether or not material, that involves management or other employees who have a role in Newco's internal controls.

(p) For the benefit of the Placement Agent, Newco hereby incorporates by reference all of the representations and warranties contained in Article IV, and its covenants contained in Article V, of the Merger Agreement, in each case with the same force and effect as if specifically set forth herein.

(q) Until the earlier of (i) the Termination Date and (ii) the Final Closing (as hereinafter defined), Newco will not issue any press release, grant any interview, or otherwise communicate with the media in any manner whatsoever with respect to the Offering without the Placement Agent's prior consent, which consent will not unreasonably be withheld, delayed or conditioned.

(r) No representation or warranty contained in Section 2A of this Agreement contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements herein not misleading in the context of such representations and warranties.

2B. Representations, Warranties and Covenants of Placement Agent. The Placement Agent hereby represents and warrants to Matinas and Newco that the following representations and warranties are true and correct as of the date of this Agreement:

(a) The Placement Agent is a corporation duly organized, validly existing and in good standing under the laws of the State of New York and has all requisite corporate power and authority to enter into this Agreement and to carry out and perform its obligations under the terms of this Agreement.

(b) This Agreement has been duly authorized, executed and delivered by the Placement Agent, and upon due execution and delivery by Matinas and Newco, this Agreement will be a valid and binding agreement of the Placement Agent enforceable against it in accordance with its terms, except as may be limited by principles of public policy and, as to enforceability, subject to applicable bankruptcy, insolvency, reorganization, moratorium and similar laws relating to or affecting creditor's rights from time to time in effect and subject to general equity principles.

(c) The Placement Agent is a member of FINRA and is registered as a broker-dealer under the Exchange Act, and under the securities acts of each state into which it is making offers or sales of the Units. None of the Placement Agent or its affiliates, or any person acting on behalf of the foregoing (other than Newco, Matinas, its or their affiliates or any person acting on its or their behalf, in respect of which no representation is made) has taken nor will it take any action that conflicts with the conditions and requirements of, or that would make unavailable with respect to the Offering, the exemption(s) from registration available pursuant to Rule 506 of Regulation D or Section 4(2) of the Act, or knows of any reason why any such exemption would be otherwise unavailable to it.

3. Placement Agent Compensation.

(a) In connection with the Offering, the Company will pay at each Closing a cash fee (the "**Agent Cash Fee**") to the Placement Agent equal to 10% of the gross proceeds from the sale of the Units consummated at such Closing.

(b) As additional compensation at each Closing the Company will issue to the Placement Agent (or its designee(s)) for nominal consideration, warrants (the "**Agent Warrants**;" the Agent Cash Fee and Agent Warrants are sometimes referred to herein collectively as "**Agent Compensation**") to purchase shares of Common Stock (the shares of Common Stock issuable upon exercise of the Agent Warrants are hereinafter referred to as the "**Agent Warrant Shares**" and the Agent Warrants and the Agent Warrant Shares are collectively referred to as the "**Agent Securities**"). The Agent Warrants shall be exercisable for that number of shares of Common Stock equaling 10% of the number of shares of Common Stock (i) included in the Units at an exercise price of \$1.00 per share and (ii) issuable upon exercise of the Warrants at an exercise price of \$2.00 per share (the "Agent Warrants"). The Agent's Warrants shall be exercisable until the date that is five (5) years after the First Closing, shall contain immediate cashless exercise provisions and shall not be callable by the Company.

(c) At each Closing, the Company will pay the Placement Agent a non-accountable expense allowance equal to 3% of the gross proceeds from the sale of the Units consummated at such Closing (the "**Agent Expense Allowance**"). The Placement Agent will not bear any of Newco's or Matinas's respective legal, accounting, printing or other expenses in connection with any transaction contemplated hereby.

(d) (i) In the event that (A) this Agreement is terminated prior to the First Closing (as defined below) or (B) following the First Closing and the Company completes a Subsequent Financing (as defined below) without engaging a placement agent or underwriter, then the Company shall also pay and issue to the Placement Agent, the Agent Compensation calculated according to the percentages set forth in Sections 3(a) and (b) of this Agreement solely with respect to the Tail Investors (as defined below), if any person or entity contacted by the Placement Agent during the Offering Period (other than existing shareholders of Matinas) and with whom the Placement Agent has discussions regarding a potential investment in the Offering, invests in the Company in such Subsequent Financing (other than through open market purchases) (the “**Tail Investors**”) at any time prior to the date that is eighteen (18) months after the Termination Date. The names of potential Tail Investors shall be provided in writing by the Placement Agent to the Company within ten (10) days following the Termination Date or the Final Closing (the “**Tail Investor List**”) and the failure to deliver such Tail Investor List shall nullify this Section 3(d). It is hereby agreed that, if the First Closing occurs, the written lists of investors utilized to effect each Closing shall, in the aggregate, constitute the Tail Investor List. The Company acknowledges and agrees that the Tail Investor List is proprietary to the Placement Agent, shall be maintained in strict confidence by the Company and those persons/entities on such list shall not be contacted by the Company without the Placement Agent’s prior written consent; provided, however that such restrictions shall not apply to ordinary course stockholder communications by the Company to its stockholders, including those Tail Investors that are stockholders of the Company.

(ii) In the event that the First Closing occurs and the Placement Agent does not elect to exercise the ROFR set forth in Section 3(f) in connection with a follow-on financing by the Company that occurs at any time during the ROFR Term (as defined below) (the “**Subsequent Financing**”), then the Company shall pay to the Placement Agent, solely with respect to the Tail Investors that invest in such Subsequent Financing, (i) 50% of the cash compensation payable to any other investment bank or other agent retained by the Company in lieu of the Placement Agent (the “**Replacement Agent**”) solely with respect to the Tail Investors and (ii) 50% of any warrants or other compensation to be paid to the Replacement Agent, solely with respect to the Tail Investors. The fees payable pursuant to this clause (ii) shall only be payable to the Placement Agent if the Company completes the Subsequent Financing and shall be payable at each closing of such Subsequent Financing with respect to Tail Investors who invested at such closing. In addition, the Company shall not be obligated to pay any fees to the Placement Agent pursuant to this clause (ii) for (A) any financing by the Company following the initial Subsequent Financing, (B) any securities sold in the Subsequent Financing to any institutional investor (even if such institutional investor is a Tail Investor) and (C) any Subsequent Financing that is completed as an underwritten public offering.

(e) In the event the Company elects to redeem the Warrants pursuant to the provisions thereto, the Placement Agent will be engaged as exclusive warrant solicitation agent at least 20 calendar days prior to the time notice of redemption is delivered to holders of Warrants. The engagement letter will provide for the payment to the Placement Agent of, inter alia, a cash fee of 5% of the exercise price for each Warrant exercised by a Warrant holder that has been solicited by the Placement Agent following a redemption notice.

(f) Effective as of the First Closing, the Company hereby grants to the Placement Agent, for a period of twelve (12) months following the Final Closing (the “**ROFR Term**”), the irrevocable preferential right of first refusal to act as lead placement agent or underwriter for any proposed private or public offering of the Company’s securities (equity or debt) by the Company. In that regard, it is understood that if the Company determines to pursue a financing during the ROFR Term and wishes to engage a placement agent or underwriter, the Company shall promptly provide the Placement Agent with a written notice of such intention (the “**Notice**”). If, within ten (7) business days of the receipt of the Notice, the Placement Agent does not accept in writing such offer to act as lead placement agent or underwriter with respect to such offering, then the Company shall be entitled to engage a placement agent or underwriter other than the Placement Agent; provided that the terms of the compensation to be paid to such other placement agent or underwriter are not materially less favorable to the Company than the terms included in the Notice. The Placement Agent’s failure to exercise its ROFR pursuant to this clause (f) with respect to a particular offering shall result in the immediate termination of this clause (f).

(g) For a period of two (2) years from the First Closing, the Company hereby grants the Placement Agent the right to appoint one (1) member of the Company’s board of directors (the “**Aegis Director**”). The initial Aegis Director shall be Adam Stern, who shall be appointed to the Board of Directors at the First Closing, with any successor Aegis Director chosen by the Placement Agent to be subject to the reasonable approval of the Company. The Aegis Director shall be entitled to the same indemnification and director compensation (if any) as any other director of the Company and shall be subject to removal on the same terms as any other director of the Company.

(h) At the First Closing, the Company and the Placement Agent shall enter into a Consulting Agreement (the “**Consulting Agreement**”) pursuant to which the Placement Agent shall render financial advisory services to the Company during the 12-month term of the Consulting Agreement in return for a fee of \$20,000 per month.

(i) The provisions of Sections 3(d), 3(f) and 3(g) of this Agreement shall terminate immediately upon the termination of Adam Stern’s employment with the Placement Agent.

4. Subscription and Closing Procedures.

(a) Matinas and Newco shall cause to be delivered to the Placement Agent copies of the Memorandum and have each consented, and hereby consent, to the use of such copies for the purposes permitted by the Act and applicable securities laws and in accordance with the terms and conditions of this Agreement, and hereby each authorize the Placement Agent and its agents and employees to use the Memorandum in connection with the sale of the Units until the earlier of (i) the Termination Date or (ii) the Final Closing, and no person or entity is or will be authorized to give any information or make any representations other than those contained in the Memorandum or to use any offering materials other than those contained in the Memorandum in connection with the sale of the Units.

(b) Matinas and Newco shall make available to the Placement Agent and its representatives such information as may be reasonably requested in making a reasonable investigation of Matinas and Newco and their respective affairs and shall provide access to such employees during normal business hours as shall be reasonably requested by the Placement Agent.

(c) Each prospective purchaser will be required to complete and execute an original omnibus signature page, for each of the Subscription Agreement and the Registration Rights Agreement (the “**Subscription Documents**”), which will be forwarded or delivered to the Placement Agent at the Placement Agent’s offices at the address set forth in Section 12 hereof, together with the subscriber’s wire transfer in the full amount of the purchase price for the number of Units desired to be purchased, subject to the Placement Agent’s right to accept a check in lieu of a wire transfer.

(d) All funds for subscriptions received from the Offering will be promptly forwarded by the Placement Agent and deposited into a non-interest bearing escrow account (the “**Escrow Account**”) established for such purpose with Signature Bank (the “**Escrow Agent**”). All such funds for subscriptions will be held in the Escrow Account pursuant to the terms of an escrow agreement among Newco, Matinas, the Placement Agent and the Escrow Agent. The Company will pay all reasonable fees related to the establishment and maintenance of the Escrow Account. Subject to the receipt of subscriptions for the Minimum Amount, the Company will either accept or reject, for any or no reason, the Subscription Documents in a timely fashion and at each Closing Newco and Matinas will countersign the Subscription Documents and provide duplicate copies of such documents to the Placement Agent for distribution to the subscribers. The Company, or the Placement Agent on the Company’s behalf, will promptly return to subscribers incomplete, improperly completed, improperly executed and rejected subscriptions and give written notice thereof to the Placement Agent upon such return.

(e) If subscriptions for at least the Minimum Amount have been accepted prior to the Termination Date, the funds therefor have been collected by the Escrow Agent and all of the conditions set forth elsewhere in this Agreement are fulfilled, a closing shall be held promptly with respect to Units sold (the “**First Closing**”). Thereafter remaining Units will continue to be offered and sold until the Termination Date and additional closings (each a “**Closing**”) may from time to time be conducted at times mutually agreed to between the Placement Agent and the Company with respect to additional Units sold, with the final closing (“**Final Closing**”) to occur within 10 days after the earlier of the Termination Date and the date on which the all Units has been fully subscribed for. Delivery of payment for the accepted subscriptions for Units from funds held in the Escrow Account will be made at each Closing against delivery of the Shares and Warrants by the Company. Executed certificates for the Common Stock, Warrants and the Placement Agent Warrants will be in such authorized denominations and, with respect to investors located by the Placement Agent, will be registered in such names as the Placement Agent may request and will be made available to the Placement Agent for checking and packaging at the Placement Agent’s office at each Closing or within ten (10) business days following a Closing.

(f) If Subscription Documents for the Minimum Amount have not been received and accepted by the Company on or before the Termination Date for any reason, the Offering will be terminated, no Units will be sold, and the Escrow Agent will, at the request of the Placement Agent, cause all monies received from subscribers for the Units to be promptly returned to such subscribers without interest, penalty, expense or deduction.

5. Further Covenants. Matinas and Newco hereby covenant and agree that:

(a) Except upon prior written notice to the Placement Agent, neither Matinas nor Newco shall, at any time prior to the Final Closing, knowingly take any action which would cause any of the representations and warranties made by it in this Agreement not to be complete and correct in all material respects on and as of each Closing Date with the same force and effect as if such representations and warranties had been made on and as of each such date (except to the extent any representation or warranty relates to an earlier date).

(b) If, at any time prior to the Final Closing, any event shall occur that causes (i) a Matinas Material Adverse Effect or (ii) a Newco Material Adverse Effect, either of which as a result it becomes necessary to amend or supplement the Memorandum so that the representations and warranties herein remain true and correct in all material respects, or in case it shall be necessary to amend or supplement the Memorandum to comply with Regulation D or any other applicable securities laws or regulations, either Matinas or Newco, as applicable, will promptly notify the Placement Agent and shall, at its sole cost, prepare and furnish to the Placement Agent copies of appropriate amendments and/or supplements in such quantities as the Placement Agent may reasonably request. Neither Matinas nor Newco will at any time before the Final Closing prepare or use any amendment or supplement to the Memorandum of which the Placement Agent will not previously have been advised and furnished with a copy, or which is not in compliance in all material respects with the Act and other applicable securities laws. As soon as Matinas or Newco is advised thereof, Matinas or Newco, as applicable, will advise the Placement Agent and its counsel, and confirm the advice in writing, of any order preventing or suspending the use of the Memorandum, or the suspension of any exemption for such qualification or registration thereof for offering in any jurisdiction, or of the institution or threatened institution of any proceedings for any of such purposes, and Matinas and Newco, as applicable, will use their reasonable best efforts to prevent the issuance of any such order and, if issued, to obtain as soon as reasonably possible the lifting thereof.

(c) Matinas and Newco shall comply with the Act, the Exchange Act and the rules and regulations thereunder, all applicable state securities laws and the rules and regulations thereunder in the states in which Placement Agent's Blue Sky counsel has advised the Placement Agent, Matinas and/or Newco that the Units are qualified or registered for sale or exempt from such qualification or registration, so as to permit the continuance of the sales of the Units, and will file or cause to be filed with the SEC, and shall promptly thereafter forward or cause to be forwarded to the Placement Agent, any and all reports on Form D as are required.

(d) Newco shall use best efforts to qualify the Units for sale under the securities laws of such jurisdictions in the United States as may be mutually agreed to by Matinas, Newco and the Placement Agent, and Newco will make or cause to be made such applications and furnish information as may be required for such purposes, provided that Newco will not be required to qualify as a foreign corporation in any jurisdiction or execute a general consent to service of process. Newco will, from time to time, prepare and file such statements and reports as are or may be required to continue such qualifications in effect for so long a period as the Placement Agent may reasonably request with respect to the Offering.

(e) The Company shall place a legend on the certificates representing the Shares, Warrants and the Agent Warrants that the securities evidenced thereby have not been registered under the Act or applicable state securities laws, setting forth or referring to the applicable restrictions on transferability and sale of such securities under the Act and applicable state laws.

(f) The Company shall apply the net proceeds from the sale of the Units for the purposes substantially as described under the "Use of Proceeds" section of the Memorandum. Except as set forth in the Memorandum, the Company shall not use any of the net proceeds of the Offering to repay indebtedness to officers (other than accrued salaries incurred in the ordinary course of business), directors or stockholders of the Company without the prior written consent of the Placement Agent.

(g) During the Offering Period, Matinas or Newco, as applicable, shall afford each prospective purchaser of Units the opportunity to ask questions of and receive answers from an officer of Matinas or Newco concerning the terms and conditions of the Offering and the opportunity to obtain such other additional information necessary to verify the accuracy of the Memorandum to the extent Matinas or Newco possesses such information or can acquire it without unreasonable expense.

(h) Except with the prior written consent of the Placement Agent, Matinas and Newco shall not, at any time prior to the earlier of the Final Closing or the Termination Date, except as contemplated by the Memorandum (i) engage in or commit to engage in any transaction outside the ordinary course of business as described in the Memorandum, (ii) issue, agree to issue or set aside for issuance any securities (debt or equity) or any rights to acquire any such securities, (iii) incur, outside the ordinary course of business, any material indebtedness, (iv) dispose of any material assets, (v) make any material acquisition or (vi) change its business or operations.

(i) The Company shall pay all reasonable expenses incurred in connection with the preparation and printing of all necessary offering documents and instruments related to the Offering and the issuance of the Shares, the Warrants and the Agent Warrants and will also pay the Company's own expenses for accounting fees, legal fees and other costs involved with the Offering. The Company will provide at its own expense such quantities of the Memorandum and other documents and instruments relating to the Offering as the Placement Agent may reasonably request. All Blue Sky filings shall be prepared by the Company's counsel at the Company's expense. Further, as promptly as practicable after the Closing, the Company shall prepare, at its own expense, velobound "closing binders" relating to the Offering and will distribute one such binder to each of the Placement Agent and its counsel.

(j) Until the earlier of the Termination Date or the Final Closing, neither Matinas nor Newco nor any person or entity acting on such persons' behalf will negotiate with any other placement agent or underwriter with respect to a private or public offering of such entity's debt or equity securities. Neither Matinas nor Newco nor anyone acting on such persons' behalf will, until the earlier of the Termination Date or the Final Closing, without the prior written consent of the Placement Agent, offer for sale to, or solicit offers to subscribe for Shares from, or otherwise approach or negotiate in respect thereof with, any other person.

6. Conditions of Placement Agent's Obligations. The obligations of the Placement Agent hereunder to effect a Closing are subject to the fulfillment, at or before each Closing, of the following additional conditions:

(a) Each of the representations and warranties made by Matinas and Newco qualified as to materiality shall be true and correct at all times prior to and on each Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct as of such earlier date, and the representations and warranties made by Matinas and Newco not qualified as to materiality shall be true and correct in all material respects at all times prior to and on each Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date.

(b) Matinas and Newco shall have performed and complied in all material respects with all agreements, covenants and conditions required to be performed and complied with by it at or before the Closing.

(c) The Memorandum did not, and as of the date of any amendment or supplement thereto will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(d) No order suspending the use of the Memorandum or enjoining the Offering or sale of the Units shall have been issued, and no proceedings for that purpose or a similar purpose shall have been initiated or pending, or, to the best of Matinas' and Newco's knowledge, be contemplated or threatened.

(e) The Placement Agent shall have received a certificate of the Chief Executive Officer of each of Matinas and Newco, dated as of the Closing Date, certifying, as to the fulfillment of the conditions set forth in subparagraphs (a), (b), (c) and (d) above.

(f) Matinas and Newco shall have delivered to the Placement Agent: (i) a certified charter document and good standing certificate, each dated as of a date within 10 days prior to the Closing Date from the secretary of state of its jurisdiction of incorporation; and (ii) resolutions of Matinas's and Newco's Board of Directors approving this Agreement and the transactions and agreements contemplated by this Agreement, the Merger Agreement and the Memorandum, certified by the Chief Executive Officer of Matinas and Newco, and (iii) resolutions of Matinas's and Matinas Acquisition Corp.'s Board of Directors and shareholders approving the Merger Agreement and the transactions and agreements contemplated by the Merger Agreement.

(g) At each Closing, the Company shall pay and/or issue to the Placement Agent the Agent Compensation and Agent Expense Allowance earned in such Closing.

(h) Matinas shall deliver to the Placement Agent a signed opinion of Lowenstein Sandler LLP, counsel to Matinas, dated as of the Closing Date, substantially in the form annexed hereto as Exhibit A-1. Newco shall deliver to the Placement Agent a signed opinion of Fox Rothschild LLP, counsel to Newco, dated as of the Closing Date, substantially in the form annexed hereto as Exhibit A-2.

(i) All proceedings taken at or prior to the Closing in connection with the authorization, issuance and sale of the Shares, the Warrants and the Agent Warrants will be reasonably satisfactory in form and substance to the Placement Agent and its counsel, and such counsel shall have been furnished with all such documents, certificates and opinions as it may reasonably request upon reasonable prior notice in connection with the transactions contemplated hereby.

(j) The Merger per the terms of the Merger Agreement shall have been consummated.

(k) Lock-up agreements with all of Matinas' existing officers and directors and with all of Matinas' and Newco's stockholders who own in the aggregate 5% of the fully- diluted ownership of Matinas and/or Newco prior to the First Closing, in form and substance reasonably acceptable to the Placement Agent and consistent with the terms set forth in the Memorandum, shall have been executed and delivered to the Placement Agent.

(l) At the First Closing the Company shall duly execute and deliver to the Placement Agent the Consulting Agreement.

7. Conditions of Newco's and Matinas's Obligations. The obligations of Newco and Matinas hereunder to effect a Closing are subject to the fulfillment, at or before each Closing, of the following additional condition that each of the representations and warranties made by Placement Agent herein are true and correct as of each Closing Date.

8. Indemnification.

(a) Newco and Matinas severally if the Merger does not occur, and jointly and severally following the consummation of the Merger, will: (i) indemnify and hold harmless the Placement Agent, its agents and their respective officers, directors, employees, selected dealers and each person, if any, who controls the Placement Agent within the meaning of the Section 15 of the Act or Section 20(a) of the Exchange Act and such selected dealers (each an **"Indemnitee"** or a **"Placement Agent Party"**) against, and pay or reimburse each Indemnitee for, any and all losses, claims, damages, liabilities or expenses whatsoever (or actions or proceedings or investigations in respect thereof), joint or several (which will, for all purposes of this Agreement, include, but not be limited to, all reasonable costs of defense and investigation and all reasonable attorneys' fees, including appeals), to which any Indemnitee may become subject (x) under the Act or otherwise, in connection with the offer and sale of the Units and (y) as a result of the breach of any representation, warranty or covenant made by either Matinas or Newco herein, regardless of whether such losses, claims, damages, liabilities or expenses shall result from any claim by any Indemnitee or by any third party; and (ii) reimburse each Indemnitee for any legal or other expenses reasonably incurred in connection with investigating or defending against any such loss, claim, action, proceeding or investigation; *provided, however*, that Newco and Matinas will not be liable in any such case to the extent that any such claim, damage or liability is finally judicially determined to have resulted exclusively from (A) an untrue statement or alleged untrue statement of a material fact made in the Memorandum, or an omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, made solely in reliance upon and in conformity with written information furnished to Newco and/or Matinas by the Placement Agent specifically for use in the Memorandum or (B) any violations by the Placement Agent of the Act or state securities laws which does not result from a violation thereof by Matinas, Newco, or any of their respective affiliates. In addition to the foregoing agreement to indemnify and reimburse, Newco and Matinas jointly and severally will indemnify and hold harmless each Indemnitee against any and all losses, claims, damages, liabilities or expenses whatsoever (or actions or proceedings or investigations in respect thereof), joint or several (which shall, for all purposes of this Agreement, include, but not be limited to, all reasonable costs of defense and investigation and all reasonable attorneys' fees, including appeals) to which any Indemnitee may become subject insofar as such costs, expenses, losses, claims, damages or liabilities arise out of or are based upon the claim of any person or entity that he or it is entitled to broker's or finder's fees from any Indemnitee in connection with the Offering, other than fees due to the Placement Agent. The foregoing indemnity agreements will be in addition to any liability Newco and Matinas may otherwise have.

(b) The Placement Agent will indemnify and hold harmless Newco and Matinas, their respective officers, directors, and each person, if any, who controls such entity Section 15 of the Act or Section 20(a) of the Exchange Act against, and pay or reimburse any such person for, any and all losses, claims, damages, liabilities or expenses whatsoever (or actions, proceedings or investigations in respect thereof) to which Newco or Matinas or any such person may become subject under the Act or otherwise, whether such losses, claims, damages, liabilities or expenses shall result from any claim of Newco, Matinas or any such person who controls Newco or Matinas within the meaning of the Act or by any third party, but only to the extent that such losses, claims, damages or liabilities are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Memorandum made in reliance upon and in conformity with information contained in the Memorandum relating to the Placement Agent, or an omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in either case, if made or omitted in reliance upon and in conformity with written information furnished to Newco or Matinas by the Placement Agent, specifically for use in the preparation thereof or (ii) any violations by the Placement Agent of the Act or state securities laws which does not result from a violation thereof by Matinas, Newco, or any of their respective affiliates. The Placement Agent will reimburse the Company or any such person for any legal or other expenses reasonably incurred in connection with investigating or defending against any such loss, claim, damage, liability or action, proceeding or investigation to which such indemnity obligation applies. The foregoing indemnity agreements are in addition to any liability which the Placement Agent may otherwise have.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, claim, proceeding or investigation (the “**Action**”), such indemnified party, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, will notify the indemnifying party of the commencement thereof, but the omission to so notify the indemnifying party will not relieve it from any liability that it may have to any indemnified party under this Section 8 unless the indemnifying party has been substantially prejudiced by such omission. The indemnifying party will be entitled to participate in and, to the extent that it may wish, jointly with any other indemnifying party, to assume the defense thereof subject to the provisions herein stated, with counsel reasonably satisfactory to such indemnified party. The indemnified party will have the right to employ separate counsel in any such Action and to participate in the defense thereof, but the fees and expenses of such counsel will not be at the expense of the indemnifying party if the indemnifying party has assumed the defense of the Action with counsel reasonably satisfactory to the indemnified party, provided, however, that if the indemnified party shall be requested by the indemnifying party to participate in the defense thereof or shall have concluded in good faith and specifically notified the indemnifying party either that there may be specific defenses available to it that are different from or additional to those available to the indemnifying party or that such Action involves or could have a material adverse effect upon it with respect to matters beyond the scope of the indemnity agreements contained in this Agreement, then the counsel representing it, to the extent made necessary by such defenses, shall have the right to direct such defenses of such Action on its behalf and in such case the reasonable fees and expenses of such counsel in connection with any such participation or defenses shall be paid by the indemnifying party. No settlement of any Action against an indemnified party will be made without the consent of the indemnifying party and the indemnified party, which consent shall not be unreasonably withheld, delayed or conditioned in light of all factors of importance to such party, and no indemnifying party shall be liable to indemnify any person for any settlement of any such claim effected without such indemnifying party’s consent.

9. Contribution. To provide for just and equitable contribution, if: (i) an indemnified party makes a claim for indemnification pursuant to Section 8 hereof and it is finally determined, by a judgment, order or decree not subject to further appeal that such claims for indemnification may not be enforced, even though this Agreement expressly provides for indemnification in such case; or (ii) any indemnified or indemnifying party seeks contribution under the Act, the Exchange Act, or otherwise, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Placement Agent on the other in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Placement Agent on the other shall be deemed to be in the same proportion as the total net proceeds from the Offering (before deducting expenses) received by the Company bear to the total Agent Cash Fees received by the Placement Agent. The relative fault, in the case of an untrue statement, alleged untrue statement, omission or alleged omission will be determined by, among other things, whether such statement, alleged statement, omission or alleged omission relates to information supplied by the Company or by the Placement Agent, and the parties’ relative intent, knowledge, access to information and opportunity to correct or prevent such statement, alleged statement, omission or alleged omission. The Company and the Placement Agent agree that it would be unjust and inequitable if the respective obligations of the Company and the Placement Agent for contribution were determined by *pro rata* allocation of the aggregate losses, liabilities, claims, damages and expenses or by any other method or allocation that does not reflect the equitable considerations referred to in this Section 9. No person guilty of a fraudulent misrepresentation (within the meaning of Section 10(f) of the Act) will be entitled to contribution from any person who is not guilty of such fraudulent misrepresentation. For purposes of this Section 9, each person, if any, who controls the Placement Agent within the meaning of the Act will have the same rights to contribution as the Placement Agent, and each person, if any, who controls the Company within the meaning of the Act will have the same rights to contribution as the Company, subject in each case to the provisions of this Section 9. Anything in this Section 9 to the contrary notwithstanding, no party will be liable for contribution with respect to the settlement of any claim or action effected without its written consent. This Section 9 is intended to supersede, to the extent permitted by law, any right to contribution under the Act, the Exchange Act or otherwise available.

10. Termination.

(a) The Offering may be terminated by the Placement Agent at any time prior to the expiration of the Offering Period in the event that: (i) any of the representations, warranties or covenants of Matinas contained herein or in the Memorandum shall prove to have been false or misleading in any material respect when actually made; (ii) Matinas shall have failed to perform any of its material obligations hereunder or under any other Matinas Transaction Document, Newco Transaction Document or any other transaction document; (iii) there shall occur any event, within the control of Matinas that could materially adversely affect the transactions contemplated hereunder or the ability of Matinas to perform hereunder; or (iv) the Placement Agent determines that it is reasonably likely that any of the conditions to Closing set forth herein will not, or cannot, be satisfied. In the event of any such termination by the Placement Agent pursuant to clauses (i), (ii) or (iii) of this Section 10(a), the Placement Agent shall be entitled to receive from Matinas, within five (5) business days of the Termination Date, in addition to other rights and remedies it may have hereunder, at law or otherwise, an amount equal to the sum of \$50,000, which amount shall be offset by the \$30,000 Matinas advanced to legal counsel for the Placement Agent (collectively, the **“Termination Amount”**). In the event of a termination by the Placement Agent under Section 10(a)(iv), the Placement Agent shall not be entitled to any further compensation pursuant to these termination provisions.

(b) This Offering may be terminated by Matinas at any time prior to the expiration of the Offering Period (i) in the event that the Placement Agent shall have failed to perform any of its material obligations hereunder or (ii) on account of the Placement Agent’s fraud, illegal or willful misconduct or gross negligence. In the event of any such termination pursuant to this Section 10(b), the Placement Agent shall not be entitled to any further compensation pursuant to these termination provisions and Sections 3(d), (e), (f) and (g) shall also terminate.

(c) In the event Matinas unilaterally decides for any reason (other than pursuant to Section 10(b) above or Section 10(d) below) to terminate the Offering at any time prior to the First Closing (the “**Unilateral Termination**”), the Placement Agent shall be entitled to receive from Matinas the Termination Amount.

(d) This Offering may be terminated upon mutual agreement of Newco, Matinas and the Placement Agent at any time prior to the expiration of the Offering Period. In addition, upon the expiration of the Offering Period, the Offering shall terminate without any further action of the parties hereto. If the Offering is terminated pursuant to this Section 10(d), then in cases in which no Closing had been theretofore consummated, each party shall pay its own respective expenses.

(e) Before any termination by the Placement Agent under Section 10(a) or by Matinas under Section 10(b) shall become effective, the terminating party shall give written notice to the other party of its intention to terminate the Offering (the “**Termination Notice**”). The Termination Notice shall specify the grounds for the proposed termination. If the specified grounds for termination, or their resulting adverse effect on the transactions contemplated hereby, are curable, then the other party shall have ten (10) days from the Termination Notice within which to remove such grounds or to eliminate all of their material adverse effects on the transactions contemplated hereby; otherwise, the Offering shall terminate.

(f) Upon any termination pursuant to this Section 10, the Placement Agent and the Company will instruct Escrow Agent to cause all monies received with respect to the subscriptions for Units not accepted by the Company to be promptly returned to such subscribers without interest, penalty or deduction.

11. Survival.

(a) The obligations of the parties to pay any costs and expenses hereunder and to provide indemnification and contribution as provided herein shall survive any termination hereunder. In addition, the provisions of Sections 3(d), and 8 through 16 shall survive the sale of the Units or any termination of the Offering hereunder.

(b) The respective indemnities, covenants, representations, warranties and other statements of Newco, Matinas and the Placement Agent set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of, and regardless of any access to information by, Newco, Matinas or the Placement Agent, or any of their officers or directors or any controlling person thereof, and will survive the sale of the Units or any termination of the Offering hereunder for a period of four years from the earlier to occur of the Final Closing or the termination of the Offering.

12. Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed to have been duly given or made as of the date delivered personally, or the date mailed if mailed by registered or certified mail (postage prepaid, return receipt requested) to the parties at the following addresses (or at such other address for a party as shall be specified by like changes of address which shall be effective upon receipt) or sent by facsimile transmission, with confirmation received, if sent to the Placement Agent, will be mailed, delivered or telefaxed and confirmed to Aegis Capital Corp., 810 Seventh Ave, 11th Floor, New York, New York 10019, Attention: Adam K. Stern, telefax number (646) 390-9122, with a copy (which shall not constitute notice) to: Meister Selig & Fein LLP, Two Grand Central Tower, 140 East 45th Street, 19th Floor, New York, NY 10017, Attn: Kenneth S. Goodwin, Esq., telefax number (212) 655-3535, if sent to Matinas or the Company, will be mailed, delivered or telefaxed and confirmed to Matinas BioPharma, Inc., 915 Klosterman Road East, Tarpon Springs, FL 34689, Attn: Roelof Rongen, President & CEO, with a copy (which shall not constitute notice) to: Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, NY 10020, Attn: Steven M. Skolnick, Esq., telefax number (973) 597 2477, and if sent to Newco, will be mailed, delivered or telefaxed and confirmed to Matinas BioPharma Holdings, Inc., 600 W. Germantown Pike, Suite 400, Plymouth Meeting, PA 19462, Attn: Stephen P. Harrington, President, provided, however, that from and after the First Closing, notices to Newco shall be sent in the same manner, and to the same address, as notices to Matinas, with a copy (which shall not constitute notice) to: Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, NY 10020, Attn: Steven M. Skolnick, Esq., telefax number (973) 597 2477.

13. Governing Law. Jurisdiction. This Agreement shall be deemed to have been made and delivered in New York City and shall be governed as to validity, interpretation, construction, affect and in all other respects by the internal laws of the State of New York. **THE PARTIES AGREE THAT ANY DISPUTE, CLAIM OR CONTROVERSY DIRECTLY OR INDIRECTLY RELATING TO OR ARISING OUT OF THIS AGREEMENT, THE TERMINATION OR VALIDITY HEREOF, ANY ALLEGED BREACH OF THIS AGREEMENT OR THE ENGAGEMENT CONTEMPLATED HEREBY (ANY OF THE FOREGOING, A "CLAIM") SHALL BE SUBMITTED TO THE JUDICIAL ARBITRATION AND MEDIATION SERVICES, INC ("JAMS"), OR ITS SUCCESSOR, IN NEW YORK, FOR FINAL AND BINDING ARBITRATION IN FRONT OF A PANEL OF THREE ARBITRATORS WITH JAMS IN NEW YORK, NEW YORK UNDER THE JAMS COMPREHENSIVE ARBITRATION RULES AND PROCEDURES (WITH EACH OF THE SELLING AGENT AND THE COMPANY CHOOSING ONE ARBITRATOR, AND THE CHOSEN ARBITRATORS CHOOSING THE THIRD ARBITRATOR). THE ARBITRATORS SHALL, IN THEIR AWARD, ALLOCATE ALL OF THE COSTS OF THE ARBITRATION, INCLUDING THE FEES OF THE ARBITRATORS AND THE REASONABLE ATTORNEYS' FEES OF THE PREVAILING PARTY, AGAINST THE PARTY WHO DID NOT PREVAIL. THE AWARD IN THE ARBITRATION SHALL BE FINAL AND BINDING. THE ARBITRATION SHALL BE GOVERNED BY THE FEDERAL ARBITRATION ACT, 9 U.S.C. SEC. 1-16, AND THE JUDGMENT UPON THE AWARD RENDERED BY THE ARBITRATORS MAY BE ENTERED BY ANY COURT HAVING JURISDICTION THEREOF. THE COMPANY AND THE PLACEMENT AGENT AGREE AND CONSENT TO PERSONAL JURISDICTION, SERVICE OF PROCESS AND VENUE IN ANY FEDERAL OR STATE COURT WITHIN THE STATE AND COUNTY OF NEW YORK IN CONNECTION WITH ANY ACTION BROUGHT TO ENFORCE AN AWARD IN ARBITRATION.**

14. Miscellaneous. No provision of this Agreement may be changed or terminated except by a writing signed by the party or parties to be charged therewith. Unless expressly so provided, no party to this Agreement will be liable for the performance of any other party's obligations hereunder. Either party hereto may waive compliance by the other with any of the terms, provisions and conditions set forth herein; provided, however, that any such waiver shall be in writing specifically setting forth those provisions waived thereby. No such waiver shall be deemed to constitute or imply waiver of any other term, provision or condition of this Agreement. Neither party may assign its rights or obligations under this Agreement to any other person or entity without the prior written consent of the other party.

15. Entire Agreement: Severability. This Agreement together with any other agreement referred to herein supersedes all prior understandings and written or oral agreements between the parties with respect to the Offering and the subject matter hereof. If any portion of this Agreement shall be held invalid or unenforceable, then so far as is reasonable and possible (i) the remainder of this Agreement shall be considered valid and enforceable and (ii) effect shall be given to the intent manifested by the portion held invalid or unenforceable.

16. Counterparts. This Agreement may be executed in multiple counterparts, each of which may be executed by less than all of the parties and shall be deemed to be an original instrument which shall be enforceable against the parties actually executing such counterparts and all of which together shall constitute one and the same instrument. The exchange of copies of this Agreement and of signature pages by facsimile transmission shall constitute effective execution and delivery of this Agreement as to the parties and may be used in lieu of the original Agreement for all purposes. Signatures of the parties transmitted by facsimile shall be deemed to be their original signatures for all purposes.

[Signatures on following page.]

If the foregoing is in accordance with your understanding of the agreement among Newco, Matinas and the Placement Agent, kindly sign and return this Agreement, whereupon it will become a binding agreement among Newco, Matinas and the Placement Agent in accordance with its terms.

MATINAS BIOPHARMA, INC.

By: /s/ Roelof Rongen

Name: Roelof Rongen

Title: President and Chief Executive Officer

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Stephen P. Harrington

Name: Stephen P. Harrington

Title: President

Accepted and agreed to this
11th day of July, 2013:

AEGIS CAPITAL CORP.

By: Sam Guidetti

Name: Sam Guidetti

Title: CCO

Exhibit A-1

Form of Opinion-Matinas Counsel

2.1 Matinas BioPharma, Inc. (the term "Company" when used herein, refers to Matinas BioPharma, Inc.) has been duly organized as a corporation and is validly existing and in good standing under the laws of the jurisdiction of its incorporation, has full corporate power and authority to own, lease and operate its properties and conduct its business as described in the Memorandum and is duly qualified as a foreign corporation for the transaction of business and is in good standing in each jurisdiction where the conduct of its business makes such qualification necessary, except where the failure to so qualify would not have a material adverse effect upon the business (as currently conducted), financial condition, prospects or results of operation of the Company (a "Material Adverse Effect").

2.2 The authorized capital stock of the Company on the date hereof consists of (i) 19,200,000 shares of Common Stock, \$0.0001 par value per share, and (ii) 6,484,481 shares of Preferred Stock, \$0.0001 par value per share, all of which have been designated as Series A Preferred Stock.

2.3 The execution and delivery by the Company of the Transaction Documents to which it is a party and the consummation by the Company of the transactions contemplated thereby have been duly authorized by all necessary corporate action on the part of the Company and duly executed and delivered by the Company. Each of the Transaction Documents to which it is a party constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

2.4 The execution and delivery by the Company of the Transaction Documents¹ to which it is a party and the consummation by the Company of the transactions contemplated thereby will not (i) violate the provisions of the Delaware General Corporation Law or any United States federal or state law, rule or regulation known to us to be currently applicable to the Company or (ii) violate the provisions of the Company's Certificate of Incorporation or By-Laws; (iii) violate any judgment, decree, order or award known to us of any court, governmental body or arbitrator having jurisdiction over the Company; or (iv) result in the breach or termination of any material term or provision of an agreement known to us to which the Company is a party, except in the case of clauses (i), (iii) and (iv) where the breach or violation would not have a Material Adverse Effect on the Company or its ability to perform its obligations under the Transaction Documents.

2.5 To our knowledge, there is no action, proceeding or litigation pending or threatened against the Company before any court, governmental or administrative agency or body that would materially adversely affect the Company's ability to consummate the transactions contemplated by the Transaction Documents.

¹ Transaction Documents should include the Placement Agency Agreement, Escrow Deposit Agreement, the Merger Agreement, Warrant, Placement Agent Warrant; Registration Rights Agreement and Subscription Agreements.

2.6 Assuming that the Shares were sold only to "accredited investors" (as defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended ("1933 Act")) and the Placement Agent complied in all material respects with Regulation D and the terms and conditions of the Offering set forth in the Placement Agency Agreement and the Memorandum, such sales were made in conformity in all material respects with the requirements of Section 4(2) of the 1933 Act and Regulation D, and with the requirements of all other United States federal regulations applicable to the Company currently in effect relating to private offerings of securities of the type made in the Offering.

2.7 Either (i) no consent, approval or authorization of, or other action by, and no notice to or filing with, any United States federal or state governmental authority on the part of the Company is required in connection with the valid execution and delivery of the Transaction Documents to which it is a party and the consummation by the Company of the transactions contemplated thereunder, except for (A) the filing of a Form D that may be filed with the United States Securities and Exchange Commission; (B) any filings under the securities laws of the various jurisdictions in which the Shares, Warrants and Placement Agent Warrants are being offered and sold in the Offering; and (C) any filings relating to public disclosure of the transactions contemplated by the Transaction Documents, or (ii) any required consent, approval, authorization, action or filing has been obtained, performed or made by the Company.

Exhibit A-2
Form of Opinion-Newco Counsel

2.1 Matinas BioPharma Holdings, Inc. (the term "Company" when used herein, refers to Matinas BioPharma Holdings, Inc.) has been duly organized as a corporation and is validly existing and in good standing under the laws of the jurisdiction of its incorporation, has full corporate power and authority to own, lease and operate its properties and conduct its business as described in the memorandum and is duly qualified as a foreign corporation for the transaction of business and is in good standing in each jurisdiction where the conduct of its business makes such qualification necessary, except where the failure to so qualify would not have a material adverse effect upon the business (as currently conducted), financial condition, prospects or results of operation of the Company (a "Material Adverse Effect").

2.2 The authorized capital stock of the Company on the date hereof consists of 150,000,000 shares of common stock, \$0.0001 par value per share, and 10,000,000 shares of preferred stock, \$0.0001 par value per share. All outstanding shares of capital stock of the Company have been duly authorized and are validly issued, fully paid and non-assessable. All shares underlying the Company's 5,500,000 outstanding common stock purchase warrants (including the 1,000,000 Merger Warrants and the 500,000 Private placement Warrants), when issued, sold and delivered against payment therefore in accordance with the provisions of such warrants, will be duly and validly issued, fully paid and non-assessable. A sufficient number of authorized but unissued shares of Common Stock have been reserved for issuance upon exercise of such warrants.

2.3 The Shares, the Warrants, the Placement Agent Warrants, and the shares of Common Stock issuable upon exercise of the Warrants and the Placement Agent Warrants have been duly authorized for issuance by all necessary corporate action on the part of the Company. The Shares and the shares of Common Stock issuable upon exercise of the Warrants and the Placement Agent Warrants when issued, sold and delivered against payment therefore in accordance with the provisions of the Memorandum, the Subscription Agreements, the Warrants or the Placement Agent Warrants, as applicable, will be duly and validly issued, fully paid and non-assessable. The issuance of the Shares, the Warrants and the Placement Agent Warrants and the shares of Common Stock issuable upon exercise of the Warrants and the Placement Agent Warrants are not subject to any statutory or, to our knowledge, contractual or other preemptive rights under any agreement listed on Schedule A hereto. A sufficient number of authorized but unissued shares of Common Stock have been reserved for issuance upon exercise of the Warrants and the Placement Agent Warrants.

2.4 The execution and delivery by the Company of the Transaction Documents to which they are a party and the consummation by the Company of the transactions contemplated thereby have been duly authorized by all necessary corporate action on the part of the Company, and duly executed and delivered by the Company, as applicable. Each of the Transaction Documents to which it is a party constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

2.5 The execution and delivery by the Company of the Transaction Documents² to which they are a party and the consummation by the Company of the transactions contemplated thereby will not (i) violate the provisions of the Delaware General Corporation Law or any United States federal or state law, rule or regulation known to us to be currently applicable to the Company, (ii) violate the provisions of the Company's Certificate of Incorporation or By-Laws; (iii) violate any judgment, decree, order or award known to us of any court, governmental body or arbitrator having jurisdiction over the Company; or (iv) result in the breach or termination of any material term or provision of an agreement known to us to which the Company is a party, except in the case of clauses (i), (iii) or (iv) where the breach or violation would not have a Material Adverse Effect on the Company or its ability to perform its obligations under the Transaction Documents.

2.6 To our knowledge, there is no action, proceeding or litigation pending or threatened against the Company before any court, governmental or administrative agency or body that would materially adversely affect the Company's ability to consummate the transactions contemplated by the Transaction Documents.

2.7 Either (i) no consent, approval or authorization of, or other action by, and no notice to or filing with, any United States federal or state governmental authority on the part of the Company is required in connection with the valid execution and delivery of the Transaction Documents to which it is a party and the consummation by the Company of the transactions contemplated thereunder, except for (A) the filing of a Form D that may be filed with the United States Securities and Exchange Commission; (B) any filings under the securities laws of the various jurisdictions in which the Shares, Warrants and Placement Agent Warrants are being offered and sold in the Offering; and (C) any filings relating to public disclosure of the transactions contemplated by the Transaction Documents, or (ii) any required consent, approval, authorization, action or filing has been obtained, performed or made by the Company.

² Transaction Documents should include the Placement Agency Agreement, Escrow Deposit Agreement, the Merger Agreement, Warrant, Placement Agent Warrant; Registration Rights Agreement and Subscription Agreements.



AEGIS CAPITAL CORP.

810 Seventh Avenue - 18th Floor
New York, New York 10019
Tel (212)813-1010 / Fax (212) 813-1048
Member FINRA and SIPC

Matinas Biopharma Holdings, Inc.
915 Klosterman Road East
Tarpon Springs, FL 34689
Attention: Roelof Rongen, President and Chief Executive Officer

Gentlemen:

This is to confirm our understanding pursuant to which Matinas Biopharma Holdings, Inc. (the "Company") has agreed (the "Agreement") to engage Aegis Capital Corp., a New York corporation ("Aegis"), to act as its financial advisor during the period commencing as of July 30, 2013 and ending 12 months from such date, unless earlier terminated pursuant to Section 8 (the "Engagement Period" or the "Term").

1. Financial Advisory Services; Compensation.

During the Term, Aegis shall provide the Company with such regular and customary financial advisory services as are reasonably requested by the Company, provided that Aegis shall not be required to undertake duties not reasonably within the scope of the financial advisory services in which it is generally engaged. It is understood and acknowledged by the parties that the value of Aegis's advice is not measurable in a quantitative manner and Aegis shall be obligated to render advice, upon the request of the Company, in good faith, but shall not be obligated to expend any specific amount of time in so doing. Aegis's duties will include (without additional compensation other than as stated herein), but will not necessarily be limited to, advice regarding:

- (i) the formation of corporate goals and their implementation;
- (ii) the financial structure of the Company or its divisions or any programs and projects undertaken by any of the foregoing, including specifically a planned restructuring of the Company's capitalization;
- (iii) obtaining financing and accessing the capital markets, including but not limited to the advisability of an initial public offering of the Company's equity securities or reverse merger with and into an SEC-reporting publicly-traded company;
- (iv) mergers, acquisitions, joint ventures, and licensing agreements; and
- (v) Aegis sponsored investor conferences and non-deal road shows.

In consideration of such services, the Company agrees to pay Aegis a monthly financial advisory fee of \$20,000 with the first such payment due and payable on the date hereof and with subsequent payments due and payable on the first business day of each month during the Term (or an aggregate of \$240,000).

2. Indemnification. The Company agrees to indemnify Aegis in accordance with the provisions of Annex A hereto, which is incorporated by reference and made a part hereof.

3. Expenses. The Company shall reimburse Aegis for all of its actual out-of-pocket expenses, including but not limited to reasonable and documented travel, legal fees and other expenses, incurred in connection with its services hereunder; provided, however, that expenses in excess of \$1,000 per month shall require prior written approval by the Company.

4. Aegis's and the Company's Relationships with Others. The Company acknowledges that Aegis and its affiliates are in the business of providing investment banking, financial advisory and consulting services to others and agrees that the provision of such services shall not constitute a breach hereof of any duty owed to the Company by virtue of this Agreement. Nothing contained herein, other than Aegis's obligations relating to the Company's Confidential Material as provided in Section 5 hereof, shall be construed to limit or restrict Aegis or its affiliates in conducting such businesses with respect to others or in rendering such services to others.

5. Confidential Information.

- (a) In connection with the rendering of services hereunder, Aegis has been or will be furnished with certain confidential information of the Company including, but not limited to, financial statements and information, cost and expense data, scientific data, intellectual property, trade secrets, business strategies, marketing and customer data, and such other information not generally available from public or published information sources. Such information shall be deemed "Confidential Material," shall be used solely in connection with the provision of services contemplated hereby, and shall not be disclosed by Aegis without the prior written consent of the Company. In the event Aegis is required by applicable law or legal process to disclose any of the Confidential Material, Aegis will deliver to the Company prompt notice of such requirement (by fax or overnight courier promptly following Aegis's knowledge or determination of such requirement) prior to such disclosure so the Company may seek an appropriate protective order and/or waive compliance of this provision. If, in the absence of a protective order (because the Company elected to not seek such an order or it was denied by a court of competent jurisdiction) or receipt of written waiver, Aegis is nonetheless, in the written opinion of its counsel, compelled to disclose any Confidential Material, Aegis may do so without liability hereunder.
- (b) The term "Confidential Information" will not include any information that (i) is or becomes generally available to the public other than as a result of the breach of the terms of this Agreement by Aegis or its affiliates, (ii) is or has been independently acquired or developed by Aegis without violating any of the terms of this Agreement, (iii) was within Aegis's possession prior to it being furnished to Aegis by or on behalf of Company or (iv) is received from a source other than the Company; provided that, in the case of subparts (iii) and (iv) above, the source of such information was not known by Aegis to be bound by a confidentiality obligation to the Company or any other party with respect to such information.

6. Limitation Upon the Use of Advice and Services

- (a) No person or entity, other than the Company (including its directors, officers and employees), shall be entitled to make use of, or rely upon any advice of Aegis to be given hereunder, and the Company shall not transmit such advice to, or encourage or facilitate the use or reliance upon such advice by others without the prior written consent of Aegis.
- (b) Use of Aegis's names in annual reports or any other report of the Company or press releases by the Company requires the prior written approval of Aegis unless the Company is required by law to include Aegis's name in such annual reports, other report or press release of the Company, in which event the Company shall furnish to Aegis copies of such annual reports or other reports or press releases using Aegis's names in advance of publication by the Company.

7. Miscellaneous.

- (a) Any notice or communication between the parties hereto shall be sufficiently given if sent by certified or registered mail, postage prepaid, or faxed and confirmed if to the Company, addressed to it at: 915 Klosterman Road East, Tarpon Springs, FL 34689, Attention: Roelof Rongen, President and Chief Executive Officer, or if to Aegis, addressed to it at: Aegis Capital Corp., 810 Seventh Avenue, 18th Fl., New York, NY 10019, Attention: Adam Stern, Head of Private Equity Banking. Such notice or other communication shall be deemed to be given on the date of receipt.
- (b) This Agreement embodies the entire agreement and understanding between the Company and Aegis and supersedes any and all negotiations, prior discussions and preliminary and prior agreements and understandings related to the subject matter hereof, and may be modified only by a written instrument duly executed by each party. This Agreement shall inure to the benefit of and be binding upon the successors, assigns and personal representatives of each of the parties hereto.
- (c) This Agreement has been duly authorized, executed and delivered by and on behalf of the Company and Aegis.
- (d) This Agreement shall be deemed to have been made and delivered in New York City and shall be governed as to validity, interpretation, construction, affect and in all other respects by the internal laws of the State of New York. The parties agree that any dispute, claim or controversy directly or indirectly relating to or arising out of this Agreement, the termination or validity hereof, any alleged breach of this Agreement or the engagement contemplated hereby (any of the foregoing, a "Claim") shall be submitted to the Judicial Arbitration and Mediation Services, Inc (JAMS), or its successor, in New York, for final and binding arbitration in front of a panel of three arbitrators with JAMS in New York, New York under the JAMS Comprehensive Arbitration Rules and Procedures (with each of Aegis and the Company choosing one arbitrator, and the chosen arbitrators choosing the third arbitrator). The arbitrators shall, in their award, allocate all of the costs of the arbitration, including the fees of the arbitrators and the reasonable attorneys' fees of the prevailing party, against the party who did not prevail. The award in the arbitration shall be final and binding. The arbitration shall be governed by the Federal Arbitration Act, 9 U.S.C. Sec.1-16, and the judgment upon the award rendered by the arbitrators may be entered by any court having jurisdiction thereof. The Company and Aegis agree and consent to personal jurisdiction, service of process and venue in any federal or state court within the State and County of New York in connection with any action brought to enforce an award in arbitration.

- (e) There is no relationship of partnership, agency, employment, franchise or joint venture between the parties. No party has the authority to bind the other or incur any obligation on the other's behalf.
- (f) This Agreement and the rights hereunder may not be assigned by either party (except by operation of law).
- (g) Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction. If any provision of this Agreement is so broad as to be unenforceable, the provision shall be interpreted to be only as broad as is enforceable.

8. Termination. This Agreement may be terminated at any time prior to the expiration of the Term by Aegis upon five (5) days prior written notice to the Company. In the event of any such termination, this engagement letter shall terminate and shall be of no further force and effect except for (i) continuing indemnity obligations hereunder, and (ii) Aegis shall be receive reimbursement for expenses it has incurred up to the date of such termination in accordance with Section 3.

In the event this Agreement shall be terminated in accordance with the provisions of this Section 8 or upon expiration of this Agreement, the sections headed "Confidential Information," "Indemnification," "Miscellaneous," "Expenses," "Limitation Upon the Use of Advice and Services" and "Limitation of Liability" will survive.

9. Limitation of Liability. The Company agrees that Aegis will not be liable to the Company for any claims, losses, damages, liabilities, costs or expenses related to the engagement hereunder (collectively, "Claims"), except to the extent finally judicially determined to have resulted solely from the gross negligence or willful misconduct of Aegis, and then only to the extent of any compensation paid to Aegis by the Company hereunder. In no event will Aegis be liable for consequential, special, indirect, incidental, punitive or exemplary losses, damages or expenses.

10. Other Services. In the event that other services are requested of Aegis by the Company, the parties hereto shall negotiate in good faith to determine a mutually acceptable level of compensation in such an eventuality.

11. Counterparts. This Agreement may be executed in one or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

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If you are in agreement with the foregoing, please execute and return one copy of this letter to Aegis.

Sincerely,

AEGIS CAPITAL CORP.

By: [Illegible]

Name: [Illegible]

Title: [Illegible]

Agreed to and Accepted

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Roelof Rongen

Name: Roelof Rongen

Title: President and Chief Executive Officer

ANNEX A

INDEMNIFICATION

The Company agrees to indemnify and hold harmless Aegis and its affiliates and their respective officers, directors, employees, agents (including selected dealers) and controlling persons (Aegis and each such person being an "Indemnified Party"), from and against any losses, claims, damages and liabilities, joint or several, to which such Indemnified Party may become subject under any applicable law, or otherwise, which relate to or arise in any manner out of any transaction, financing, or any other matter (collectively, the "Matters") contemplated by the engagement letter of which this Annex A forms a part and the performance by Aegis of the services contemplated thereby, and will promptly reimburse each Indemnified Party for all reasonable expenses (including reasonable fees and expenses of legal counsel) as incurred in connection with the investigation of, preparation for or defense of any pending or threatened claim or any action or proceeding arising therefrom, whether or not such Indemnified Party is a party and whether or not such claim, action or proceeding is initiated or brought by or on behalf of the Company. Notwithstanding the foregoing, the Company shall not be liable under the foregoing to the extent that any loss, claim, damage, liability or expense is found in a final judgment by a court of competent jurisdiction to have resulted solely from Aegis's willful misconduct or gross negligence.

The Company also agrees that no Indemnified Party shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company or its security holders or creditors related to, arising out of, or in connection with, any Matters, the engagement of Aegis pursuant to, or the performance by Aegis of the services contemplated by, the engagement letter, except to the extent any loss, claim, damage, liability if found in a final judgment by a court of competent jurisdiction to have resulted solely from Aegis's willful misconduct or gross negligence.

If the indemnification of an Indemnified Party provided for this Annex A is for any reason held unenforceable, although otherwise applicable in accordance with its terms, the Company agrees to contribute to the losses, claims, damages and liabilities for which such indemnification is held unenforceable (i) in such proportion as is appropriate to reflect the relative benefits to the Company, on the one hand, and Aegis, on the other hand, of any Matter (whether or not the Matter is consummated) or (ii) if (but only if) the allocation provided for in clause (i) is for any reason held unenforceable, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company, on the one hand, and Aegis, on the other hand, as well as any other relevant equitable considerations. The Company agrees that for the purposes of this paragraph the relative benefits to the Company and Aegis of any contemplated Matter (whether or not such Matter is consummated) shall be deemed to be in the same proportion that the total value paid or received or to be paid or received by the Company as a result of or in connection with any Matter, bears to the fees paid or to be paid to Aegis under the engagement letter; provided, however, that, to the extent permitted by applicable law, in no event shall the Indemnified Parties be required to contribute an aggregate amount in excess of the aggregate fees actually paid to Aegis under the engagement letter of which this Annex A is a part.

The Company agrees that it will not, without the prior written consent of Aegis, settle, compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding in respect of which indemnification may be sought hereunder (whether or not Aegis or any other Indemnified Party is an actual or potential party to such claim, action or proceeding), unless such settlement, compromise or consent includes an unconditional release of Aegis and each other Indemnified Party hereunder from all liability arising out of such claim, action or proceeding. If Aegis or any other Indemnified Party is requested or required to appear as a witness in any action brought by or on behalf of or against the Company in which such party is not named as a defendant, the Company will reimburse Aegis for all reasonable expenses incurred in connection with such party's appearing and preparing to appear as such a witness, including, without limitation, the fees and disbursements of its legal counsel.

The provisions of this Annex A shall continue to apply and shall remain in full force and effect regardless of any modification or termination of the engagement or engagement letter of which this Annex A is a part or the completion of Aegis's services thereunder.

SUBSCRIPTION AGREEMENT

Matinas BioPharma Holdings, Inc.
915 Klosterman Road East
Tarpon Springs, FL 346894

Ladies and Gentlemen:

1. **Subscription.** The undersigned (the “Purchaser”), intending to be legally bound, hereby irrevocably agrees to purchase from Matinas BioPharma Holdings, Inc., a Delaware corporation (the “Company”), the number of units (the “Units”) set forth on the signature page hereof at a purchase price of \$25,000 per Unit. Each Unit consists of (i) 25,000 shares of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”) and (ii) 12,500 Series 2 warrants (each, a “Warrant” and collectively, the “Warrants”), each warrant to purchase one share of Common Stock at an exercise price of \$2.00 per share. The Units are being sold in the Offering (as defined below).
2. **The Offering.** This subscription is submitted to you in accordance with and subject to the terms and conditions described in this Subscription Agreement and the Confidential Private Placement Memorandum of the Company dated September 13, 2013, as amended or supplemented from time to time, including all attachments, schedules and exhibits thereto (the “Memorandum”), relating to the offering (the “Offering”) by the Company of up to 40 Units (\$1,000,000) (the “Offering Amount”). In the event the entire Offering Amount is sold, the Placement Agent (as defined below) and the Company shall have the right to place an additional 8 Units (\$200,000) to cover over-allotments. Aegis Capital Corp. has been engaged as placement agent in connection with the Offering (the “Placement Agent”). The terms of the Offering are more completely described in the Memorandum and such terms are incorporated herein in their entirety.
3. **Payment.** The Purchaser will immediately make a wire transfer payment to, “Signature Bank, Escrow Agent for Matinas BioPharma Holdings, Inc.” in the full amount of the purchase price of the Units being subscribed for in the Offering. Wire transfer instructions are set forth on page 12 hereof under the heading “To subscribe for Units in the private offering of Matinas BioPharma Holdings, Inc.” Such funds will be held for the Purchaser’s benefit, and will be returned promptly, without interest or offset if this Subscription Agreement is not accepted by the Company or the Offering is terminated pursuant to its terms by the Company prior to the Closing (as hereinafter defined). Together with a wire transfer of the full purchase price, the Purchaser is delivering a completed and executed Signature Page to this Subscription Agreement.
4. **Deposit of Funds.** All payments made as provided in Section 3 hereof shall be deposited by the Company or the Placement Agent as soon as practicable after receipt thereof with Signature Bank (the “Escrow Agent”), in a non-interest-bearing escrow account (the “Escrow Account”) until the earliest to occur of (a) the closing (the “Closing”) of such number of Units as are sold in this Offering (it being understood there will be one such Closing), (b) the rejection of such subscription, and (c) the termination of the Offering by the Company or the Placement Agent.

5. **Acceptance of Subscription.** The Purchaser understands and agrees that the Company, in its sole discretion, reserves the right to accept or reject this or any other subscription for Units, in whole or in part, notwithstanding prior receipt by the Purchaser of notice of acceptance of this subscription. The Company shall have no obligation hereunder until the Company shall execute and deliver to the Purchaser an executed copy of this Subscription Agreement. If this subscription is rejected in whole or the Offering of Units is terminated, all funds received from the Purchaser will be returned without interest or offset, and this Subscription Agreement shall thereafter be of no further force or effect. If this subscription is rejected in part, the funds for the rejected portion of this subscription will be returned without interest or offset, and this Subscription Agreement will continue in full force and effect to the extent this subscription was accepted.

6. **Representations and Warranties.**

The Purchaser hereby acknowledges, represents, warrants, and agrees as follows:

(a) None of the shares of Common Stock or the shares of Common Stock issuable upon exercise of the Warrants (the "Warrant Shares") offered pursuant to the Memorandum are registered under the Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws. The Purchaser understands that the offering and sale of the Units is intended to be exempt from registration under the Securities Act, by virtue of Section 4(2) thereof and the provisions of Regulation D ("Regulation D") as promulgated by the United States Securities and Exchange Commission (the "SEC") thereunder, based, in part, upon the representations, warranties and agreements of the Purchaser contained in this Subscription Agreement;

(b) Prior to the execution of this Subscription Agreement, the Purchaser and the Purchaser's attorney, accountant, purchaser representative and/or tax adviser, if any (collectively, the "Advisers"), have received the Memorandum and all other documents requested by the Purchaser, have carefully reviewed them and understand the information contained therein;

(c) Neither the SEC nor any state securities commission or other regulatory authority has approved the Units, the Common Stock, the Warrants or the Warrant Shares, or passed upon or endorsed the merits of the offering of Units or confirmed the accuracy or determined the adequacy of the Memorandum. The Memorandum has not been reviewed by any federal, state or other regulatory authority;

(d) All documents, records, and books pertaining to the investment in the Units (including, without limitation, the Memorandum) have been made available for inspection by such Purchaser and its Advisers, if any;

(e) The Purchaser and its Advisers, if any, have had a reasonable opportunity to ask questions of and receive answers from a person or persons acting on behalf of the Company concerning the offering of the Units and the business, financial condition and results of operations of the Company, and all such questions have been answered to the full satisfaction of the Purchaser and its Advisers, if any;

(f) In evaluating the suitability of an investment in the Company, the Purchaser has not relied upon any representation or information (oral or written) other than as stated in the Memorandum.

(g) The Purchaser is unaware of, is in no way relying on, and did not become aware of the Offering of the Units through or as a result of, any form of general solicitation or general advertising including, without limitation, any article, notice, advertisement or other communication published in any newspaper, magazine or similar media or broadcast over television, radio or the Internet (including, without limitation, internet "blogs," bulletin boards, discussion groups and social networking sites) in connection with the Offering and sale of the Units and is not subscribing for the Units and did not become aware of the Offering of the Units through or as a result of any seminar or meeting to which the Purchaser was invited by, or any solicitation of a subscription by, a person not previously known to the Purchaser in connection with investments in securities generally;

(h) The Purchaser has taken no action that would give rise to any claim by any person for brokerage commissions, finders' fees or the like relating to this Subscription Agreement or the transactions contemplated hereby (other than commissions to be paid by the Company to the Placement Agent or as otherwise described in the Memorandum);

(i) The Purchaser, together with its Advisers, if any, has such knowledge and experience in financial, tax, and business matters, and, in particular, investments in securities, so as to enable it to utilize the information made available to it in connection with the Offering to evaluate the merits and risks of an investment in the Units and the Company and to make an informed investment decision with respect thereto;

(j) The Purchaser is not relying on the Company, the Placement Agent or any of their respective employees or agents with respect to the legal, tax, economic and related considerations of an investment in the Units, and the Purchaser has relied on the advice of, or has consulted with, only its own Advisers;

(k) The Purchaser is acquiring the Units solely for such Purchaser's own account for investment purposes only and not with a view to or intent of resale or distribution thereof, in whole or in part. The Purchaser has no agreement or arrangement, formal or informal, with any person to sell or transfer all or any part of the Units, the shares of Common Stock, the Warrants or the Warrant Shares, and the Purchaser has no plans to enter into any such agreement or arrangement.

(l) The Purchaser must bear the substantial economic risks of the investment in the Units indefinitely because none of the securities included in the Units may be sold, hypothecated or otherwise disposed of unless subsequently registered under the Securities Act and applicable state securities laws or an exemption from such registration is available. Legends shall be placed on the securities included in the Units to the effect that they have not been registered under the Securities Act or applicable state securities laws and appropriate notations thereof will be made in the Company's stock books. Stop transfer instructions will be placed with the transfer agent of the Units. There is no market for resale of the Units, the Common Stock, the Warrants or the Warrant Shares and there can be no assurance that such securities will be freely transferable at any time in the foreseeable future.

(m) The Purchaser has adequate means of providing for such Purchaser's current financial needs and foreseeable contingencies and has no need for liquidity from its investment in the Units for an indefinite period of time;

(n) The Purchaser is aware that an investment in the Units is high risk, involving a number of very significant risks and has carefully read and considered the matters set forth under the caption "Risk Factors" in the Memorandum, and, in particular, acknowledges that the Company has a limited operating history, significant operating losses since inception, limited revenues to date, limited assets and is engaged in a highly competitive business;

(o) The Purchaser meets the requirements of at least one of the suitability standards for an "accredited investor" as that term is defined in Regulation D and as set forth on the Accredited Investor Certification contained herein;

(p) The Purchaser (i) if a natural person, represents that the Purchaser has reached the age of 21 and has full power and authority to execute and deliver this Subscription Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof; (ii) if a corporation, partnership, or limited liability company or partnership, or association, joint stock company, trust, unincorporated organization or other entity, represents that such entity was not formed for the specific purpose of acquiring the Units, such entity is duly organized, validly existing and in good standing under the laws of the state of its organization, the consummation of the transactions contemplated hereby is authorized by, and will not result in a violation of state law or its charter or other organizational documents, such entity has full power and authority to execute and deliver this Subscription Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof and to purchase and hold the securities constituting the Units, the execution and delivery of this Subscription Agreement has been duly authorized by all necessary action, this Subscription Agreement has been duly executed and delivered on behalf of such entity and is a legal, valid and binding obligation of such entity; or (iii) if executing this Subscription Agreement in a representative or fiduciary capacity, represents that it has full power and authority to execute and deliver this Subscription Agreement in such capacity and on behalf of the subscribing individual, ward, partnership, trust, estate, corporation, or limited liability company or partnership, or other entity for whom the Purchaser is executing this Subscription Agreement, and such individual, partnership, ward, trust, estate, corporation, or limited liability company or partnership, or other entity has full right and power to perform pursuant to this Subscription Agreement and make an investment in the Company, and represents that this Subscription Agreement constitutes a legal, valid and binding obligation of such entity. The execution and delivery of this Subscription Agreement will not violate or be in conflict with any order, judgment, injunction, agreement or controlling document to which the Purchaser is a party or by which it is bound;

(q) The Purchaser and the Advisers, if any, have had the opportunity to obtain any additional information, to the extent the Company has such information in its possession or could acquire it without unreasonable effort or expense, necessary to verify the accuracy of the information contained in the Memorandum and all documents received or reviewed in connection with the purchase of the Units and have had the opportunity to have representatives of the Company provide them with such additional information regarding the terms and conditions of this particular investment and the financial condition, results of operations, business of the Company deemed relevant by the Purchaser or the Advisers, if any, and all such requested information, to the extent the Company had such information in its possession or could acquire it without unreasonable effort or expense, has been provided to the full satisfaction of the Purchaser and the Advisers, if any;

(r) Any information which the Purchaser has heretofore furnished or is furnishing herewith to the Company or the Placement Agent is complete and accurate and may be relied upon by the Company and the Placement Agent in determining the availability of an exemption from registration under federal and state securities laws in connection with the offering of securities as described in the Memorandum. The Purchaser further represents and warrants that it will notify and supply corrective information to the Company and the Placement Agent immediately upon the occurrence of any change therein occurring prior to the Company's issuance of the securities contained in the Units;

(s) The Purchaser has significant prior investment experience, including investment in non-listed and non-registered securities. The Purchaser is knowledgeable about investment considerations in development-stage companies with limited operating histories. The Purchaser has a sufficient net worth to sustain a loss of its entire investment in the Company in the event such a loss should occur. The Purchaser's overall commitment to investments which are not readily marketable is not excessive in view of the Purchaser's net worth and financial circumstances and the purchase of the Units will not cause such commitment to become excessive. The investment is a suitable one for the Purchaser;

(t) The Purchaser is satisfied that the Purchaser has received adequate information with respect to all matters which it or the Advisers, if any, consider material to its decision to make this investment;

(u) The Purchaser acknowledges that any estimates or forward-looking statements or projections included in the Memorandum were prepared by the Company in good faith but that the attainment of any such projections, estimates or forward-looking statements cannot be guaranteed by the Company and should not be relied upon;

(v) No oral or written representations have been made, or oral or written information furnished, to the Purchaser or the Advisers, if any, in connection with the Offering which are in any way inconsistent with the information contained in the Memorandum;

(w) Within five (5) days after receipt of a request from the Company or the Placement Agent, the Purchaser will provide such information and deliver such documents as may reasonably be necessary to comply with any and all laws and ordinances to which the Company or the Placement Agent is subject;

(x) The Purchaser's substantive relationship with the Placement Agent or subagent through which the Purchaser is subscribing for Units predates the Placement Agent's or such subagent's contact with the Purchaser regarding an investment in the Units;

(y) THE SECURITIES OFFERED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS AND ARE BEING OFFERED AND SOLD IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. THE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER SAID ACT AND SUCH LAWS PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE SECURITIES HAVE NOT BEEN RECOMMENDED, APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION OR ANY OTHER REGULATORY AUTHORITY, NOR HAVE ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF THIS OFFERING OR THE ACCURACY OR ADEQUACY OF THE MEMORANDUM OR THIS SUBSCRIPTION AGREEMENT. ANY REPRESENTATION TO THE CONTRARY IS UNLAWFUL;

(z) In making an investment decision investors must rely on their own examination of the Company and the terms of the Offering, including the merits and risks involved. The Purchaser should be aware that it will be required to bear the financial risks of this investment for an indefinite period of time;

(aa) **(For ERISA plans only)** The fiduciary of the ERISA plan (the "Plan") represents that such fiduciary has been informed of and understands the Company's investment objectives, policies and strategies, and that the decision to invest "plan assets" (as such term is defined in ERISA) in the Company is consistent with the provisions of ERISA that require diversification of plan assets and impose other fiduciary responsibilities. The Purchaser fiduciary or Plan (a) is responsible for the decision to invest in the Company; (b) is independent of the Company or any of its affiliates; (c) is qualified to make such investment decision; and (d) in making such decision, the Purchaser fiduciary or Plan has not relied primarily on any advice or recommendation of the Company or any of its affiliates;

(bb) **The Purchaser should check the Office of Foreign Assets Control (“OFAC”) website at <<http://www.treas.gov/ofac>> before making the following representations.** The Purchaser represents that the amounts invested by it in the Company in the Offering were not and are not directly or indirectly derived from activities that contravene federal, state or international laws and regulations, including anti-money laundering laws and regulations. Federal regulations and Executive Orders administered by OFAC prohibit, among other things, the engagement in transactions with, and the provision of services to, certain foreign countries, territories, entities and individuals. The lists of OFAC prohibited countries, territories, persons and entities can be found on the OFAC website at <<http://www.treas.gov/ofac>>. In addition, the programs administered by OFAC (the “OFAC Programs”) prohibit dealing with individuals¹ or entities in certain countries regardless of whether such individuals or entities appear on the OFAC lists;

(cc) To the best of the Purchaser’s knowledge, none of: (1) the Purchaser; (2) any person controlling or controlled by the Purchaser; (3) if the Purchaser is a privately-held entity, any person having a beneficial interest in the Purchaser; or (4) any person for whom the Purchaser is acting as agent or nominee in connection with this investment is a country, territory, individual or entity named on an OFAC list, or a person or entity prohibited under the OFAC Programs. Please be advised that the Company may not accept any amounts from a prospective investor if such prospective investor cannot make the representation set forth in the preceding paragraph. The Purchaser agrees to promptly notify the Company and the Placement Agent should the Purchaser become aware of any change in the information set forth in these representations. The Purchaser understands and acknowledges that, by law, the Company may be obligated to “freeze the account” of the Purchaser, either by prohibiting additional subscriptions from the Purchaser, declining any redemption requests and/or segregating the assets in the account in compliance with governmental regulations, and the Placement Agent may also be required to report such action and to disclose the Purchaser’s identity to OFAC. The Purchaser further acknowledges that the Company may, by written notice to the Purchaser, suspend the redemption rights, if any, of the Purchaser if the Company reasonably deems it necessary to do so to comply with anti-money laundering regulations applicable to the Company and the Placement Agent or any of the Company’s other service providers. These individuals include specially designated nationals, specially designated narcotics traffickers and other parties subject to OFAC sanctions and embargo programs;

(dd) To the best of the Purchaser’s knowledge, none of: (1) the Purchaser; (2) any person controlling or controlled by the Purchaser; (3) if the Purchaser is a privately-held entity, any person having a beneficial interest in the Purchaser; or (4) any person for whom the Purchaser is acting as agent or nominee in connection with this investment is a senior foreign political figure,² or any immediate family³ member or close associate⁴ of a senior foreign political figure, as such terms are defined in the footnotes below; and

(ee) If the Purchaser is affiliated with a non-U.S. banking institution (a “Foreign Bank”), or if the Purchaser receives deposits from, makes payments on behalf of, or handles other financial transactions related to a Foreign Bank, the Purchaser represents and warrants to the Company that: (1) the Foreign Bank has a fixed address, other than solely an electronic address, in a country in which the Foreign Bank is authorized to conduct banking activities; (2) the Foreign Bank maintains operating records related to its banking activities; (3) the Foreign Bank is subject to inspection by the banking authority that licensed the Foreign Bank to conduct banking activities; and (4) the Foreign Bank does not provide banking services to any other Foreign Bank that does not have a physical presence in any country and that is not a regulated affiliate.

¹ These individuals include specially designated nationals, specially designated narcotics traffickers and other parties subject to OFAC sanctions and embargo programs.

² A “senior foreign political figure” is defined as a senior official in the executive, legislative, administrative, military or judicial branches of a foreign government (whether elected or not), a senior official of a major foreign political party, or a senior executive of a foreign government-owned corporation. In addition, a “senior foreign political figure” includes any corporation, business or other entity that has been formed by, or for the benefit of, a senior foreign political figure.

³ “Immediate family” of a senior foreign political figure typically includes the figure’s parents, siblings, spouse, children and in-laws.

⁴ A “close associate” of a senior foreign political figure is a person who is widely and publicly known to maintain an unusually close relationship with the senior foreign political figure, and includes a person who is in a position to conduct substantial domestic and international financial transactions on behalf of the senior foreign political figure.

7. **Intentionally Omitted.**

8. **Indemnification.** The Purchaser agrees to indemnify and hold harmless the Company, the Placement Agent (including its selected dealers, if any), and their respective officers, directors, employees, agents, control persons and affiliates from and against all losses, liabilities, claims, damages, costs, fees and expenses whatsoever (including, but not limited to, any and all expenses incurred in investigating, preparing or defending against any litigation commenced or threatened) based upon or arising out of any actual or alleged false acknowledgment, representation or warranty, or misrepresentation or omission to state a material fact, or breach by the Purchaser of any covenant or agreement made by the Purchaser herein or in any other document delivered in connection with this Subscription Agreement.

9. **Irrevocability; Binding Effect.** The Purchaser hereby acknowledges and agrees that the subscription hereunder is irrevocable by the Purchaser, except as required by applicable law, and that this Subscription Agreement shall survive the death or disability of the Purchaser and shall be binding upon and inure to the benefit of the parties and their heirs, executors, administrators, successors, legal representatives, and permitted assigns. If the Purchaser is more than one person, the obligations of the Purchaser hereunder shall be joint and several and the agreements, representations, warranties, and acknowledgments herein shall be deemed to be made by and be binding upon each such person and such person's heirs, executors, administrators, successors, legal representatives, and permitted assigns.

10. **Modification.** This Subscription Agreement shall not be modified or waived except by an instrument in writing signed by the party against whom any such modification or waiver is sought.

11. **Notices.** Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be mailed by certified mail, return receipt requested, or delivered against receipt to the party to whom it is to be given (a) if to the Company, at the address set forth above, or (b) if to the Purchaser, at the address set forth on the signature page hereof (or, in either case, to such other address as the party shall have furnished in writing in accordance with the provisions of this Section 11). Any notice or other communication given by certified mail shall be deemed given at the time of certification thereof, except for a notice changing a party's address which shall be deemed given at the time of receipt thereof.

12. **Assignability.** This Subscription Agreement and the rights, interests and obligations hereunder are not transferable or assignable by the Purchaser and the transfer or assignment of the shares of Common Stock or the Warrants shall be made only in accordance with all applicable laws.

13. **Applicable Law.** This Subscription Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to contracts to be wholly-performed within said State.

14. **Arbitration.** The parties agree to submit all controversies to arbitration in accordance with the provisions set forth below and understand that:

(a) Arbitration is final and binding on the parties.

(b) The parties are waiving their right to seek remedies in court, including the right to a jury trial.

(c) Pre-arbitration discovery is generally more limited and different from court proceedings.

(d) The arbitrator's award is not required to include factual findings or legal reasoning and any party's right to appeal or to seek modification of rulings by arbitrators is strictly limited.

(e) The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.

(f) All controversies which may arise between the parties concerning this Subscription Agreement shall be determined by arbitration pursuant to the rules then pertaining to the Financial Industry Regulatory Authority, Inc. ("FINRA") in New York City, New York. Judgment on any award of any such arbitration may be entered in the Supreme Court of the State of New York or in any other court having jurisdiction of the person or persons against whom such award is rendered. Any notice of such arbitration or for the confirmation of any award in any arbitration shall be sufficient if given in accordance with the provisions of this Agreement. The parties agree that the determination of the arbitrators shall be binding and conclusive upon them.

15. **Blue Sky Qualification.** The purchase of Units under this Subscription Agreement is expressly conditioned upon the exemption from qualification of the offer and sale of the Units from applicable federal and state securities laws. The Company shall not be required to qualify this transaction under the securities laws of any jurisdiction and, should qualification be necessary, the Company shall be released from any and all obligations to maintain its offer, and may rescind any sale contracted, in the jurisdiction.

16. **Use of Pronouns.** All pronouns and any variations thereof used herein shall be deemed to refer to the masculine, feminine, neuter, singular or plural as the identity of the person or persons referred to may require.

17. **Confidentiality.** The Purchaser acknowledges and agrees that any information or data the Purchaser has acquired from or about the Company, not otherwise properly in the public domain, was received in confidence. The Purchaser agrees not to divulge, communicate or disclose, except as may be required by law or for the performance of this Agreement, or use to the detriment of the Company or for the benefit of any other person or persons, or misuse in any way, any confidential information of the Company, including any scientific, technical, trade or business secrets of the Company and any scientific, technical, trade or business materials that are treated by the Company as confidential or proprietary, including, but not limited to, ideas, discoveries, inventions, developments and improvements belonging to the Company and confidential information obtained by or given to the Company about or belonging to third parties.

18. **Miscellaneous.**

(a) This Subscription Agreement constitutes the entire agreement between the Purchaser and the Company with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings, if any, relating to the subject matter hereof. The terms and provisions of this Subscription Agreement may be waived, or consent for the departure therefrom granted, only by a written document executed by the party entitled to the benefits of such terms or provisions.

(b) The representations and warranties of the Company and the Purchaser made in this Subscription Agreement shall survive the execution and delivery hereof and delivery of the shares of Common Stock and Warrants contained in the Units.

(c) Each of the parties hereto shall pay its own fees and expenses (including the fees of any attorneys, accountants, appraisers or others engaged by such party) in connection with this Subscription Agreement and the transactions contemplated hereby whether or not the transactions contemplated hereby are consummated.

(d) This Subscription Agreement may be executed in one or more counterparts each of which shall be deemed an original, but all of which shall together constitute one and the same instrument.

(e) Each provision of this Subscription Agreement shall be considered separable and, if for any reason any provision or provisions hereof are determined to be invalid or contrary to applicable law, such invalidity or illegality shall not impair the operation of or affect the remaining portions of this Subscription Agreement.

(f) Paragraph titles are for descriptive purposes only and shall not control or alter the meaning of this Subscription Agreement as set forth in the text.

(g) The Purchaser understands and acknowledges that there may be multiple closings for this Offering.

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ANTI MONEY LAUNDERING REQUIREMENTS

The USA PATRIOT Act

The USA PATRIOT Act is designed to detect, deter, and punish terrorists in the United States and abroad. The Act imposes new anti-money laundering requirements on brokerage firms and financial institutions. Since April 24, 2002 all brokerage firms have been required to have new, comprehensive anti-money laundering programs.

To help you understand these efforts, we want to provide you with some information about money laundering and the Placement Agent's efforts to implement the USA PATRIOT Act.

What the Placement Agent is required to do to help eliminate money laundering?

Under new rules required by the USA PATRIOT Act, the Placement Agent's anti-money laundering program must designate a special compliance officer, set up employee training, conduct independent audits, and establish policies and procedures to detect and report suspicious transaction and ensure compliance with the new laws.

What is money laundering?

Money laundering is the process of disguising illegally obtained money so that the funds appear to come from legitimate sources or activities. Money laundering occurs in connection with a wide variety of crimes, including illegal arms sales, drug trafficking, robbery, fraud, racketeering, and terrorism.

How big is the problem and why is it important?

The use of the U.S. financial system by criminals to facilitate terrorism or other crimes could well taint our financial markets. According to the U.S. State Department, one recent estimate puts the amount of worldwide money laundering activity at \$1 trillion a year.

As part of the Placement Agent's required program, it may ask you to provide various identification documents or other information. Until you provide the information or documents that the Placement Agent needs, it may not be able to effect any transactions for you.

MATINAS BIOPHARMA HOLDINGS, INC.
SIGNATURE PAGE TO THE
SUBSCRIPTION AGREEMENT

Subscriber hereby elects to subscribe under the Subscription Agreement for a total of _____ Units at a price of \$25,000 per Unit (NOTE: to be completed by subscriber) and executes the Subscription Agreement.

Date (NOTE: To be completed by subscriber): _____

If the Purchaser is an INDIVIDUAL, and if purchased as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:

Print Name(s)	Social Security Number(s)
Signature(s) of Subscriber(s)	Signature
Date	Address

If the Purchaser is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:

Name of Partnership, Corporation, Limited Liability Company or Trust	Federal Taxpayer Identification Number
By: Name: Title:	State of Organization
Date	Address
MATINAS BIOPHARMA HOLDINGS, INC.	AEGIS CAPITAL CORP..
By: Authorized Officer	By: Authorized Officer

MATINAS BIOPHARMA HOLDINGS, INC.

ACCREDITED INVESTOR CERTIFICATION

For Individual Investors Only

(all Individual Investors must INITIAL where appropriate):

Initial _____ I have an individual net worth, or joint net worth with my spouse, as of the date hereof in excess of \$1 million. For purposes of calculating net worth under this category, (i) the undersigned's primary residence shall not be included as an asset, (ii) indebtedness that is secured by the undersigned's primary residence, up to the estimated fair market value of the primary residence at the time of the sale of securities, shall not be included as a liability, (iii) to the extent that the indebtedness that is secured by the primary residence is in excess of the fair market value of the primary residence, the excess amount shall be included as a liability, and (iv) if the amount of outstanding indebtedness that is secured by the primary residence exceeds the amount outstanding 60 days prior to the execution of this Subscription Agreement, other than as a result of the acquisition of the primary residence, the amount of such excess shall be included as a liability.

Initial _____ I have had an annual gross income for the past two years of at least \$200,000 (or \$300,000 jointly with my spouse) and expect my income (or joint income, as appropriate) to reach the same level in the current year.

Initial _____ I am a director or executive officer of Matinas BioPharma Holdings, Inc.

For Non-Individual Investors

(all Non-Individual Investors must INITIAL where appropriate):

Initial _____ The investor certifies that it is a partnership, corporation, limited liability company or business trust that is 100% owned by persons who meet at least one of the criteria for Individual Investors set forth above.

Initial _____ The investor certifies that it is a partnership, corporation, limited liability company or any organization described in Section 501(c)(3) of the Internal Revenue Code, Massachusetts or similar business trust that has total assets of at least \$5 million and was not formed for the purpose of investing the Company.

Initial _____ The investor certifies that it is an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974, whose investment decision is made by a plan fiduciary (as defined in ERISA §3(21)) that is a bank, savings and loan association, insurance company or registered investment adviser.

- Initial** _____ The investor certifies that it is an employee benefit plan whose total assets exceed \$5,000,000 as of the date of this Agreement.
- Initial** _____ The undersigned certifies that it is a self-directed employee benefit plan whose investment decisions are made solely by persons who meet either of the criteria for Individual Investors.
- Initial** _____ The investor certifies that it is a U.S. bank, U.S. savings and loan association or other similar U.S. institution acting in its individual or fiduciary capacity.
- Initial** _____ The undersigned certifies that it is a broker-dealer registered pursuant to §15 of the Securities Exchange Act of 1934.
- Initial** _____ The investor certifies that it is an organization described in §501(c)(3) of the Internal Revenue Code with total assets exceeding \$5,000,000 and not formed for the specific purpose of investing in the Company.
- Initial** _____ The investor certifies that it is a trust with total assets of at least \$5,000,000, not formed for the specific purpose of investing in the Company, and whose purchase is directed by a person with such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment.
- Initial** _____ The investor certifies that it is a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality thereof, for the benefit of its employees, and which has total assets in excess of \$5,000,000.
- Initial** _____ The investor certifies that it is an insurance company as defined in §2(13) of the Securities Act, or a registered investment company.
- Initial** _____ An investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of that Act.
- Initial** _____ A Small Business Investment Company licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958.
- Initial** _____ A private business development company as defined in Section 202(a)(22) of the Investment Advisers Act of 1940.

MATINAS BIOPHARMA HOLDINGS, INC.

Investor Profile

(MUST BE COMPLETED BY INVESTOR)

Section A - Personal Investor Information

Investor Name(s): _____
Individual executing Profile or Trustee: _____
Social Security Numbers / Federal I.D. Number: _____

Date of Birth: _____ Marital Status: _____
Joint Party Date of Birth: _____ Investment Experience (Years): _____
Annual Income: _____ Liquid Net Worth: _____

Net Worth (**excluding value of primary residence**): _____

Tax Bracket: _____ 15% or below _____ 25% - 27.5% _____ Over 27.5%

Investment Objectives (**circle one or more**): Preservation of Capital, Income, Capital Appreciation, Trading Profits, Speculation or Other
(please specify) * See definitions on following page

Home Street Address: _____

Home City, State & Zip Code: _____

Home Phone: _____ Home Fax: _____ Home Email: _____

Employer: _____

Employer Street Address: _____

Employer City, State & Zip Code: _____

Bus. Phone: _____ Bus. Fax: _____ Bus. Email: _____

Type of Business: _____

Aegis Capital Account Executive / Outside Broker/Dealer: _____

If you are a **United States citizen**, please list the number and jurisdiction of issuance of any other government-issued document evidencing residence and bearing a photograph or similar safeguard (such as a driver's license or passport), and **PROVIDE A PHOTOCOPY** of each of the documents you have listed.

If you are **NOT a United States citizen**, for each jurisdiction of which you are a citizen or in which you work or reside, please list (i) your passport number and country of issuance or (ii) alien identification card number **AND** (iii) number and country of issuance of any other government-issued document evidencing nationality or residence and bearing a photograph or similar safeguard, and **PROVIDE A PHOTOCOPY** of each of these documents you have listed. **These photocopies must be certified by a lawyer as to authenticity.**

Section B – Securities Delivery Instructions

____ Please deliver securities to the Employer Address listed in Section A.

____ Please deliver securities to the Home Address listed in Section A.

____ Please deliver securities to the following address:

_____.

Section C –Wire Transfer Instructions

____ I will wire funds from my outside account according to the "Subscription Instructions" Page.

____ I will wire funds from my Aegis Capital Account - See "Wire Transfer Authorization" Page.

____ The funds for this investment are rolled over, tax deferred from _____ within the allowed 60 day window.

Please check if you are a FINRA member or affiliate of a FINRA member firm: _____

Investor Signature

Date

Investor Signature

Date

Investment Objectives: The typical investment listed with each objective are only some examples of the kinds of investments that have historically been consistent with the listed objectives. However, neither Matinas BioPharma Holdings, Inc. nor Aegis Capital Corp. can assure that any investment will achieve your intended objective. You must make your own investment decisions and determine for yourself if the investments you select are appropriate and consistent with your investment objectives.

Neither Matinas BioPharma Holdings, Inc., nor Aegis Capital Corp. assume responsibility to you for determining if the investments you selected are suitable for you.

Preservation of Capital: An investment objective of *Preservation of Capital* indicates you seek to maintain the principal value of your investments and are interested in investments that have historically demonstrated a very low degree of risk of loss of principal value. Some examples of typical investments might include money market funds and high quality, short-term fixed income products.

Income: An investment objective of *Income* indicates you seek to generate income from investments and are interested in investments that have historically demonstrated a low degree of risk of loss of principal value. Some examples of typical investments might include high quality, short and medium-term fixed income products, short-term bond funds and covered call options.

Capital Appreciation: An investment objective of *Capital Appreciation* indicates you seek to grow the principal value of your investments over time and are willing to invest in securities that have historically demonstrated a moderate to above average degree of risk of loss of principal value to pursue this objective. Some examples of typical investments might include common stocks, lower quality, medium-term fixed income products, equity mutual funds and index funds.

Trading Profits: An investment objective of *Trading Profits* indicates you seek to take advantage of short-term trading opportunities, which may involve establishing and liquidating positions quickly. Some examples of typical investments might include short-term purchases and sales of volatile or low priced common stocks, put or call options, spreads, straddles and/or combinations on equities or indexes. This is a high-risk strategy.

Speculation: An investment objective of *Speculation* indicates you seek a significant increase in the principal value of your investments and are willing to accept a corresponding greater degree of risk by investing in securities that have historically demonstrated a high degree of risk of loss of principal value to pursue this objective. Some examples of typical investments might include lower quality, long-term fixed income products, initial public offerings, volatile or low priced common stocks, the purchase of sale of put or call options, spreads, straddles and/or combinations on equities or indexes, and the use of short-term or day trading strategies.

Other: Please specify.

VOTING AGREEMENT

This **VOTING AGREEMENT** (this "Agreement") is entered into as of July [___], 2013 (the "Effective Date") by and among Matinas BioPharma Holdings, Inc., a Delaware corporation (the "Company"), the parties listed as stockholders of Matinas BioPharma, Inc. (the "Matinas Stockholders") on the signature pages hereto and the parties listed as stockholders of the Company (the "Holdings Stockholders") on the signature pages hereto (each, a "Stockholder" and collectively, the "Stockholders").

WITNESSETH:

WHEREAS, as of the date hereof, each Stockholder holds and is entitled to vote (or to direct the voting of) shares of voting common stock, par value \$0.0001 per share (the "Voting Common Shares"), of the Company, (such Voting Common Shares, together with any other Voting Common Shares the voting power of which is acquired by such Stockholders during the period from the date hereof through the date on which this Agreement is terminated in accordance with its terms (such period, the "Voting Period"), are collectively referred to herein as the "Subject Shares");

WHEREAS, the Company has entered into an Agreement and Plan of Merger with Matinas BioPharma, Inc., a Delaware corporation ("Matinas"), pursuant to which a newly organized, wholly-owned subsidiary of the Company has merged with and into Matinas, with Matinas remaining as the surviving entity and a wholly-owned subsidiary of the Company (the "Merger");

WHEREAS, simultaneously with the Merger and to provide the capital required by the Company for working capital and other purposes, the Company has offered in compliance with Rule 506 of Regulation D and/or Regulation S of the Securities Act of 1933, as amended, to investors in a private placement transaction (the "PPO"), units ("Units") of its securities, each Unit consisting of Two Hundred Fifty Thousand (250,000) shares of Common Stock (the "Investor Shares") and One Hundred Twenty Five Thousand (125,000) Series 1 warrants (the "Investor Warrants") to purchase One Hundred Twenty Five Thousand shares of Common Stock;

WHEREAS, the initial closing of the PPO and the closing of the Merger have taken place as of the Effective Date; and

WHEREAS, as an inducement to the parties' willingness to consummate the transactions contemplated by the Merger Agreement, the Company and the Stockholders are entering into this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants, and conditions set forth herein, the parties mutually agree as follows:

**ARTICLE I
DEFINITIONS**

Section 1.1 Capitalized Terms. For purposes of this Agreement, capitalized terms used and not defined herein shall have the respective meanings ascribed to them in the Merger Agreement.

**ARTICLE II
VOTING AGREEMENT AND IRREVOCABLE PROXY**

Section 2.1 Agreement to Vote the Subject Shares. Each Stockholder hereby agrees that, during the Voting Period, at any duly called meeting of the stockholders of the Company (or any adjournment or postponement thereof) or action taken by written consent in lieu of a meeting, each Stockholder shall, if a meeting is held, appear at the meeting, in person or by proxy, or otherwise cause his Subject Shares owned at any time to be counted as present thereat for purposes of establishing a quorum, and he shall vote (or cause to be voted), in person or by proxy, all of his Subject Shares:

- (a) to ensure that the size of the Board shall be set and remain at five (5) directors unless increased by the Board.
- (b) to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the Stockholders, the following persons shall be elected to the Board:
 - (i) One person designated by Aegis Capital Corp. (the "Aegis Designee"), which individual shall initially be Adam Stern.
 - (ii) Four people designated by the Matinas Stockholders (the "Matinas Designees"), which individuals shall initially be Herbert Conrad, Roelof Rongen, Stefano Ferrari and Jerome Jabbour.

Section 2.2 Grant of Irrevocable Proxy. If requested by the Company, each Stockholder shall appoint the Company and any designee of the Company, and each of them individually, as each Stockholder's proxy, with full power of substitution and resubstitution, to vote during the Voting Period with respect to any and all of the Subject Shares on the matters and in the manner specified in Section 2.1. Each Stockholder shall take such further action or execute such other instruments as may be reasonably necessary to effectuate the intent of any such proxy. Each Stockholder affirms that any irrevocable proxy given by him with respect to this Agreement and the transactions contemplated hereby shall be given to the Company by such Stockholder to secure the performance of the obligations of the Stockholder under this Agreement. It is agreed that the Company (and its officers on behalf of the Company) will use the irrevocable proxy that may be granted by each Stockholder only in accordance with applicable Law and only if such Stockholder fails to comply with Section 2.1 and that, to the extent the Company (and its officers on behalf of the Company) uses any such irrevocable proxy, he will only vote the Subject Shares subject to such irrevocable proxy with respect to the matters specified in, and in accordance with the provisions of, Section 2.1.

Section 2.3 Nature of Irrevocable Proxy. Any proxy granted pursuant to Section 2.2 to the Company by the Stockholders shall be irrevocable during the term of this Agreement, shall be deemed to be coupled with an interest sufficient in law to support an irrevocable proxy and shall revoke any and all prior proxies granted by the Stockholders. Any proxy that may be granted hereunder shall terminate upon the termination of this Agreement.

ARTICLE III COVENANTS

Section 3.1 Subject Shares.

(a) Each Stockholder agrees that during the Voting Period he shall not, without the Company's prior written consent, grant any proxies or powers of attorney with respect to any or all of the Subject Shares or agree to vote the Subject Shares on any matter inconsistent with the terms described herein; provided, however, that in the event a Stockholder transfers all or any portion of his Subject Shares such Stockholder shall be permitted to grant stock powers with respect to such transferred Subject Shares.

(b) In the event of a stock dividend or distribution, or any change in the Subject Shares by reason of any stock dividend or distribution, split-up, recapitalization, combination, conversion, exchange of shares or the like, the term "Subject Shares" shall be deemed to refer to and include the Subject Shares as well as all such stock dividends and distributions and any securities into which or for which any or all of the Subject Shares may be changed or exchanged or which are received in such transaction.

Section 3.2 Voting Trusts. Each Stockholder agrees that he will not, nor will he permit any entity under his control to, deposit any of his Subject Shares in a voting trust or subject any of his Subject Shares to any arrangement with respect to the voting of such Subject Shares other than as provided herein. Notwithstanding the foregoing, each Stockholder shall be permitted to transfer all or any portion of his Subject Shares to third parties.

ARTICLE IV REPRESENTATIONS AND WARRANTIES OF EACH STOCKHOLDER

Each Stockholder hereby represents and warrants to the Company, severally, but not jointly, as follows:

Section 4.1 Due Organization, etc. Each Stockholder has all necessary power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby. This Agreement has been duly executed and delivered by each Stockholder and (assuming the due authorization, execution and delivery by the Company) constitutes a valid and binding obligation of such Stockholder, enforceable against such Stockholder in accordance with its terms, except to the extent enforcement is limited by bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and by general equitable principles.

Section 4.2 Ownership of Shares. As of the date hereof, each Stockholder is the lawful owner of the Voting Common Shares owned by such Stockholder hereto and has the sole power to vote or cause to be voted such shares or shares power to vote or cause to be voted such shares solely with one or more other persons. Each Stockholder has good and valid title to the Voting Common Shares owned by each Stockholder, free and clear of any and all pledges, mortgages, liens, charges, proxies, voting agreements, encumbrances, adverse claims, options, security interests and demands of any nature or kind whatsoever, other than (i) those created by this Agreement, or (ii) those existing under applicable securities laws.

Section 4.3 No Conflicts. (a) No authorization, consent or approval of any other person is necessary for the execution of this Agreement by each Stockholder and (b) none of the execution and delivery of this Agreement by each Stockholder, the consummation by each Stockholder of the transactions contemplated hereby or compliance by each Stockholder with any of the provisions hereof shall (i) result in, or give rise to, a violation or breach of or a default under any of the terms of any material contract, understanding, agreement or other instrument or obligation to which each Stockholder is a party or by which each Stockholder or any of the Subject Shares or its assets may be bound or (ii) violate any applicable order, writ, injunction, decree, judgment, statute, rule or regulation, except for any of the foregoing as would not reasonably be expected to materially impair each Stockholder's ability to perform his obligations under this Agreement.

ARTICLE V REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants to each Stockholder as follows:

Section 5.1 Due Organization, etc. The Company is a Delaware corporation duly organized and validly existing under the Laws of the jurisdiction of its organization. The Company has all necessary corporate power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby by the Company have been duly authorized by all necessary corporate action on the part of the Company. This Agreement has been duly executed and delivered by the Company and (assuming the due authorization, execution and delivery by each Stockholder) constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except to the extent enforcement is limited by bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and by general equitable principles.

Section 5.2 No Conflicts. (a) No authorization, consent or approval of any other person is necessary for the execution of this Agreement by the Company and (b) none of the execution and delivery of this Agreement by the Company, the consummation by the Company of the transactions contemplated hereby or compliance by the Company with any of the provisions hereof shall (i) conflict with or result in any breach of the organizational documents of the Company, (ii) result in, or give rise to, a violation or breach of or a default under any of the terms of any material contract, understanding, agreement or other instrument or obligation to which the Company is a party or by which the Company or any of its assets may be bound or (iii) violate any applicable order, writ, injunction, decree, judgment, statute, rule or regulation, except for any of the foregoing as would not reasonably be expected to materially impair the Company's ability to perform its obligations under this Agreement.

**ARTICLE VI
TERMINATION**

Section 6.1 Termination. This Agreement shall automatically terminate, and neither the Company nor the Stockholders shall have any rights or obligations hereunder and this Agreement shall become null and void and have no effect upon the earliest to occur of: (a) the approval of the holders of at least 75% of the Subject Shares, (b) the closing of a firm commitment underwritten public offering of the Company's shares of Common Stock resulting in gross proceeds of at least \$20 million, or (c) three years from the effective date of the Merger. The termination of this Agreement shall not prevent either party from seeking any remedies (at law or in equity) against the other party or relieve any party from liability for such party's willful and material breach of any terms of this Agreement. Notwithstanding anything to the contrary herein, the provisions of Article VII shall survive the termination of this Agreement.

**ARTICLE VII
MISCELLANEOUS**

Section 7.1 Further Actions. Each of the parties hereto agrees to take any all actions and to do all things reasonably necessary or appropriate to effectuate this Agreement.

Section 7.2 Amendments, Waivers, etc. This Agreement may not be amended, changed, supplemented, waived or otherwise modified, except upon the execution and delivery of a written agreement executed by the holders of at least 75% of the Subject Shares. The failure of any party hereto to exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with its obligations hereunder, and any custom or practice of the parties at variance with the terms hereof shall not constitute a waiver by such party of its right to exercise any such or other right, power or remedy or to demand such compliance.

Section 7.3 Notices. All notices or other communications which are required or permitted under this Agreement shall be in writing and sufficient if delivered by hand, by facsimile transmission, by registered or certified mail, post pre-paid, by electronic mail or by courier or overnight carrier, to the persons at the addresses set forth below (or at such other address as may be provided hereunder), and shall be deemed to have been delivered as of the date so delivered:

If to the Company to:

Matinas BioPharma Holdings, Inc.
915 Klosterman Road East
Tarpon Springs, FL 34689
Attention: President & CEO
E-mail: rrongen@matinasbiopharma.com

with copy to:

Lowenstein Sandler LLP
1251 Avenue of the Americas
New York, NY 10020
Attn: Steven M. Skolnick, Esq.
Facsimile: (973) 597 2477

If to the Stockholders:

To each Stockholder at the address set forth on the signature page hereto or at such other address as any party shall have furnished to the other parties in writing.

Section 7.4 Headings. Headings of the Articles and Sections of this Agreement are for convenience of the parties only, and shall be given no substantive or interpretive effect whatsoever.

Section 7.5 Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application of such provision to any person or any circumstance, is invalid or unenforceable (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application of such provision, in any other jurisdiction.

Section 7.6 Entire Agreement; Assignment. This Agreement constitutes the entire agreement, and supersedes all other prior agreements and understandings, both written and oral, between the parties, or any of them, with respect to the subject matter hereof. Neither this Agreement nor any of the rights, interests or obligations hereunder shall be assigned by any of the parties hereto (whether by operation of law or otherwise) without the prior written consent of the other parties. Subject to the preceding two sentences, this Agreement will be binding upon, inure to the benefit of and be enforceable by the parties hereto and their respective successors and permitted assigns.

Section 7.7 Parties in Interest. The Company and the Stockholders hereby agree that their respective representations, warranties and covenants set forth herein are solely for the benefit of the other party hereto, in accordance with and subject to the terms of this Agreement, and this Agreement is not intended to, and does not, confer upon any person other than the parties hereto any rights or remedies hereunder, including, without limitation, the right to rely upon the representations and warranties set forth herein. The representations and warranties in this Agreement are the product of negotiations among the parties hereto and are for the sole benefit of the parties hereto. Any inaccuracies in such representations and warranties are subject to waiver by the parties hereto in accordance with Section 7.2 without notice or liability to any other person. In some instances, the representations and warranties in this Agreement may represent an allocation among the parties hereto of risks associated with particular matters regardless of the knowledge of any of the parties hereto. Consequently, persons other than the parties hereto may not rely upon the representations and warranties in this Agreement as characterizations of actual facts or circumstances as of the date of this Agreement or as of any other date.

Section 7.8 Interpretation. When a reference is made in this Agreement to an Article or Section, such reference shall be to an Article or Section of this Agreement unless otherwise indicated. Whenever the words “include,” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation.” The words “hereof,” “herein” and “hereunder” and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms defined in this Agreement shall have the defined meanings when used in any certificate or other document made or delivered pursuant thereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such term. Any agreement, instrument or statute defined or referred to herein or in any agreement or instrument that is referred to herein means such agreement, instrument or statute as from time to time amended, modified or supplemented in accordance with the terms hereof, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. References to a person are also to its permitted successors and assigns. Each of the parties has participated in the drafting and negotiation of this Agreement. If an ambiguity or question of intent or interpretation arises, this Agreement must be construed as if drafted by all the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of authorship of any of the provisions of this Agreement.

Section 7.9 Governing Law. THIS AGREEMENT SHALL BE DEEMED TO BE MADE IN AND IN ALL RESPECTS SHALL BE INTERPRETED, CONSTRUED AND GOVERNED BY AND IN ACCORDANCE WITH THE LAW OF THE STATE OF NEW YORK WITHOUT REGARD TO THE CONFLICTS OF LAW PRINCIPLES THEREOF.

Section 7.10 Specific Performance. The parties acknowledge that any breach of this Agreement would give rise to irreparable harm for which monetary damages would not be an adequate remedy and that, in addition to other rights or remedies, the parties shall be entitled to seek enforcement of any provision of this Agreement by a decree of specific performance and to temporary, preliminary and permanent injunctive relief to prevent breaches or threatened breaches of any of the provisions of this Agreement, without the necessity of proving the inadequacy of monetary damages as a remedy.

Section 7.11 Submission to Jurisdiction. The parties hereby irrevocably submit to the exclusive jurisdiction of the United States District Court for the Southern District of New York located in the borough of Manahattan in the City of New York, or if such court does not have jurisdiction, the Supreme Court of the State of New York, New York County, for the purposes of any suit, action or other proceeding arising out of this Agreement or any transaction contemplated hereby. Each of the parties hereto further agrees that service of any process, summons, notice or document by registered mail to such party's respective address set forth in Section 7.3 (or to such other address for notices as provided by such party pursuant to Section 7.3) or in any other manner permitted by law shall be effective service of process for any action, suit or proceeding in New York with respect to any matters to which it has submitted to jurisdiction as set forth above in the immediately preceding sentence. Each of the parties hereto irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Agreement or the transactions contemplated hereby in (i) the United States District Court for the Southern District of New York or (ii) the Supreme Court of the State of New York, New York County, and hereby further irrevocably and unconditionally waives and agrees not to please or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.

Section 7.12 Waiver of Jury Trial. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (I) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (II) EACH PARTY UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (III) EACH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (IV) EACH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 7.12.

Section 7.13 Counterparts. This Agreement may be executed in two or more counterparts (including by facsimile or electronic submission via .pdf file), each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument, and shall become effective when one or more counterparts have been signed by each of the parties and delivered (including by facsimile or electronic submission via .pdf file) to the other parties.

[Signature Pages Follow]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be duly executed as of the day and year first above written.

**MATINAS BIOPHARMA
HOLDINGS, INC.**

By: _____

Name: Stephen P. Harrington

Title: President

[Signatures Continue on the Next Page]

MATINAS BIOPHARMA HOLDINGS, INC.

2013 EQUITY COMPENSATION PLAN

1. Establishment and Purpose

The purpose of the Matinas BioPharma Holdings, Inc. 2013 Equity Incentive Plan (the “Plan”) is to provide a means whereby eligible employees, officers, non-employee directors and other individual service providers develop a sense of proprietorship and personal involvement in the development and financial success of the Company and to encourage them to devote their best efforts to the business of the Company, thereby advancing the interests of the Company and its stockholders. The Company, by means of the Plan, seeks to retain the services of such eligible persons and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Subsidiaries.

The Plan permits the grant of Nonqualified Stock Options, Incentive Stock Options, Stock Appreciation Rights, Restricted Stock, Stock Units, Performance Shares, Performance Units, Incentive Bonus Awards, Other Cash-Based Awards and Other Stock-Based Awards. This Plan shall become effective upon the date set forth in Section 18.1 hereof.

2. Definitions

Wherever the following capitalized terms are used in the Plan, they shall have the meanings specified below:

2.1 “Affiliate” means, with respect to a Person, a Person that directly or indirectly Controls, or is Controlled by, or is under common Control with, such Person.

2.2 “Applicable Law” means the requirements relating to the administration of equity-based awards or equity compensation plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

2.3 “Award” means an award of a Stock Option, Stock Appreciation Right, Restricted Stock, Stock Unit, Performance Share, Performance Unit, Incentive Bonus Award, Other Cash-Based Award and/or Other Stock-Based Award granted under the Plan.

2.4 “Award Agreement” means either (i) a written or electronic agreement entered into between the Company and a Participant setting forth the terms and conditions of an Award including any amendment or modification thereof, or (ii) a written or electronic statement issued by the Company to a Participant describing the terms and provisions of such Award, including any amendment or modification thereof. The Committee may provide for the use of electronic, internet or other non-paper Award Agreements, and the use of electronic, internet or other non-paper means for the acceptance thereof and actions thereunder by a Participant. Each Award Agreement shall be subject to the terms and conditions of the Plan and need not be identical.

2.5 “Board” means the Board of Directors of the Company.

2.6 “Cause” means (i) conviction of, or the entry of a plea of guilty or no contest to, a felony or any other crime that causes the Company or its Affiliates public disgrace or disrepute, or materially and adversely affects the Company’s or its Affiliates’ operations or financial performance or the relationship the Company has with its customers, (ii) gross negligence or willful misconduct with respect to the Company or any of its Affiliates, including, without limitation fraud, embezzlement, theft or proven dishonesty in the course of his or her employment; (iii) refusal to perform any lawful, material obligation or fulfill any duty (other than any duty or obligation of the type described in clause (v) below) to the Company or its Affiliates (other than due to a Disability), which refusal, if curable, is not cured within 10 days after delivery of written notice thereof; (iv) material breach of any agreement with or duty owed to the Company or any of its Affiliates, which breach, if curable, is not cured within 10 days after the delivery of written notice thereof; or (v) any breach of any obligation or duty to the Company or any of its Affiliates (whether arising by statute, common law or agreement) relating to confidentiality, noncompetition, nonsolicitation or proprietary rights. Notwithstanding the foregoing, if a Participant and the Company (or any of its Affiliates) have entered into an employment agreement, consulting agreement or other similar agreement that specifically defines “cause,” then with respect to such Participant, “Cause” shall have the meaning defined in that employment agreement, consulting agreement or other agreement.

2.7 “Change in Control” means, unless otherwise provided in an Award Agreement, the occurrence of any one of the following events:

(i) any “person,” including a “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act, but excluding the Company, any entity controlling, controlled by or under common control with the Company, any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any such entity, and, with respect to any particular Participant, the Participant and any “group” (as such term is used in Section 13(d)(3) of the Exchange Act) of which the Participant is a member), is or becomes the “beneficial owner” (as defined in Rule 13(d)(3) under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of either (A) the combined voting power of the Company’s then outstanding securities or (B) the then outstanding shares of Common Stock (in either such case other than as a result of an acquisition of securities directly from the Company); or

(ii) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, shares representing in the aggregate 50% or more of the combined voting power of the securities of the corporation issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any); or

(iii) there shall occur (A) any sale, lease, exchange or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity, at least 50% of the combined voting power of the voting securities of which are owned by "persons" (as defined above) in substantially the same proportion as their ownership of the Company immediately prior to such sale or (B) the approval by stockholders of the Company of any plan or proposal for the liquidation or dissolution of the Company; or

(iv) the members of the Board at the beginning of any consecutive 24-calendar-month period (the "Incumbent Directors") cease for any reason other than due to death to constitute at least a majority of the members of the Board; provided that any Director whose election, or nomination for election by the Company's stockholders, was approved or ratified by a vote of at least a majority of the members of the Board then still in office who were members of the Board at the beginning of such 24-calendar-month period, shall be deemed to be an Incumbent Director.

Notwithstanding the foregoing, no event or condition shall constitute a Change in Control to the extent that, if it were, a 20% tax would be imposed under Section 409A of the Code; provided that, in such a case, the event or condition shall continue to constitute a Change in Control to the maximum extent possible (e.g., if applicable, in respect of vesting without an acceleration of distribution) without causing the imposition of such 20% tax.

2.8 "Code" means the Internal Revenue Code of 1986, as amended. For purposes of this Plan, references to sections of the Code shall be deemed to include references to any applicable regulations thereunder and any successor or similar provision.

2.9 "Committee" means the committee of the Board delegated with the authority to administer the Plan, or the full Board, as provided in Section 3 of the Plan. With respect to any decision involving an Award intended to satisfy the requirements of Section 162(m) of the Code, the Committee shall consist of two or more directors of the Company who are "outside directors" within the meaning of Section 162(m) of the Code. With respect to any decision relating to a Reporting Person, the Committee shall consist solely of two or more directors who are disinterested within the meaning of Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision. The fact that a Committee member shall fail to qualify under any of these requirements shall not invalidate an Award if the Award is otherwise validly made under the Plan. The Board may at any time appoint additional members to the Committee, remove and replace members of the Committee with or without cause, and fill vacancies on the Committee however caused.

2.10 "Common Stock" means the Company's Common Stock, par value \$.0001 per share.

2.11 “Company” means Matinas BioPharma Holdings, Inc., a Delaware corporation, and any successor thereto as provided in Section 16.8.

2.12 “Control” means, as to any Person, the power to direct or cause the direction of the management and policies of such Person, or the power to appoint directors of the Company, whether through the ownership of voting securities, by contract or otherwise (the terms “Controlled by” and “under common Control with” shall have correlative meanings).

2.13 “Date of Grant” means the date on which an Award under the Plan is granted by the Committee, or such later date as the Committee may specify to be the effective date of an Award.

2.14 “Disability” means a Participant being considered “disabled” within the meaning of Section 409A of the Code and Treasury Regulation 1.409A-3(i)(4), as well as any successor regulation or interpretation.

2.15 “Effective Date” means the date set forth in Section 18.1 hereof.

2.16 “Eligible Person” means any person who is an employee, officer, director, consultant, advisor or other individual service provider of the Company or any Subsidiary, or any person who is determined by the Committee to be a prospective employee, officer, director, consultant, advisor or other individual service provider of the Company or any Subsidiary.

2.17 “Exchange Act” means the Securities Exchange Act of 1934, as amended.

2.18 “Fair Market Value” of a share of Common Stock shall be, as applied to a specific Date of Grant (i) the closing price of a share of Common Stock on the most recent date preceding the Date of Grant on which trades of the Common Stock were recorded on the principal established stock exchange or national market system on which the Common Stock is then traded, or (ii) if the shares of Common Stock are not then traded on an established stock exchange or national market system but are then traded in an over-the-counter market, the average of the closing bid and asked prices for the shares of Common Stock in such over-the-counter market on the most recent date preceding such Date of Grant on which such closing bid and asked prices are available on such over-the-counter market or (iii) if the shares of Common Stock are not then listed on a national securities exchange or national market system or traded in an over-the-counter market, the price of a share of Common Stock as determined by the Committee in its discretion in a manner consistent with Section 409A of the Code and Treasury Regulation 1.409A-1(b)(5)(iv), as well as any successor regulation or interpretation.

2.19 “Incentive Bonus Award” means an Award granted under Section 12 of the Plan.

2.20 “Incentive Stock Option” means a Stock Option granted under Section 6 hereof that is intended to meet the requirements of Section 422 of the Code and the regulations promulgated thereunder.

- 2.21 “Nonqualified Stock Option” means a Stock Option granted under Section 6 hereof that is not an Incentive Stock Option.
- 2.22 “Other Cash-Based Award” means a contractual right granted to an Eligible Person under Section 13 hereof entitling such Eligible Person to receive a cash payment at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.
- 2.23 “Other Stock-Based Award” means a contractual right granted to an Eligible Person under Section 13 representing a notional unit interest equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions as are set forth in the Plan and the applicable Award Agreement.
- 2.24 “Participant” means any Eligible Person who holds an outstanding Award under the Plan.
- 2.25 “Person” shall mean any individual, partnership, firm, trust, corporation, limited liability company or other similar entity. When two or more Persons act as a partnership, limited partnership, syndicate or other group for the purpose of acquiring, holding or disposing of Common Stock, such partnership, limited partnership, syndicate or group shall be deemed a “Person”
- 2.26 “Performance Measures” mean the measures of performance of the Company and its Subsidiaries as more fully described in Section 14 of the Plan and Exhibit A hereto.
- 2.27 “Performance Shares” means a contractual right granted to an Eligible Person under Section 10 hereof representing a notional unit interest equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.
- 2.28 “Performance Unit” means a contractual right granted to an Eligible Person under Section 11 hereof representing a notional dollar interest as determined by the Committee to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.
- 2.29 “Plan” means this Matinas BioPharma Holdings, Inc. 2013 Equity Incentive Plan, as it may be amended from time to time.
- 2.30 “Reporting Person” means an officer, director or greater than ten percent stockholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.
- 2.31 “Restricted Stock Award” means a grant of shares of Common Stock to an Eligible Person under Section 8 hereof that are issued subject to such vesting and transfer restrictions and such other conditions as are set forth in the Plan and the applicable Award Agreement.

2.32 “Securities Act” means the Securities Act of 1933, as amended.

2.33 “Service” means a Participant’s employment or other service relationship with the Company or any Subsidiary.

2.34 “Stock Appreciation Right” means a contractual right granted to an Eligible Person under Section 7 hereof entitling such Eligible Person to receive a payment, upon the exercise of such right, in such amount and at such time, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.35 “Stock Option” means a contractual right granted to an Eligible Person under Section 6 hereof to purchase shares of Common Stock at such time and price, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.36 “Stock Unit Award” means a contractual right granted to an Eligible Person under Section 9 hereof representing notional unit interests equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.37 “Stockholders’ Agreement” means an agreement between a Participant and the Company as contemplated by Section 16.11.

2.38 “Subsidiary” means an entity (whether or not a corporation) that is wholly or majority owned or controlled, directly or indirectly, by the Company; provided, however, that with respect to Incentive Stock Options, the term “Subsidiary” shall include only an entity that qualifies under section 424(f) of the Code as a “subsidiary corporation” with respect to the Company.

3. Administration

3.1 Committee Members. The Plan shall be administered by the Committee; provided that the entire Board may act in lieu of the Committee on any matter, subject to Code Section 162(m) and 16b-3 Award requirements referred to in Section 2.9 of the Plan. If and to the extent permitted by Applicable Law, the Committee may authorize one or more Reporting Persons (or other officers) to make Awards to Eligible Persons who are not Reporting Persons (or other officers whom the Committee has specifically authorized to make Awards). Subject to Applicable Law and the restrictions set forth in the Plan, the Committee may delegate administrative functions to individuals who are Reporting Persons, officers, or employees of the Company or its Subsidiaries.

3.2 Committee Authority. The Committee shall have such powers and authority as may be necessary or appropriate for the Committee to carry out its functions as described in the Plan. Subject to the express limitations of the Plan, the Committee shall have authority in its discretion to determine the Eligible Persons to whom, and the time or times at which, Awards may be granted, the number of shares, units or other rights subject to each Award, the exercise, base or purchase price of an Award (if any), the time or times at which an Award will become vested, exercisable or payable, the performance criteria, performance goals and other conditions of an Award, the duration of the Award, and all other terms of the Award. Subject to the terms of the Plan, the Committee shall have the authority to amend the terms of an Award in any manner that is not inconsistent with the Plan (including to extend the post-termination exercisability period of Stock Options and Stock Appreciation Rights), provided that no such action shall adversely affect the rights of a Participant with respect to an outstanding Award without the Participant's consent. The Committee shall also have discretionary authority to interpret the Plan, to make all factual determinations under the Plan, and to make all other determinations necessary or advisable for Plan administration, including, without limitation, to correct any defect, to supply any omission or to reconcile any inconsistency in the Plan or any Award Agreement hereunder. The Committee may prescribe, amend, and rescind rules and regulations relating to the Plan. The Committee's determinations under the Plan need not be uniform and may be made by the Committee selectively among Participants and Eligible Persons, whether or not such persons are similarly situated. The Committee shall, in its discretion, consider such factors as it deems relevant in making its interpretations, determinations and actions under the Plan including, without limitation, the recommendations or advice of any officer or employee of the Company or such attorneys, consultants, accountants or other advisors as it may select. All interpretations, determinations, and actions by the Committee shall be final, conclusive, and binding upon all parties.

3.3 No Liability; Indemnification. Neither the Board nor any Committee member, nor any Person acting at the direction of the Board or the Committee, shall be liable for any act, omission, interpretation, construction or determination made in good faith with respect to the Plan, any Award or any Award Agreement. The Company and its Subsidiaries shall pay or reimburse any member of the Committee, as well as any other Person who takes action on behalf of the Plan, for all reasonable expenses incurred with respect to the Plan, and to the full extent allowable under Applicable Law shall indemnify each and every one of them for any claims, liabilities, and costs (including reasonable attorney's fees) arising out of their good faith performance of duties on behalf of the Company with respect to the Plan. The Company and its Subsidiaries may, but shall not be required to, obtain liability insurance for this purpose.

4. Shares Subject to the Plans

4.1 Share Limitation. Subject to adjustment pursuant to Section 4.2 hereof, the maximum aggregate number of shares of Common Stock which may be issued under all Awards granted to Participants under the Plan shall be 8,250,000 shares, all of which may, but need not, be issued in respect of Incentive Stock Options. Shares of Common Stock issued under the Plan may be either authorized but unissued shares or shares held in the Company's treasury. Any shares of Common Stock subject to Awards that are settled in Common Stock shall be counted against the maximum share limitations of this Section 4.1 as one share of Common Stock for every share of Common Stock subject thereto, regardless of the number of shares of Common Stock actually issued to settle the Stock Option or Stock Appreciation Right upon exercise. To the extent that any Award under the Plan payable in shares of Common Stock is forfeited, cancelled, returned to the Company for failure to satisfy vesting requirements or upon the occurrence of other forfeiture events, or otherwise terminates without payment being made thereunder, the shares of Common Stock covered thereby will no longer be counted against the foregoing maximum share limitations and may again be made subject to Awards under the Plan pursuant to such limitations. Shares of Common Stock that otherwise would have been issued upon the exercise of a Stock Option or in payment with respect to any other form of Award, that are surrendered in payment or partial payment of taxes required to be withheld with respect to the exercise of such Stock Option or the making of such payment, will no longer be counted against the foregoing maximum share limitations and may again be made subject to Awards under the Plan pursuant to such limitations.

4.2 Adjustments. If there shall occur any change with respect to the outstanding shares of Common Stock by reason of any recapitalization, reclassification, stock dividend, extraordinary dividend, stock split, reverse stock split, or other distribution with respect to the shares of Common Stock, or any merger, reorganization, consolidation, combination, spin-off or other similar corporate change, or any other change affecting the Common Stock, the Committee shall, in the manner and to the extent that it deems appropriate and equitable to the Participants and consistent with the terms of the Plan, cause an adjustment to be made in (i) the maximum numbers and kind of shares provided in Section 4.1 hereof, (ii) the numbers and kind of shares of Common Stock, units, or other rights subject to then outstanding Awards, (iii) the price for each share or unit or other right subject to then outstanding Awards, (iv) the performance measures or goals relating to the vesting of an Award and (v) any other terms of an Award that are affected by the event to prevent dilution or enlargement of a Participant's rights under an Award. Notwithstanding the foregoing, in the case of Incentive Stock Options, any such adjustments shall, to the extent practicable, be made in a manner consistent with the requirements of Section 424(a) of the Code.

5. Participation and Awards

5.1 Designation of Participants. All Eligible Persons are eligible to be designated by the Committee to receive Awards and become Participants under the Plan. The Committee has the authority, in its discretion, to determine and designate from time to time those Eligible Persons who are to be granted Awards, the types of Awards to be granted and the number of shares of Common Stock or units subject to Awards granted under the Plan. In selecting Eligible Persons to be Participants and in determining the type and amount of Awards to be granted under the Plan, the Committee shall consider any and all factors that it deems relevant or appropriate.

5.2 Determination of Awards. The Committee shall determine the terms and conditions of all Awards granted to Participants in accordance with its authority under Section 3.2 hereof. An Award may consist of one type of right or benefit hereunder or of two or more such rights or benefits granted in tandem or in the alternative. To the extent deemed appropriate by the Committee, an Award shall be evidenced by an Award Agreement as described in Section 16.1 hereof.

6. Stock Options

6.1 Grant of Stock Option. A Stock Option may be granted to any Eligible Person selected by the Committee. Subject to the provisions of Section 6.6 hereof and Section 422 of the Code, each Stock Option shall be designated, in the discretion of the Committee, as an Incentive Stock Option or as a Nonqualified Stock Option.

6.2 Exercise Price. The exercise price per share of a Stock Option shall not be less than 100% of the Fair Market Value of a share of Common Stock on the Date of Grant, subject to adjustments as provided for under Section 4.2, provided that the Committee may in its discretion specify for any Stock Option an exercise price per share that is higher than the Fair Market Value on the Date of Grant. The Exercise Price of any Stock Option granted upon the effectiveness of an initial public offering of the Common Stock shall be the opening offering price per share of the Common Stock in connection with such initial public offering.

6.3 Vesting of Stock Options. The Committee shall in its discretion prescribe the time or times at which, or the conditions upon which, a Stock Option or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Option may be based on the continued Service of the Participant with the Company or a Subsidiary for a specified time period (or periods) and/or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting or exercisability of any Stock Option at any time. The Committee in its sole discretion may allow a Participant to exercise unvested Nonqualified Stock Options, in which case the shares of Common Stock then issued shall be Restricted Stock having analogous vesting restrictions to the unvested Nonqualified Stock Options.

6.4 Term of Stock Options. The Committee shall in its discretion prescribe in an Award Agreement the period during which a vested Stock Option may be exercised, provided that the maximum term of a Stock Option shall be ten (10) years from the Date of Grant. A Stock Option may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a Participant's Service with the Company or any Subsidiary, including by reason of voluntary resignation, death, Disability, termination for Cause or any other reason. Except as otherwise provided in this Section 6 or in an Award Agreement as such agreement may be amended from time to time upon authorization of the Committee, no Stock Option may be exercised at any time during the term thereof unless the Participant is then in the Service of the Company or one of its Subsidiaries.

6.5 Stock Option Exercise. Subject to such terms and conditions as shall be specified in an Award Agreement, a Stock Option may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company, and payment of the aggregate exercise price by certified or bank check, or such other means as the Committee may accept. As set forth in an Award Agreement or otherwise determined by the Committee, in its sole discretion, at or after grant, payment in full or in part of the exercise price of an Option may be made: (i) in the form of shares of Common Stock that have been held by the Participant for such period as the Committee may deem appropriate for accounting purposes or otherwise, valued at the Fair Market Value of such shares on the date of exercise; (ii) by surrendering to the Company shares of Common Stock otherwise receivable on exercise of the Option; (iii) by a cashless exercise program implemented by the Committee in connection with the Plan; and/or (iv) by such other method as may be approved by the Committee and set forth in an Award Agreement. Subject to any governing rules or regulations, as soon as practicable after receipt of written notification of exercise and full payment of the exercise price and satisfaction of any applicable tax withholding pursuant to Section 17.5, the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount based upon the number of shares of Common Stock purchased under the Option. Unless otherwise determined by the Committee, all payments under all of the methods indicated above shall be paid in United States dollars or shares of Common Stock, as applicable.

6.6 Additional Rules for Incentive Stock Options.

(a) Eligibility. An Incentive Stock Option may only be granted to an Eligible Person who is considered an employee under Treasury Regulation §1.421-7(h) of the Company or any Subsidiary.

(b) Annual Limits. No Incentive Stock Option shall be granted to an Eligible Person as a result of which the aggregate Fair Market Value (determined as of the Date of Grant) of the stock with respect to which Incentive Stock Options are exercisable for the first time in any calendar year under the Plan and any other stock option plans of the Company or any Subsidiary would exceed \$100,000, determined in accordance with Section 422(d) of the Code. This limitation shall be applied by taking Incentive Stock Options into account in the order in which granted.

(c) Ten Percent Stockholders. If a Stock Option granted under the Plan is intended to be an Incentive Stock Option, and if the Participant, at the time of grant, owns stock possessing ten percent or more of the total combined voting power of all classes of Common Stock of the Company or any Subsidiary, then (A) the Stock Option exercise price per share shall in no event be less than 110% of the Fair Market Value of the Common Stock on the date of such grant and (B) such Stock Option shall not be exercisable after the expiration of five (5) years following the date such Stock Option is granted.

(d) Termination of Employment. An Award of an Incentive Stock Option shall provide that such Stock Option may be exercised not later than three (3) months following termination of employment of the Participant with the Company and all Subsidiaries, or not later than one (1) year following death or a permanent and total disability within the meaning of Section 22(e)(3) of the Code, as and to the extent determined by the Committee to comply with the requirements of Section 422 of the Code.

(e) Disqualifying Dispositions. If shares of Common Stock acquired by exercise of an Incentive Stock Option are disposed of within two (2) years following the Date of Grant or one (1) year following the transfer of such shares to the Participant upon exercise, the Participant shall, promptly following such disposition, notify the Company in writing of the date and terms of such disposition and provide such other information regarding the disposition as the Company may reasonably require.

7. Stock Appreciation Rights

7.1 Grant of Stock Appreciation Rights. A Stock Appreciation Right may be granted to any Eligible Person selected by the Committee. Stock Appreciation Rights may be granted on a basis that allows for the exercise of the right by the Participant or that provides for the automatic payment of the right upon a specified date or event.

7.2 Base Price. The base price of a Stock Appreciation Right shall be determined by the Committee in its sole discretion; provided, however, that the base price for any grant of a Stock Appreciation Right shall not be less than 100% of the Fair Market Value of a share of Common Stock on the Date of Grant, subject to adjustments as provided for under Section 4.2.

7.3 Vesting Stock Appreciation Rights. The Committee shall in its discretion prescribe the time or times at which, or the conditions upon which, a Stock Appreciation Right or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Appreciation Right may be based on the continued Service of a Participant with the Company or a Subsidiary for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting or exercisability of any Stock Appreciation Right at any time.

7.4 Term of Stock Appreciation Rights. The Committee shall in its discretion prescribe in an Award Agreement the period during which a vested Stock Appreciation Right may be exercised, provided that the maximum term of a Stock Appreciation Right shall be ten (10) years from the Date of Grant. A Stock Appreciation Right may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a Participant's Service with the Company or any Subsidiary, including by reason of voluntary resignation, death, Disability, termination for Cause or any other reason. Except as otherwise provided in this Section 7 or in an Award Agreement as such agreement may be amended from time to time upon authorization of the Committee, no Stock Appreciation Right may be exercised at any time during the term thereof unless the Participant is then in the Service of the Company or one of its Subsidiaries.

7.5 Payment of Stock Appreciation Rights. Subject to such terms and conditions as shall be specified in an Award Agreement, a vested Stock Appreciation Right may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company and payment of any exercise price. Upon the exercise of a Stock Appreciation Right and payment of any applicable exercise price, a Participant shall be entitled to receive an amount determined by multiplying: (i) the excess of the Fair Market Value of a share of Common Stock on the date of exercise of the Stock Appreciation Right over the base price of such Stock Appreciation Right, by (ii) the number of shares as to which such Stock Appreciation Right is exercised. Payment of the amount determined under the immediately preceding sentence may be made, as approved by the Committee and set forth in the Award Agreement, in shares of Common Stock valued at their Fair Market Value on the date of exercise, in cash, or in a combination of shares of Common Stock and cash, subject to applicable tax withholding requirements set forth in Section 17.5. If Stock Appreciation Rights are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

8. Restricted Stock Awards

8.1 Grant of Restricted Stock Awards. A Restricted Stock Award may be granted to any Eligible Person selected by the Committee. The Committee may require the payment by the Participant of a specified purchase price in connection with any Restricted Stock Award. The Committee may provide in an Award Agreement for the payment of dividends and distributions to the Participant at such times as paid to stockholders generally or at the times of vesting or other payment of the Restricted Stock Award. If any dividends or distributions are paid in stock while a Restricted Stock Award is subject to restrictions under Section 8.3 of the Plan or Code Section 162(m), the dividends or other distributions shares shall be subject to the same restrictions on transferability as the shares of Common Stock to which they were paid unless otherwise set forth in the Award Agreement. The Committee may also subject the grant of any Restricted Stock Award to the execution of a voting agreement with the Company or with any Affiliate of the Company.

8.2 Vesting Requirements. The restrictions imposed on shares of Common Stock granted under a Restricted Stock Award shall lapse in accordance with the vesting requirements specified by the Committee in the Award Agreement. Upon vesting of a Restricted Stock Award, such Award shall be subject to the tax withholding requirement set forth in Section 17.5. The requirements for vesting of a Restricted Stock Award may be based on the continued Service of the Participant with the Company or its Subsidiaries for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting of a Restricted Stock Award at any time. If the vesting requirements of a Restricted Stock Award shall not be satisfied, the Award shall be forfeited and the shares of Common Stock subject to the Award shall be returned to the Company. In the event that the Participant paid any purchase price with respect to such forfeited shares, unless otherwise provided by the Committee in an Award Agreement, the Company will refund to the Participant the lesser of (i) such purchase price and (ii) the Fair Market Value of such shares on the date of forfeiture.

8.3 Restrictions. Shares granted under any Restricted Stock Award may not be transferred, assigned or subject to any encumbrance, pledge, or charge until all applicable restrictions are removed or have expired, unless otherwise allowed by the Committee. The Committee may require in an Award Agreement that certificates representing the shares granted under a Restricted Stock Award bear a legend making appropriate reference to the restrictions imposed, and that certificates representing the shares granted or sold under a Restricted Stock Award will remain in the physical custody of an escrow holder until all restrictions are removed or have expired.

8.4 Rights as Stockholder. Subject to the foregoing provisions of this Section 8 and the applicable Award Agreement, the Participant to whom a Restricted Stock Award is made shall have all rights of a stockholder with respect to the shares granted to the Participant under the Restricted Stock Award, including the right to vote the shares and receive all dividends and other distributions paid or made with respect thereto, unless the Committee determines otherwise at the time the Restricted Stock Award is granted.

8.5 Section 83(b) Election. If a Participant makes an election pursuant to Section 83(b) of the Code with respect to a Restricted Stock Award, the Participant shall file, within 30 days following the Date of Grant, a copy of such election with the Company (directed to the Secretary thereof) and with the Internal Revenue Service, in accordance with the regulations under Section 83 of the Code. The Committee may provide in an Award Agreement that the Restricted Stock Award is conditioned upon the Participant's making or refraining from making an election with respect to the Award under Section 83(b) of the Code.

9. Stock Unit Awards

9.1 Grant of Stock Unit Awards. A Stock Unit Award may be granted to any Eligible Person selected by the Committee. The value of each stock unit under a Stock Unit Award is equal to the Fair Market Value of the Common Stock on the applicable date or time period of determination, as specified by the Committee. A Stock Unit Award shall be subject to such restrictions and conditions as the Committee shall determine. A Stock Unit Award may be granted together with a dividend equivalent right with respect to the shares of Common Stock subject to the Award, which may be accumulated and may be deemed reinvested in additional stock units, as determined by the Committee in its discretion. If any dividend equivalents are paid while a Stock Unit Award is subject to restrictions under Section 9 of the Plan or Code Section 162(m), the dividend equivalents shall be subject to the same restrictions on transferability as the Stock Units to which they were paid, unless otherwise set forth in the Award Agreement.

9.2 Vesting of Stock Unit Awards. On the Date of Grant, the Committee shall, in its discretion, determine any vesting requirements with respect to a Stock Unit Award, which shall be set forth in the Award Agreement. The requirements for vesting of a Stock Unit Award may be based on the continued Service of the Participant with the Company or its Subsidiaries for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting of a Stock Unit Award at any time. A Stock Unit Award may also be granted on a fully vested basis, with a deferred payment date as may be determined by the Committee or elected by the Participant in accordance with rules established by the Committee.

9.3 Payment of Stock Unit Awards. A Stock Unit Award shall become payable to a Participant at the time or times determined by the Committee and set forth in the Award Agreement, which may be upon or following the vesting of the Award. Payment of a Stock Unit Award may be made, at the discretion of the Committee, in cash or in shares of Common Stock, or in a combination thereof as described in the Award Agreement, subject to applicable tax withholding requirements set forth in Section 17.5. Any cash payment of a Stock Unit Award shall be made based upon the Fair Market Value of the Common Stock, determined on such date or over such time period as determined by the Committee. Notwithstanding the foregoing, unless specified otherwise in the Award Agreement, any Stock Unit, whether settled in Common Stock or cash, shall be paid no later than two and one-half months after the later of the calendar year or fiscal year in which the Stock Units vest. If Stock Unit Awards are settled in shares of Common Stock, then as soon as practicable following the date of settlement, the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

10. Performance Shares

10.1 Grant of Performance Shares. Performance Shares may be granted to any Eligible Person selected by the Committee. A Performance Share Award shall be subject to such restrictions and condition as the Committee shall specify. A Performance Share Award may be granted with a dividend equivalent right with respect to the shares of Common Stock subject to the Award, which may be accumulated and may be deemed reinvested in additional stock units, as determined by the Committee in its discretion.

10.2 Value of Performance Shares. Each Performance Share shall have an initial value equal to the Fair Market Value of a Share on the Grant Date. The Committee shall set performance goals in its discretion that, depending on the extent to which they are met over a specified time period, shall determine the number of Performance Shares that shall be paid to a Participant.

10.3 Earning of Performance Shares. After the applicable time period has ended, the number of Performance Shares earned by the Participant over such time period shall be determined as a function of the extent to which the applicable corresponding performance goals have been achieved. This determination shall be made solely by the Committee. The Committee may, in its discretion, waive any performance or vesting conditions relating to a Performance Share Award.

10.4 Form and Timing of Payment of Performance Shares. The Committee shall pay at the close of the applicable Performance Period, or as soon as practicable thereafter, any earned Performance Shares in the form of cash or in shares of Common Stock or in a combination thereof, as specified in a Participant's Award Agreement, subject to applicable tax withholding requirements set forth in Section 17.5. Notwithstanding the foregoing, all Performance Shares shall be paid no later than two and one-half months following the later of the calendar year or fiscal year in which such Performance Shares vest. Any shares of Common Stock paid to a Participant under this Section 10.4 may be subject to any restrictions deemed appropriate by the Committee. If Performance Shares are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

11. Performance Units

11.1 Grant of Performance Units. Performance Units may be granted to any Eligible Person selected by the Committee. A Performance Unit Award shall be subject to such restrictions and condition as the Committee shall specify in a Participant's Award Agreement.

11.2 Value of Performance Units. Each Performance Unit shall have an initial notional value equal to a dollar amount determined by the Committee, in its sole discretion. The Committee shall set performance goals in its discretion that, depending on the extent to which they are met over a specified time period, will determine the number of Performance Units that shall be settled and paid to the Participant.

11.3 Earning of Performance Units. After the applicable time period has ended, the number of Performance Units earned by the Participant, and the amount payable in cash, in shares or in a combination thereof, over such time period shall be determined as a function of the extent to which the applicable corresponding performance goals have been achieved. This determination shall be made solely by the Committee. The Committee may, in its discretion, waive any performance or vesting conditions relating to a Performance Unit Award

11.4 Form and Timing of Payment of Performance Units. The Committee shall pay at the close of the applicable Performance Period, or as soon as practicable thereafter, any earned Performance Units in the form of cash or in shares of Common Stock or in a combination thereof, as specified in a Participant's Award Agreement, subject to applicable tax withholding requirements set forth in Section 17.5. Notwithstanding the foregoing, all Performance Units shall be paid no later than two and one-half months following the later of the calendar year or fiscal year in which such Performance Units vest. Any shares of Common Stock paid to a Participant under this Section 11.4 may be subject to any restrictions deemed appropriate by the Committee. If Performance Units are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

12. Incentive Bonus Awards

12.1 Incentive Bonus Awards. The Committee, at its discretion, may grant Incentive Bonus Awards to such Participants as it may designate from time to time. The terms of a Participant's Incentive Bonus Award shall be set forth in the Participant's Award Agreement. Each Award Agreement shall specify such general terms and conditions as the Committee shall determine.

12.2 Incentive Bonus Award Performance Criteria. The determination of Incentive Bonus Awards for a given year or years may be based upon the attainment of specified levels of Company or Subsidiary performance as measured by pre-established, objective performance criteria determined at the discretion of the Committee, including any or all of the Performance Measures set forth in Exhibit A hereto. The Committee shall (i) select those Participants who shall be eligible to receive an Incentive Bonus Award, (ii) determine the performance period, (iii) determine target levels of performance, and (iv) determine the level of Incentive Bonus Award to be paid to each selected Participant upon the achievement of each performance level. The Committee generally shall make the foregoing determinations prior to the commencement of services to which an Incentive Bonus Award relates (or for Incentive Bonus Awards intended to satisfy Code Section 162(m), within the permissible time period established for exemption under Code Section 162(m) and the regulations promulgated thereunder), to the extent applicable, and while the outcome of the performance goals and targets is uncertain.

12.3 Payment of Incentive Bonus Awards.

(a) Incentive Bonus Awards shall be paid in cash or Common Stock, as set forth in a Participant's Award Agreement. Payments shall be made following a determination by the Committee that the performance targets were attained and shall be made within two and one-half months after the later of the end of the fiscal or calendar year in which the Incentive Award is no longer subject to a substantial risk of forfeiture.

(b) The amount of an Incentive Bonus Award to be paid upon the attainment of each targeted level of performance shall equal a percentage of a Participant's base salary for the fiscal year, a fixed dollar amount, or such other formula, as determined by the Committee.

13. Other Cash-Based Awards and Other Stock-Based Awards

13.1 Other Cash-Based and Stock-Based Awards. The Committee may grant other types of equity-based or equity-related Awards not otherwise described by the terms of this Plan (including the grant or offer for sale of unrestricted Shares) in such amounts and subject to such terms and conditions, as the Committee shall determine. Such Awards may involve the transfer of actual shares of Common Stock to a Participant, or payment in cash or otherwise of amounts based on the value of shares of Common Stock. In addition, the Committee, at any time and from time to time, may grant Cash-Based Awards to a Participant in such amounts and upon such terms as the Committee shall determine, in its sole discretion.

13.2 Value of Cash-Based Awards and Other Stock-Based Awards. Each Other Stock-Based Award shall be expressed in terms of shares of Common Stock or units based on shares of Common Stock, as determined by the Committee, in its sole discretion. Each Other Cash-Based Award shall specify a payment amount or payment range as determined by the Committee, in its sole discretion. If the Committee exercises its discretion to establish performance goals, the value of Other Cash-Based Awards that shall be paid to the Participant will depend on the extent to which such performance goals are met.

13.3 Payment of Cash-Based Awards and Other Stock-Based Awards. Payment, if any, with respect to Other Cash-Based Awards and Other Stock-Based Award shall be made in accordance with the terms of the Award, in cash or Shares as the Committee determines.

14. Code Section 162(m) Awards

14.1 Awards Granted Under Code Section 162(m). The Committee, at its discretion, may designate that a Restricted Stock, Stock Unit, Performance Share, Performance Unit, Incentive Bonus, Other Stock Award or Other Cash Award shall be granted as a Code Section 162(m) Award. Such an Award must comply with the following additional requirements, which shall control over any other provision that pertains to such Award.

14.2 Performance Measures.

(a) Each Code Section 162(m) Award shall be based upon the attainment of specified levels of pre-established, objective Performance Measures that are intended to satisfy the performance based compensation exemption requirements of Code Section 162(m) and the regulations promulgated thereunder. Further, at the discretion of the Committee, an Award also may be subject to goals and restrictions in addition to the Performance Measures.

(b) "Performance Measures" means the measures of performance of the Company and its Subsidiaries used to determine a Participant's entitlement to an Award under the Plan. Such performance measures shall have the same meanings as used in the Company's financial statements, or, if such terms are not used in the Company's financial statements, they shall have the meaning applied pursuant to generally accepted accounting principles, or as used generally in the Company's industry. Performance Measures shall be calculated with respect to the Company and each Subsidiary consolidated therewith for financial reporting purposes or such division or other business unit as may be selected by the Committee. For purposes of the Plan, the Performance Measures shall be calculated in accordance with generally accepted accounting principles to the extent applicable, but, unless otherwise determined by the Committee, prior to the accrual or payment of any Award under this Plan for the same performance period and excluding the effect (whether positive or negative) of any change in accounting standards or any extraordinary, unusual or nonrecurring item, as determined by the Committee, occurring after the establishment of the performance goals. Performance Measures shall be based on one or more of the criteria set forth in Exhibit A which is hereby incorporated by reference, as determined by the Committee.

(c) For each Code Section 162(m) Award, the Committee shall (i) select the Participant who shall be eligible to receive a Code Section 162(m) Award, (ii) determine the applicable performance period, (iii) determine the target levels of the Company or Subsidiary Performance Measures, and (iv) determine the number of shares of Common Stock or cash or other property (or combination thereof) subject to an Award to be paid to each selected Participant. The Committee shall make the foregoing determinations prior to the commencement of services to which an Award relates (or within the permissible time period established under Code Section 162(m)) and while the outcome of the performance goals and targets is uncertain.

14.3 Attainment of Code Section 162(m) Goals.

(a) After each performance period, the Committee shall certify in writing (which may include the written minutes for any meeting of the Committee): (i) if the Company has attained the performance targets, and (ii) the number of shares pursuant to the Award that are to become freely transferable, if applicable, or the cash or other property payable under the Award. The Committee shall have no discretion to waive all or part of the conditions, goals and restrictions applicable to the receipt of full or partial payment of an Award except in the case of a Change in Control of the Corporation or the death or Disability of a Participant.

(b) Notwithstanding the foregoing, the Committee may, in its discretion, reduce any Award based on such factors as may be determined by the Committee, including, without limitation, a determination by the Committee that such a reduction is appropriate in light of pay practices of competitors, or the performance of the Company, a Subsidiary or a Participant relative to the performance of competitors, or performance with respect to the Company's strategic business goals.

14.4 Individual Participant Limitations. Subject to adjustment as provided in Section 4.2, with respect to Awards intended to be Code Section 162(m) Awards and Stock Option and Stock Appreciation Rights Awards intended to be exempt from the deductibility limitation in Code Section 162(m), no Participant in any one fiscal year of the Company may be granted (a) Stock Options or Stock Appreciation Rights with respect to more than 1,500,000 shares of Common Stock in the aggregate; and (b) Restricted Stock, Stock Units, Performance Shares Awards, Incentive Bonus Awards and Other Stock Based Awards that are denominated in shares of Common Stock with respect to more than 1,500,000 shares in the aggregate. The maximum dollar value payable to any Participant in any one (1) fiscal year of the Company with respect to Stock Units, Performance Units or Incentive Bonus Awards or Other Stock-Based Awards that may be settled in cash or other property (other than Common Stock) is \$500,000. If an Award is cancelled, the cancelled Award shall continue to be counted towards the applicable limitations.

15. Change in Control

15.1 Effect of Change in Control.

(a) The Committee may, at the time of the grant of an Award and as set forth in an Award Agreement, provide for the effect of a "Change in Control" on an Award. Such provisions may include any one or more of the following: (i) the acceleration or extension of time periods for purposes of exercising, vesting in, or realizing gain from any Award, (ii) the elimination or modification of performance or other conditions related to the payment or other rights under an Award, (iii) provision for the cash settlement of an Award for an equivalent cash value, as determined by the Committee, or (iv) such other modification or adjustment to an Award as the Committee deems appropriate to maintain and protect the rights and interests of Participants upon or following a Change in Control. To the extent necessary for compliance with Section 409A of the Code, an Award Agreement shall provide that an Award subject to the requirements of Section 409A that would otherwise become payable upon a Change in Control shall only become payable to the extent that the requirements for a "change in control" for purposes of Section 409A have been satisfied.

(b) Notwithstanding anything to the contrary set forth in the Plan, unless otherwise provided by an Award Agreement, upon or in anticipation of any Change in Control, the Committee may, in its sole and absolute discretion and without the need for the consent of any Participant, take one or more of the following actions contingent upon the occurrence of that Change in Control: (i) cause any or all outstanding Stock Options and Stock Appreciation Rights held by Participants affected by the Change in Control to become vested and immediately exercisable, in whole or in part; (ii) cause any or all outstanding Restricted Stock, Stock Units, Performance Shares, Performance Units, Incentive Bonus Award and any other Award held by Participants affected by the Change in Control to become non-forfeitable, in whole or in part; (iii) cancel any Stock Option or Stock Appreciation Right in exchange for a substitute option in a manner consistent with the requirements of Treasury Regulation. §1.424-1(a) (notwithstanding the fact that the original Stock Option may never have been intended to satisfy the requirements for treatment as an Incentive Stock Option); (iv) cancel any Restricted Stock, Stock Units, Performance Shares or Performance Units held by a Participant in exchange for restricted stock or performance shares of or stock or performance units in respect of the capital stock of any successor corporation; (v) redeem any Restricted Stock held by a Participant affected by the Change in Control for cash and/or other substitute consideration with a value equal to the Fair Market Value of an unrestricted share of Common Stock on the date of the Change in Control; (vi) cancel any Stock Option or Stock Appreciation Right held by a Participant affected by the Change in Control in exchange for cash and/or other substitute consideration with a value equal to (A) the number of shares of Common Stock subject to that Stock Option or Stock Appreciation Right, multiplied by (B) the difference, if any, between the Fair Market Value per share of Common Stock on the date of the Change in Control and the exercise price of that Stock Option or Stock Appreciation Right; *provided*, that if the Fair Market Value per share of Common Stock on the date of the Change in Control does not exceed the exercise price of any such Stock Option or Stock Appreciation Right, the Committee may cancel that Stock Option or Stock Appreciation Right without any payment of consideration therefor; (vii) cancel any Stock Unit or Performance Unit held by a Participant affected by the Change in Control in exchange for cash and/or other substitute consideration with a value equal to the Fair Market Value per share of Common Stock on the date of the Change in Control (provided that such cancelation and exchange does not violate Section 409A of the Code); or (ix) make such other modifications, adjustments or amendments to outstanding Awards or this Plan as the Committee deems necessary or appropriate.

16. General Provisions

16.1 Award Agreement. To the extent deemed necessary by the Committee, an Award under the Plan shall be evidenced by an Award Agreement in a written or electronic form approved by the Committee setting forth the number of shares of Common Stock or units subject to the Award, the exercise price, base price, or purchase price of the Award, the time or times at which an Award will become vested, exercisable or payable and the term of the Award. The Award Agreement may also set forth the effect on an Award of termination of Service under certain circumstances. The Award Agreement shall be subject to and incorporate, by reference or otherwise, all of the applicable terms and conditions of the Plan, and may also set forth other terms and conditions applicable to the Award as determined by the Committee consistent with the limitations of the Plan. Award Agreements evidencing Incentive Stock Options shall contain such terms and conditions as may be necessary to meet the applicable provisions of Section 422 of the Code. The grant of an Award under the Plan shall not confer any rights upon the Participant holding such Award other than such terms, and subject to such conditions, as are specified in the Plan as being applicable to such type of Award (or to all Awards) or as are expressly set forth in the Award Agreement.

16.2 Forfeiture Events/Representations. The Committee may specify in an Award Agreement at the time of the Award that the Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events shall include, but shall not be limited to, termination of Service for Cause, violation of material Company policies, breach of noncompetition, confidentiality or other restrictive covenants that may apply to the Participant, or other conduct by the Participant that is detrimental to the business or reputation of the Company. The Committee may also specify in an Award Agreement that the Participant's rights, payments and benefits with respect to an Award shall be conditioned upon the Participant making a representation regarding compliance with noncompetition, confidentiality or other restrictive covenants that may apply to the Participant and providing that the Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment on account of a breach of such representation. In addition and without limitation of the foregoing, any amounts paid hereunder shall be subject to recoupment in accordance with The Dodd–Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any “clawback” policy adopted by the Company or as is otherwise required by applicable law or stock exchange listing condition.

16.3 No Assignment or Transfer; Beneficiaries.

(a) Awards under the Plan shall not be assignable or transferable by the Participant, except by will or by the laws of descent and distribution, and shall not be subject in any manner to assignment, alienation, pledge, encumbrance or charge. Notwithstanding the foregoing, the Committee may provide in an Award Agreement that the Participant shall have the right to designate a beneficiary or beneficiaries who shall be entitled to any rights, payments or other benefits specified under an Award following the Participant's death. During the lifetime of a Participant, an Award shall be exercised only by such Participant or such Participant's guardian or legal representative. In the event of a Participant's death, an Award may, to the extent permitted by the Award Agreement, be exercised by the Participant's beneficiary as designated by the Participant in the manner prescribed by the Committee or, in the absence of an authorized beneficiary designation, by the legatee of such Award under the Participant's will or by the Participant's estate in accordance with the Participant's will or the laws of descent and distribution, in each case in the same manner and to the same extent that such Award was exercisable by the Participant on the date of the Participant's death.

(b) Limited Transferability Rights. Notwithstanding anything else in this Section 16.3 to the contrary, the Committee may in its discretion provide in an Award Agreement that an Award in the form of a Nonqualified Stock Option, share-settled Stock Appreciation Right, Restricted Stock, Performance Share or share-settled Other Stock-Based Award may be transferred, on such terms and conditions as the Committee deems appropriate, either (i) by instrument to the Participant's “Immediate Family” (as defined below), (ii) by instrument to an inter vivos or testamentary trust (or other entity) in which the Award is to be passed to the Participant's designated beneficiaries, or (iii) by gift to charitable institutions. Any transferee of the Participant's rights shall succeed and be subject to all of the terms of the applicable Award Agreement and the Plan. “Immediate Family” means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and shall include adoptive relationships.

16.4 Rights as Stockholder. A Participant shall have no rights as a holder of shares of Common Stock with respect to any unissued securities covered by an Award until the date the Participant becomes the holder of record of such securities. Except as provided in Section 4.2 hereof, no adjustment or other provision shall be made for dividends or other stockholder rights, except to the extent that the Award Agreement provides for dividend payments or dividend equivalent rights.

16.5 Employment or Service. Nothing in the Plan, in the grant of any Award or in any Award Agreement shall confer upon any Eligible Person or Participant any right to continue in the Service of the Company or any of its Subsidiaries, or interfere in any way with the right of the Company or any of its Subsidiaries to terminate the employment or other service relationship of an Eligible Person or Participant for any reason at any time.

16.6 Fractional Shares. In the case of any fractional share or unit resulting from the grant, vesting, payment or crediting of dividends or dividend equivalents under an Award, the Committee shall have the discretionary authority to (i) disregard such fractional share or unit, (ii) round such fractional share or unit to the nearest lower or higher whole share or unit, or (iii) convert such fractional share or unit into a right to receive a cash payment.

16.7 Other Compensation and Benefit Plans. The amount of any compensation deemed to be received by a Participant pursuant to an Award shall not constitute includable compensation for purposes of determining the amount of benefits to which a Participant is entitled under any other compensation or benefit plan or program of the Company or any Subsidiary, including, without limitation, under any bonus, pension, profit-sharing, life insurance, salary continuation or severance benefits plan, except to the extent specifically provided by the terms of any such plan.

16.8 Plan Binding on Transferees. The Plan shall be binding upon the Company, its transferees and assigns, and the Participant, the Participant's executor, administrator and permitted transferees and beneficiaries. In addition, all obligations of the Company under this Plan with respect to Awards granted hereunder shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

16.9 Foreign Jurisdictions. The Committee may adopt, amend and terminate such arrangements and grant such Awards, not inconsistent with the intent of the Plan, as it may deem necessary or desirable to comply with any tax, securities, regulatory or other laws of other jurisdictions with respect to Awards that may be subject to such laws. The terms and conditions of such Awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. Moreover, the Board may approve such supplements to or amendments, restatements or alternative versions of the Plan, not inconsistent with the intent of the Plan, as it may consider necessary or appropriate for such purposes, without thereby affecting the terms of the Plan as in effect for any other purpose.

16.10 Substitute Awards in Corporate Transactions. Nothing contained in the Plan shall be construed to limit the right of the Committee to grant Awards under the Plan in connection with the acquisition, whether by purchase, merger, consolidation or other corporate transaction, of the business or assets of any corporation or other entity. Without limiting the foregoing, the Committee may grant Awards under the Plan to an employee or director of another corporation who becomes an Eligible Person by reason of any such corporate transaction in substitution for awards previously granted by such corporation or entity to such person. The terms and conditions of the substitute Awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. Any shares of Common Stock subject to these substitute Awards shall not be counted against any of the maximum share limitations set forth in the Plan.

16.11 Stockholder Agreements; Restrictions. Upon the grant of any Award or the distribution of Common Stock pursuant to any Award (as applicable), the Participant (or legal representative) may be required to become a party to a Stockholders Agreement and/or related agreement(s), which shall include such terms and conditions (including without limitation, call rights, drag-along rights and refusal rights), as may be determined by the Committee in its sole discretion.

17. Legal Compliance

17.1 Securities Laws. No shares of Common Stock will be issued or transferred pursuant to an Award unless and until all then applicable requirements imposed by Federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the shares of Common Stock may be listed, have been fully met. As a condition precedent to the issuance of shares pursuant to the grant or exercise of an Award, the Company may require the Participant to take any reasonable action to meet such requirements. The Committee may impose such conditions on any shares of Common Stock issuable under the Plan as it may deem advisable, including, without limitation, restrictions under the Securities Act, as amended, under the requirements of any exchange upon which such shares of the same class are then listed, and under any blue sky or other securities laws applicable to such shares. The Committee may also require the Participant to represent and warrant at the time of issuance or transfer that the shares of Common Stock are being acquired only for investment purposes and without any current intention to sell or distribute such shares. All Common Stock issued pursuant to the terms of this Plan shall constitute "restricted securities," as that term is defined in Rule 144 promulgated pursuant to the Securities Act, and may not be transferred except in compliance herewith and with the registration requirements of the Securities Act or an exemption therefrom. Certificates representing Common Stock acquired pursuant to an Award may bear such legend as the Company may consider appropriate under the circumstances. If an Award is made to an Eligible Person who is subject to Chinese jurisdiction, and approval of the Award by China's State Administration of Foreign Exchange is needed, the Award may be converted to cash or other equivalent amount if and to the extent that such approval is not obtained.

17.2 Incentive Arrangement. The Plan is designed to provide an on-going, pecuniary incentive for Participants to produce their best efforts to increase the value of the Company. The Plan is not intended to provide retirement income or to defer the receipt of payments hereunder to the termination of a Participant's employment or beyond. The Plan is thus intended not to be a pension or welfare benefit plan that is subject to Employee Retirement Income Security Act of 1974 ("ERISA"), and shall be construed accordingly. All interpretations and determinations hereunder shall be made on a basis consistent with the Plan's status as not an employee benefit plan subject to ERISA.

17.3 Unfunded Plan. The adoption of the Plan and any reservation of shares of Common Stock or cash amounts by the Company to discharge its obligations hereunder shall not be deemed to create a trust or other funded arrangement. Except upon the issuance of Common Stock pursuant to an Award, any rights of a Participant under the Plan shall be those of a general unsecured creditor of the Company, and neither a Participant nor the Participant's permitted transferees or estate shall have any other interest in any assets of the Company by virtue of the Plan. Notwithstanding the foregoing, the Company shall have the right to implement or set aside funds in a grantor trust, subject to the claims of the Company's creditors or otherwise, to discharge its obligations under the Plan.

17.4 Section 409A Compliance. To the extent applicable, it is intended that the Plan and all Awards hereunder comply with the requirements of Section 409A of the Code, and the Plan and all Award Agreements shall be interpreted and applied by the Committee in a manner consistent with this intent in order to avoid the imposition of any additional tax under Section 409A of the Code. In the event that any provision of the Plan or an Award Agreement is determined by the Committee to not comply with the applicable requirements of Section 409A of the Code, the Committee shall have the authority to take such actions and to make such interpretations or changes to the Plan or an Award Agreement as the Committee deems necessary to comply with such requirements, provided that the Committee shall act in a manner that is intended to preserve the economic value of the Award to the Participant. In no event whatsoever shall the Company be liable for any additional tax, interest or penalties that may be imposed on any Participant by Section 409A of the Code or any damages for failing to comply with Section 409A of the Code. Notwithstanding anything in the Plan to the contrary, all or part of an Award payment to a Participant who is determined to constitute a Code Section 409A "Specified Employee" at the time of separation from service, shall be delayed (if then required) under Code Section 409A, and paid in an aggregated lump on the first business day after six (6) months have lapsed following the Participant's separation from service, or the date of the Participant's death, if earlier. Any remaining payments shall be paid on their regularly scheduled payment dates. For purposes of the Plan and any Agreements issued under the Plan, the phrases "separation from service," "termination of employment" and "employment termination" shall be deemed to mean "separation from service" as defined by Code Section 409A and regulations thereunder.

17.5 Tax Withholding.

(a) The Company shall have the power and the right to deduct or withhold, or require a participant to remit to the Company, the minimum statutory amount to satisfy federal, state, and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Plan, but in no event shall such deduction or withholding or remittance exceed the minimum statutory withholding requirements. Notwithstanding the foregoing, if a minimum statutory amount of withholding does not apply under the laws of any foreign jurisdiction, the Company may withhold such amount for remittance to the applicable taxing authority of such jurisdiction as the Company determines in its discretion, uniformly applied, to be appropriate.

(b) A Participant may, in order to fulfill the withholding obligation, tender previously-acquired shares of Common Stock or have shares of stock withheld from the exercise, provided that the shares have an aggregate Fair Market Value sufficient to satisfy in whole or in part the applicable withholding taxes. The broker-assisted exercise procedure described in Section 6.5 may also be utilized to satisfy the withholding requirements related to the exercise of a Stock Option.

(c) Notwithstanding the foregoing, a Participant may not use shares of Common Stock to satisfy the withholding requirements to the extent that (i) there is a substantial likelihood that the use of such form of payment or the timing of such form of payment would subject the Participant to a substantial risk of liability under Section 16 of the Exchange Act; or (ii) such withholding would constitute a violation of the provisions of any law or regulation (including the Sarbanes-Oxley Act of 2002).

17.6 No Guarantee of Tax Consequences. Neither the Company, the Board, the Committee nor any other Person make any commitment or guarantee that any federal, state, local or foreign tax treatment will apply or be available to any Participant or any other person hereunder.

17.7 Severability. If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

17.8 Stock Certificates; Book Entry Form. Notwithstanding any provision of the Plan to the contrary, unless otherwise determined by the Committee or required by any applicable law, rule or regulation, any obligation set forth in the Plan pertaining to the delivery or issuance of stock certificates evidencing shares of Common Stock may be satisfied by having issuance and/or ownership of such shares recorded on the books and records of the Company (or, as applicable, its transfer agent or stock plan administrator).

17.9 Governing Law. The Plan and all rights hereunder shall be subject to and interpreted in accordance with the laws of the State of New Jersey, without reference to the principles of conflicts of laws, and to applicable Federal securities laws.

18. Effective Date, Amendment and Termination

18.1 Effective Date. The effective date of the Plan shall be the date on which the Plan is approved by the requisite percentage of the holders of the Common Stock of the Company; provided, however, that Awards granted under the Plan subsequent to the approval of the Plan by the Board shall be valid if such stockholder approval occurs within one year of the date on which such Board approval occurs.

18.2 Amendment; Termination. The Board may suspend or terminate the Plan (or any portion thereof) at any time and may amend the Plan at any time and from time to time in such respects as the Board may deem advisable or in the best interests of the Company or any Subsidiary; provided, however, that (a) no such amendment, suspension or termination shall materially and adversely affect the rights of any Participant under any outstanding Awards, without the consent of such Participant, (b) to the extent necessary and desirable to comply with any applicable law, regulation, or stock exchange rule, the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as required, and (c) stockholder approval is required for any amendment to the Plan that (i) increases the number of shares of Common Stock available for issuance under the Plan, or (ii) changes the persons or class of persons eligible to receive Awards. The Plan will continue in effect until terminated in accordance with this Section 18.2; *provided, however*, that no Award will be granted hereunder on or after the 10th anniversary of the date of the Plan's initial adoption by the Board; *but provided further*, that Awards granted prior to such 10th anniversary may extend beyond that date.

INITIAL BOARD APPROVAL: ___/___/2013

INITIAL STOCKHOLDER APPROVAL: ___/___/2013

EXHIBIT A

PERFORMANCE MEASURES

Code Section 162(m) Awards shall be based on the attainment of objective performance goals that are established by the Committee and relate to one or more Performance Measures, in each case on specified date or over any period, up to 10 years, as determined by the Committee.

“Performance Measures” means the following business criteria (or any combination thereof) with respect to one or more of the Company, any Subsidiary or any division or operating unit thereof:

- pre-tax income,
- after-tax income,
- net income (meaning net income as reflected in the Company’s financial reports for the applicable period, on an aggregate, diluted and/or per share basis, or economic net income),
- operating income or profit,
- cash flow, free cash flow, cash flow return on investment (discounted or otherwise), net cash provided by operations, or cash flow in excess of cost of capital,
- earnings per share (basic or diluted),
- return on equity,
- returns on sales or revenues,
- return on invested capital or assets (gross or net),
- cash, funds or earnings available for distribution,
- appreciation in the fair market value of the Common Stock,
- operating expenses,
- implementation or completion of critical projects or processes,
- return on investment,
- total return to stockholders (meaning the aggregate Common Stock price appreciation and
- dividends paid (assuming full reinvestment of dividends) during the applicable period),

- net earnings growth,
- stock appreciation (meaning an increase in the price or value of the Common Stock after the date of grant of an award and during the applicable period),
- related return ratios,
- increase in revenues,
- the Company's published ranking against its peer group of real estate investment trusts based on total stockholder return,
- net earnings,
- changes (or the absence of changes) in the per share or aggregate market price of the Company's Common Stock,
- number of securities sold,
- earnings before or after any one or more of the following items: interest, taxes, depreciation or amortization, as reflected in the Company's financial reports for the applicable period,
 - total revenue growth (meaning the increase in total revenues after the date of grant of an award and during the applicable period, as reflected in the Company's financial reports for the applicable period),
 - economic value created,
 - operating margin or profit margin,
 - Share price or total shareholder return,
 - cost targets, reductions and savings, productivity and efficiencies,
 - strategic business criteria, consisting of one or more objectives based on meeting objectively determinable specified market penetration, geographic business expansion, progress with research and development activities, investor satisfaction, employee satisfaction, human resources management, supervision of litigation, information technology, and goals relating to acquisitions, divestitures, joint ventures and similar transactions, and budget comparisons,
 - objectively determinable personal professional objectives, including any of the foregoing performance goals, the implementation of policies and plans, the negotiation of transactions, the development of long term business goals, formation of joint ventures, research or development collaborations, and the completion of other corporate transactions, and

- any combination of, or a specified increase or improvement in, any of the foregoing.

Where applicable, the Performance Measures may be expressed in terms of attaining a specified level of the particular criteria or the attainment of a percentage increase or decrease in the particular criteria, and may be applied to one or more of the Company, a Subsidiary or affiliate, or a division or strategic business unit of the Company, or may be applied to the performance of the Company relative to a market index, a group of other companies or a combination thereof, all as determined by the Committee.

The Performance Measures may include a threshold level of performance below which no payment shall be made (or no vesting shall occur), levels of performance at which specified payments shall be made (or specified vesting shall occur), and a maximum level of performance above which no additional payment shall be made (or at which full vesting shall occur).

Except as otherwise expressly provided, all financial terms are used as defined under Generally Accepted Accounting Principles (“GAAP”) and all determinations shall be made in accordance with GAAP, as applied by the Company in the preparation of its periodic reports to stockholders.

To the extent permitted by Section 162(m) of the Code, unless the Committee provides otherwise at the time of establishing the performance goals, for each fiscal year of the Company, the Committee shall have the authority to make equitable adjustments to the Performance Measures in recognition of unusual or non-recurring events affecting the Company or any Subsidiary or affiliate or the financial statements of the Company or any Subsidiary or affiliate and may provide for objectively determinable adjustments, as determined in accordance with GAAP, to any of the Performance Measures described above for one or more of the items of gain, loss, profit or expense: (A) determined to be extraordinary or unusual in nature or infrequent in occurrence, (B) related to the disposal of a segment of a business, (C) related to a change in accounting principle under GAAP or a change in applicable laws or regulations, (D) related to discontinued operations that do not qualify as a segment of a business under GAAP, and (E) attributable to the business operations of any entity acquired by the Company during the fiscal year.

INCENTIVE STOCK OPTION GRANT AGREEMENT

MATINAS BIOPHARMA HOLDINGS, INC.

This Stock Option Grant Agreement (the "Grant Agreement") is made and entered into effective on the Date of Grant set forth in Exhibit A (the "Date of Grant") by and between Matinas BioPharma Holdings, Inc., a Delaware corporation (the "Company"), and the individual named in Exhibit A hereto (the "Optionee").

WHEREAS, the Company desires to provide the Optionee an incentive to participate in the success and growth of the Company through the opportunity to earn a proprietary interest in the Company; and

WHEREAS, to give effect to the foregoing intention, the Company desires to grant the Optionee an option pursuant to the Matinas BioPharma Holdings, Inc. 2013 Equity Compensation Plan (the "Plan") to acquire the Company's common stock, par value \$.0001 per share (the "Common Stock");

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for good and valuable consideration, the parties hereto agree as follows:

1. Grant. The Company hereby grants the Optionee an Incentive Stock Option (the "Option") to purchase up to the number of shares of Common Stock (the "Shares") set forth in Exhibit A hereto at the exercise price per Share (the "Exercise Price") set forth in Exhibit A, subject to the terms and conditions set forth herein and the provisions of the Plan, the terms of which are incorporated herein by reference. Capitalized terms used but not otherwise defined in this Grant Agreement shall have the meanings as set forth in the Plan.

This Option is intended to qualify as an Incentive Stock Option ("ISO") under Section 422 of the Code. However, notwithstanding such designation, if the Optionee becomes eligible in any given year to exercise ISOs for Shares having a Fair Market Value in excess of \$100,000, those options representing the excess shall be treated as Non-Qualified Stock Options. In the previous sentence, "ISOs" include ISOs granted under any plan of the Company or any parent or any Subsidiary of the Company. For the purpose of deciding which options apply to Shares that "exceed" the \$100,000 limit, ISOs shall be taken into account in the same order as granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted. The Optionee hereby acknowledges that there is no assurance that the Option will, in fact, be treated as an Incentive Stock Option under Section 422 of the Code.

2. Vesting. Except as otherwise provided in this Grant Agreement, this Option will vest and become exercisable, in whole or in part, with respect to 2.7778% of the total number of Shares Subject to the Option set forth on Exhibit A on the last day of each month for each of the thirty-six calendar months (36) following the Date of Grant (commencing with the last day of the month in which the Date of Grant occurs); provided, however, that no portion of this Option will vest after the date on which the Optionee's employment or other Service with the Company and its Subsidiaries terminates.

3. Exercise Period Following Termination of Service. This Option shall terminate and be canceled to the extent not exercised within three (3) months following termination of the Optionee's employment or other Service with the Company and all Subsidiaries, except that if such termination is due to the Optionee's death or permanent and total disability within the meaning of Section 22(e)(3) of the Code, this Option shall terminate and be canceled one (1) year from the date of termination of Service with the Company and all Subsidiaries. Notwithstanding the foregoing, in the event that the Optionee's employment or other Service with the Company and its Subsidiaries is terminated for Cause, then the Option shall immediately terminate on the date of such termination of Service and shall not be exercisable for any period following such date. In no event, however, shall this Option be exercised later than the Expiration Date set forth in Exhibit A and in no event shall this Option be exercised for more Shares than the Shares which otherwise have become exercisable as of the date of termination.

4. Method of Exercise. This Option is exercisable by delivery to the Company of an exercise notice (the "Exercise Notice") in a form satisfactory to the Committee or by such other form or means as the Committee may permit or require. Any Exercise Notice shall state or provide the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and include such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price for the Exercised Shares in (i) cash; (ii) check; or (iii) such other manner as is acceptable to the Committee, provided that such form of consideration is permitted by the Plan and by applicable law. Upon exercise of the Option by the Optionee and prior to the delivery of such Exercised Shares, the Company shall have the right to require the Optionee to satisfy applicable Federal and state tax income tax withholding requirements and the Optionee's share of applicable employment withholding taxes in a method satisfactory to the Company. Notwithstanding the foregoing, no Exercised Shares shall be issued unless such exercise and issuance complies with the requirements relating to the administration of stock option plans and other applicable equity plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted, and the applicable laws of any foreign country or jurisdiction where stock grants or other applicable equity grants are made under the Plan; assuming such compliance, for income tax purposes the Exercised Shares shall be considered transferred to the Optionee on the date the Option is exercised with respect to such Shares.

5. Covenants Agreement. This Option shall be subject to forfeiture at the election of the Company in the event that the Optionee breaches any agreement between the Optionee and the Company with respect to noncompetition, nonsolicitation, assignment of inventions and contributions and/or nondisclosure obligations of the Optionee.

6. Taxes. By executing this Grant Agreement, Optionee acknowledges and agrees that Optionee is solely responsible for the satisfaction of any applicable taxes that may be imposed on Optionee that arise as a result of the grant, vesting or exercise of the Option, including without limitation any taxes arising under Section 409A of the Code (regarding deferred compensation) or Section 4999 of the Code (regarding golden parachute excise taxes), and that neither the Company nor the Committee shall have any obligation whatsoever to pay such taxes or otherwise indemnify or hold Optionee harmless from any or all of such taxes.

7. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of the Optionee only by the Optionee. The terms of the Plan and this Grant Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

8. Securities Matters. All Shares and Exercised Shares shall be subject to the restrictions on sale, encumbrance and other disposition provided by Federal or state law. The Company shall not be obligated to sell or issue any Shares or Exercised Shares pursuant to this Grant Agreement unless, on the date of sale and issuance thereof, such Shares are either registered under the Securities Act of 1933, as amended (the "Securities Act"), and all applicable state securities laws, or are exempt from registration thereunder. Regardless of whether the offering and sale of Shares under the Plan have been registered under the Securities Act, or have been registered or qualified under the securities laws of any state, the Company at its discretion may impose restrictions upon the sale, pledge or other transfer of such Shares (including the placement of appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary in order to achieve compliance with the Securities Act or the securities laws of any state or any other law.

9. Investment Purpose. The Optionee represents and warrants that unless the Shares are registered under the Securities Act, any and all Shares acquired by the Optionee under this Grant Agreement will be acquired for investment for the Optionee's own account and not with a view to, for resale in connection with, or with an intent of participating directly or indirectly in, any distribution of such Shares within the meaning of the Securities Act. The Optionee agrees not to sell, transfer or otherwise dispose of such Shares unless they are either (1) registered under the Securities Act and all applicable state securities laws, or (2) exempt from such registration in the opinion of Company counsel.

10. Lock-Up Agreement. The Optionee hereby agrees that in the event that the Optionee exercises this Option during a period in which any directors or officers of the Company have agreed with one or more underwriters not to sell securities of the Company, then, as a condition to such exercise, the Optionee shall enter into an agreement, in form and substance satisfactory to the Company, pursuant to which the Optionee shall agree to restrictions on transferability of the Shares comparable to the restrictions agreed upon by such directors or officers of the Company.

11. Other Plans. No amounts of income received by the Optionee pursuant to this Grant Agreement shall be considered compensation for purposes of any pension or retirement plan, insurance plan or any other employee benefit plan of the Company or its subsidiaries, unless otherwise expressly provided in such plan.

12. No Guarantee of Continued Service. The Optionee acknowledges and agrees that the right to exercise the Option pursuant to the exercise schedule hereof is earned only by continuing employment or Service with the Company and/or its Subsidiaries (and not through the act of being hired, being granted an option or purchasing shares hereunder). The Optionee further acknowledges and agrees that (i) this Grant Agreement, the transactions contemplated hereunder and the exercise schedule set forth herein do not constitute an express or implied promise of continued employment or Service for the exercise period or for any other period, and shall not interfere with the Optionee's right or the right of the Company or its Subsidiaries to terminate the employment or Service relationship at any time, with or without cause, subject to the terms of any written employment agreement that the Optionee may have entered into with the Company or any of its Subsidiaries; and (ii) the Company would not have granted this Option to the Optionee but for these acknowledgements and agreements.

13. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Grant Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and the Optionee. In the event of any conflict between this Grant Agreement and the Plan, the Plan shall be controlling, except as otherwise specifically provided in the Plan. This Grant Agreement shall be construed under the laws of the State of New Jersey, without regard to conflict of laws principles.

14. Opportunity for Review. Optionee and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Grant Agreement. The Optionee has reviewed the Plan and this Grant Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Agreement and fully understands all provisions of the Plan and this Grant Agreement. The Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan and this Grant Agreement. The Optionee further agrees to notify the Company upon any change in the residence address indicated herein.

15. Section 409A. This Option is intended to be excepted from coverage under Section 409A and shall be administered, interpreted and construed accordingly. The Company may, in its sole discretion and without the Optionee's consent, modify or amend the terms of this Grant Agreement, impose conditions on the timing and effectiveness of the exercise of the Option by Optionee, or take any other action it deems necessary or advisable, to cause the Option to be excepted from Section 409A (or to comply therewith to the extent the Company determines it is not excepted).

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement as of the date set forth in Exhibit A.

MATINAS BIOPHARMA HOLDINGS, INC.

By: _____

Name:

Title:

OPTIONEE

Name:

EXHIBIT A

INCENTIVE STOCK OPTION GRANT AGREEMENT

MATINAS BIOPHARMA HOLDINGS, INC.

- (a). **Optionee's Name:** _____
- (b). **Date of Grant:** _____
- (c). **Number of Shares Subject to the Option:** _____
- (d). **Exercise Price:** \$_____ per Share
- (e). **Expiration Date:** _____

_____(Initials)
Optionee

_____(Initials)
Company Signatory

NONQUALIFIED STOCK OPTION GRANT AGREEMENT

MATINAS BIOPHARMA HOLDINGS, INC.

This Stock Option Grant Agreement (the "Grant Agreement") is made and entered into effective on the Date of Grant set forth in Exhibit A (the "Date of Grant") by and between Matinas BioPharma Holdings, Inc., a Delaware corporation (the "Company"), and the individual named in Exhibit A hereto (the "Optionee").

WHEREAS, the Company desires to provide the Optionee an incentive to participate in the success and growth of the Company through the opportunity to earn a proprietary interest in the Company; and

WHEREAS, to give effect to the foregoing intention, the Company desires to grant the Optionee an option pursuant to the Matinas BioPharma Holdings, Inc. 2013 Equity Compensation Plan (the "Plan") to acquire the Company's common stock, par value \$.0001 per share (the "Common Stock");

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for good and valuable consideration, the parties hereto agree as follows:

1. Grant. The Company hereby grants the Optionee a Nonqualified Stock Option (the "Option") to purchase up to the number of shares of Common Stock (the "Shares") set forth in Exhibit A hereto at the exercise price per Share (the "Exercise Price") set forth in Exhibit A, subject to the terms and conditions set forth herein and the provisions of the Plan, the terms of which are incorporated herein by reference. Capitalized terms used but not otherwise defined in this Grant Agreement shall have the meanings as set forth in the Plan.

2. Vesting. Except as otherwise provided in this Grant Agreement, this Option will vest and become exercisable, in whole or in part, with respect to 2.7778% of the total number of Shares Subject to the Option set forth on Exhibit A on the last day of each month for each of the thirty-six calendar months (36) following the Date of Grant (commencing with the last day of the month in which the Date of Grant occurs); provided, however, that no portion of this Option will vest after the date on which the Optionee's employment or other Service with the Company and its Subsidiaries terminates.

3. Exercise Period Following Termination of Service. This Option shall terminate and be canceled to the extent not exercised within ninety (90) days after the Optionee's employment or other Service with the Company and its Subsidiaries terminates, except that if such termination is due to the death or Disability of the Optionee, this Option shall terminate and be canceled twelve (12) months from the date of termination of Service. Notwithstanding the foregoing, in the event that the Optionee's employment or other Service with the Company and its Subsidiaries is terminated for Cause, then the Option shall immediately terminate on the date of such termination of Service and shall not be exercisable for any period following such date. In no event, however, shall this Option be exercised later than the Expiration Date set forth in Exhibit A and in no event shall this Option be exercised for more Shares than the Shares which otherwise have become exercisable as of the date of termination.

4. Method of Exercise. This Option is exercisable by delivery to the Company of an exercise notice (the "Exercise Notice") in a form satisfactory to the Committee or by such other form or means as the Committee may permit or require. Any Exercise Notice shall state or provide the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and include such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price for the Exercised Shares in (i) cash; (ii) check; or (iii) such other manner as is acceptable to the Committee, provided that such form of consideration is permitted by the Plan and by applicable law. Upon exercise of the Option by the Optionee and prior to the delivery of such Exercised Shares, the Company shall have the right to require the Optionee to satisfy applicable Federal and state tax income tax withholding requirements and the Optionee's share of applicable employment withholding taxes in a method satisfactory to the Company. Notwithstanding the foregoing, no Exercised Shares shall be issued unless such exercise and issuance complies with the requirements relating to the administration of stock option plans and other applicable equity plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted, and the applicable laws of any foreign country or jurisdiction where stock grants or other applicable equity grants are made under the Plan; assuming such compliance, for income tax purposes the Exercised Shares shall be considered transferred to the Optionee on the date the Option is exercised with respect to such Shares.

5. Covenants Agreement. This Option shall be subject to forfeiture at the election of the Company in the event that the Optionee breaches any agreement between the Optionee and the Company with respect to noncompetition, nonsolicitation, assignment of inventions and contributions and/or nondisclosure obligations of the Optionee.

6. Taxes. By executing this Grant Agreement, Optionee acknowledges and agrees that Optionee is solely responsible for the satisfaction of any applicable taxes that may be imposed on Optionee that arise as a result of the grant, vesting or exercise of the Option, including without limitation any taxes arising under Section 409A of the Code (regarding deferred compensation) or Section 4999 of the Code (regarding golden parachute excise taxes), and that neither the Company nor the Committee shall have any obligation whatsoever to pay such taxes or otherwise indemnify or hold Optionee harmless from any or all of such taxes.

7. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of the Optionee only by the Optionee. The terms of the Plan and this Grant Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

8. Securities Matters. All Shares and Exercised Shares shall be subject to the restrictions on sale, encumbrance and other disposition provided by Federal or state law. The Company shall not be obligated to sell or issue any Shares or Exercised Shares pursuant to this Grant Agreement unless, on the date of sale and issuance thereof, such Shares are either registered under the Securities Act of 1933, as amended (the "Securities Act"), and all applicable state securities laws, or are exempt from registration thereunder. Regardless of whether the offering and sale of Shares under the Plan have been registered under the Securities Act, or have been registered or qualified under the securities laws of any state, the Company at its discretion may impose restrictions upon the sale, pledge or other transfer of such Shares (including the placement of appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary in order to achieve compliance with the Securities Act or the securities laws of any state or any other law.

9. Investment Purpose. The Optionee represents and warrants that unless the Shares are registered under the Securities Act, any and all Shares acquired by the Optionee under this Grant Agreement will be acquired for investment for the Optionee's own account and not with a view to, for resale in connection with, or with an intent of participating directly or indirectly in, any distribution of such Shares within the meaning of the Securities Act. The Optionee agrees not to sell, transfer or otherwise dispose of such Shares unless they are either (1) registered under the Securities Act and all applicable state securities laws, or (2) exempt from such registration in the opinion of Company counsel.

10. Lock-Up Agreement. The Optionee hereby agrees that in the event that the Optionee exercises this Option during a period in which any directors or officers of the Company have agreed with one or more underwriters not to sell securities of the Company, then, as a condition to such exercise, the Optionee shall enter into an agreement, in form and substance satisfactory to the Company, pursuant to which the Optionee shall agree to restrictions on transferability of the Shares comparable to the restrictions agreed upon by such directors or officers of the Company.

11. Other Plans. No amounts of income received by the Optionee pursuant to this Grant Agreement shall be considered compensation for purposes of any pension or retirement plan, insurance plan or any other employee benefit plan of the Company or its subsidiaries, unless otherwise expressly provided in such plan.

12. No Guarantee of Continued Service. The Optionee acknowledges and agrees that the right to exercise the Option pursuant to the exercise schedule hereof is earned only by continuing employment or Service with the Company and/or its Subsidiaries (and not through the act of being hired, being granted an option or purchasing shares hereunder). The Optionee further acknowledges and agrees that (i) this Grant Agreement, the transactions contemplated hereunder and the exercise schedule set forth herein do not constitute an express or implied promise of continued employment or Service for the exercise period or for any other period, and shall not interfere with the Optionee's right or the right of the Company or its Subsidiaries to terminate the employment or Service relationship at any time, with or without cause, subject to the terms of any written employment agreement that the Optionee may have entered into with the Company or any of its Subsidiaries; and (ii) the Company would not have granted this Option to the Optionee but for these acknowledgements and agreements.

13. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Grant Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and the Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and the Optionee. In the event of any conflict between this Grant Agreement and the Plan, the Plan shall be controlling, except as otherwise specifically provided in the Plan. This Grant Agreement shall be construed under the laws of the State of New Jersey, without regard to conflict of laws principles.

14. Opportunity for Review. Optionee and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Grant Agreement. The Optionee has reviewed the Plan and this Grant Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Agreement and fully understands all provisions of the Plan and this Grant Agreement. The Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan and this Grant Agreement. The Optionee further agrees to notify the Company upon any change in the residence address indicated herein.

15. Section 409A. This Option is intended to be excepted from coverage under Section 409A and shall be administered, interpreted and construed accordingly. The Company may, in its sole discretion and without the Optionee's consent, modify or amend the terms of this Grant Agreement, impose conditions on the timing and effectiveness of the exercise of the Option by Optionee, or take any other action it deems necessary or advisable, to cause the Option to be excepted from Section 409A (or to comply therewith to the extent the Company determines it is not excepted).

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement as of the date set forth in Exhibit A.

MATINAS BIOPHARMA HOLDINGS, INC.

By: _____
Name:
Title:

OPTIONEE

Name:

EXHIBIT A

NONQUALIFIED STOCK OPTION GRANT AGREEMENT

MATINAS BIOPHARMA HOLDINGS, INC.

- (a). **Optionee's Name:** _____
- (b). **Date of Grant:** _____
- (c). **Number of Shares Subject to the Option:** _____
- (d). **Exercise Price:** \$_____ per Share
- (e). **Expiration Date:** _____

_____(Initials)
Optionee

_____(Initials)
Company Signatory

EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT (this "Agreement"), dated July 30, 2013 and effective on the date of the initial closing of the private placement offering of the Company's common stock (the "Effective Date"), is by and between MATINAS BIOPHARMA HOLDINGS, INC., a Delaware corporation (the "Company") and Roelof Rongen (the "Executive").

WITNESSETH:

WHEREAS, the Company desires to employ the Executive as its President and Chief Executive Officer and the Executive desires to accept such employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall govern the terms of employment between the Executive and the Company.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

ARTICLE 1 EMPLOYMENT; TERM OF AGREEMENT

Section 1.1. Employment and Acceptance. During the Term (as defined in Section 1.2), the Company shall employ the Executive, and the Executive shall accept such employment and serve the Company, in each case, subject to the terms and conditions of this Agreement.

Section 1.2. Term. The employment relationship hereunder shall be for the period commencing on the Effective Date and, subject to earlier termination as provided in ARTICLE 4, ending on the third anniversary of the Effective Date (the "Term"). In the event that the Executive's employment with the Company terminates, the Company's obligation to continue to pay, after the Termination Date (as defined in Section 4.2(b)), Base Salary (as defined in Section 3.1(a)), Annual Bonus (as defined in Section 3.1(b)) and other unaccrued benefits shall terminate, except as may be provided for in ARTICLE 4.

ARTICLE 2 TITLE; DUTIES AND OBLIGATIONS; LOCATION

Section 2.1. Title. The Company shall employ the Executive to render exclusive and full-time services to the Company. The Executive shall serve in the capacity of President and Chief Executive Officer.

Section 2.2. Duties. The Executive shall report to the Company's Board of Directors (the "Board") and be subject to the lawful direction of the Board. The Executive agrees to perform to the best of his ability, experience and talent those acts and duties, consistent with the position of President and Chief Executive Officer as the Board shall from time to time direct. During the Term, the Executive also shall serve in such other executive-level positions or capacities as may, from time to time, be reasonably requested by the Board, including, without limitation (subject to election, appointment, re-election or re-appointment, as applicable) as (a) a member of the Board and/or as a member of the board of directors or similar governing body of any of the Company's subsidiaries or other Affiliates (as defined below), (b) an officer of any of the Company's subsidiaries or other Affiliates, and/or (c) a member of any committee of the Company and/or any of its subsidiaries or other Affiliates, in each case, for no additional compensation. As used in this Agreement, "Affiliate" of any individual or entity means any other individual or entity that directly or indirectly controls, is controlled by, or is under common control with, the individual or entity. For avoidance of doubt, any election of the Executive as a member of the Board is independent from the employment of the Executive under this Agreement and subject to normal procedures, bylaws and agreements regulating the election and/or removal of the members of the Board; provided, however, that, as set forth above, such service shall be for no additional compensation.

Section 2.3. Compliance with Policies, etc. During the Term, the Executive shall be bound by, and comply fully with, all of the Company's policies and procedures for employees and officers in place from time to time, including, but not limited to, all terms and conditions set forth in the Company's employee handbook, compliance manual, codes of conduct and any other memoranda and communications applicable to the Executive pertaining to the policies, procedures, rules and regulations, as currently in effect and as may be amended from time to time. These policies and procedures include, among other things and without limitation, the Executive's obligations to comply with the Company's rules regarding confidential and proprietary information and trade secrets.

Section 2.4. Time Commitment. During the Term, the Executive shall use his best efforts to promote the interests of the Company (including its subsidiaries and other Affiliates) and shall devote all of his business time, ability and attention to the performance of his duties for the Company and shall not, directly or indirectly, render any services to any other person or organization, whether for compensation or otherwise, except with the Board's prior written consent or as specified on Schedule A of the Covenants Agreement (as defined in Section 5.1), provided that the foregoing shall not prevent the Executive from (i) participating in charitable, civic, educational, professional, community or industry affairs, or (ii) managing the Executive's passive personal investments, so long as, in each case, such activities individually or in the aggregate do not materially interfere or conflict with the Executive's duties hereunder or create a potential business or fiduciary conflict (in each case, as determined by the Board).

Section 2.5. Location. The Executive's principal place of business for the performance of his duties under this Agreement shall be at the principal executive office of the Company. Notwithstanding, the foregoing, the Executive shall be required to travel as necessary to perform his duties hereunder.

ARTICLE 3
COMPENSATION AND BENEFITS; EXPENSES

Section 3.1. Compensation and Benefits. For all services rendered by the Executive in any capacity during the Term (including, without limitation, serving as an officer, director or member of any committee of the Company or any of its subsidiaries or other Affiliates), the Executive shall be compensated as follows (subject, in each case, to the provisions of ARTICLE 4 below):

(a) Base Salary. During the Term, the Company shall pay the Executive a base salary (the "Base Salary") at the annualized rate of \$300,000, which shall be subject to customary withholdings and authorized deductions and be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base salary shall be subject to periodic adjustments as the Board and/or the Compensation Committee of the Board (the "Compensation Committee") shall in its/their discretion deem appropriate; provided, however, that upon the later to occur of (i) the closing of an additional round of financing (including equity, debt or convertible debt financing, and whether in one transaction or a series of related transactions) with gross proceeds of at least \$15 million following the current private placement offering (the initial closing of which is occurring as of the Effective Date), and (ii) the initiation of the first Phase III trial of MAT9001, the annualized rate of Base Salary shall increase by \$50,000, and upon each one-year anniversary thereof during the term, shall be increased by an additional \$50,000. As used in this Agreement, the term "Base Salary" shall refer to Base Salary as may be adjusted from time to time.

(b) Annual Bonus. For each calendar year ending during the Term (beginning with the calendar year ending December 31, 2013), the Executive shall be eligible to receive an annual bonus (the "Annual Bonus") with a target amount equal to forty percent (40%) of the Base Salary earned by the Executive for such calendar year (the "Target Annual Bonus"). The actual amount of each Annual Bonus will be based upon the level of achievement of the Company's corporate objectives and the Executive's individual objectives, in each case, as established by the Board or the Compensation Committee for the calendar year with respect to which such Annual Bonus relates. The determination of the level of achievement of the corporate objectives and the Executive's individual performance objectives for a year shall be made by the Board or the Compensation Committee, in its reasonable discretion. Each Annual Bonus for a calendar year, to the extent earned, will be paid in a lump sum in the following calendar year, within the first 75 days of such following year. The Annual Bonus shall not be deemed earned until the date that it is paid. Accordingly, in order for the Executive to receive an Annual Bonus, the Executive must be actively employed by the Company at the time of such payment.

(c) Signing Bonus. Within thirty (30) days following the Effective Date, the Company will pay to the Executive in a lump sum the amount of \$150,000 as a signing bonus.

(d) Equity Compensation. The Company will recommend to the Compensation Committee at its next regularly scheduled meeting following the Effective Date a grant to the Executive of options to purchase up to 350,000 shares of the Company's common stock pursuant to the Company's 2013 Equity Compensation Plan (the "2013 Plan"), on the terms and conditions determined by the Compensation Committee, with such grant subject to stockholder approval of the Company's 2013 Equity Compensation Plan. During the Term, subject to the terms and conditions established within the 2013 Plan or any successor equity compensation plan as may be in place from time to time and separate Award Agreements (as defined in the 2013 Plan), the Executive also shall be eligible to receive from time to time additional Stock Options, Stock Unit Awards, Performance Shares, Performance Units, Incentive Bonus Awards, Other Cash-Based Awards and/or Other Stock-Based Awards (as such capitalized terms are defined in the 2013 Plan), in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

(e) Benefit Plans. The Executive shall be entitled to participate in all employee benefit plans and programs (excluding severance plans, if any) generally made available by the Company to senior executives of the Company, to the extent permissible under the general terms and provisions of such plans or programs and in accordance with the provisions thereof. The Company may amend, modify or rescind any employee benefit plan or program and/or change employee contribution amounts to benefit costs without notice in its discretion. Prior to establishing such benefit plans, the Company may pay the expense of health and dental insurance maintained by the Executive for his own benefit plus his immediate family at the Effective Date up to an amount of \$2,500 per month.

(f) Paid Vacation. The Executive shall be entitled to paid vacation days in accordance with the Company's vacation policies in effect from time to time for its executive team; provided, however, that the Executive shall be entitled to no less than fifteen (15) paid vacation days per calendar year during the Term.

Section 3.2. Expense Reimbursement. The Company shall reimburse the Executive during the Term, in accordance with the Company's expense reimbursement policies in place from time, for all reasonable out-of-pocket business expenses incurred by the Executive in the performance of his duties hereunder. In order to receive such reimbursement, the Executive shall furnish to the Company documentary evidence of each such expense in the form required to comply with the Company's policies in place from time to time.

ARTICLE 4 TERMINATION OF EMPLOYMENT

Section 4.1. Termination Without Cause or Resignation for Good Reason.

(a) The Company may terminate the Executive's employment hereunder at any time without Cause (other than by reason of death or Disability) upon ninety (90) days prior written notice to the Executive. Executive may terminate his employment hereunder for Good Reason upon written notice to the Company in accordance with the provisions set forth in Section 4.1(c).

(b) As used in this Agreement, "Cause" means: (i) a material act, or act of fraud, committed by the Executive that is intended to result in the Executive's personal enrichment to the detriment or at the expense of the Company or any of its Affiliates; (ii) the Executive is convicted of a felony; (iii) gross negligence or willful misconduct by the Executive, or failure by the Executive to perform the duties or obligations reasonably assigned to the Executive by the Board or the CEO from time to time, which is not cured upon ten (10) days prior written notice (unless such negligence, misconduct or failure is not susceptible to cure, as determined in the reasonable discretion of the Board); or (iv) the Executive violates the Covenants Agreement (as defined in Section 5.1 below).

(c) As used in this Agreement, “Good Reason” means the occurrence of any of the following: (1) a material breach by the Company of the terms of this Agreement; (2) a material reduction in the Executive’s Base Salary; (3) a material diminution in the Executive’s authority, duties or responsibilities; or (4) a material change in the geographic location at which the Executive performs services for the Company; provided, however, that the Executive must notify the Company within ninety (90) days of the occurrence of any of the foregoing conditions that he considers it to be a “Good Reason” condition and provide the Company with at least thirty (30) days in which to cure the condition. If the Executive fails to provide this notice and cure period prior to his resignation, or resigns more than six (6) months after the initial existence of the condition, his resignation will not be deemed to be for “Good Reason.”

(d) If the Executive’s employment is terminated pursuant to Section 4.1(a) other than during the Post-Change in Control Period (as defined in Section 4.1(e)), the Executive shall, in full discharge of all of the Company’s obligations to the Executive, be entitled to receive, and the Company’s sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations (as defined in Section 4.2(b));

(ii) six (6) months accelerated vesting of all of the Executive’s outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to twelve (12) months of the Executive’s Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company’s customary payroll practices, commencing sixty (60) days following the Termination Date (the “Pre-CIC Severance Payments”); and

(B) if the Executive then participates in the Company’s medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“COBRA”), the Company will pay monthly, on the Executive’s behalf, a portion of the cost of such coverage for the twelve (12) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the “Pre-CIC COBRA Assistance”); provided, however, that if and to the extent that the Company may not provide such Pre-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Pre-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A (as defined in Section 5.16).

(e) If the Executive's employment is terminated pursuant to Section 4.1(a) during the twenty-four (24) months immediately following a Change in Control (as defined below) (the "Post-Change in Control Period"), the Executive shall, in full discharge of all of the Company's obligations to the Executive (and in lieu of any payments and benefits set forth in Section 4.1(d)), be entitled to receive, and the Company's sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations;

(ii) full accelerated vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to eighteen (18) months of the Executive's Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the Termination Date (the "Post-CIC Severance Payments");

(B) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company will pay monthly, on the Executive's behalf, a portion of the cost of such coverage for the eighteen (18) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the "Post-CIC COBRA Assistance"); provided, however, that if and to the extent that the Company may not provide such Post-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Post-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A; and

(C) a payment equal to the Executive's Target Annual Bonus for the calendar year in which the Termination Date occurs, payable in a lump sum on the 60th day following the Termination Date.

(f) As used in this Agreement, "Change in Control" means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person's status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

Section 4.2. Termination for Cause; Voluntary Termination; Expiration of Term.

(a) The Company may terminate the Executive's employment hereunder at any time for Cause upon written notice to the Executive. The Executive may voluntarily terminate his employment hereunder at any time without Good Reason upon ninety (90) days prior written notice to the Company; provided, however, the Company reserves the right, upon written notice to the Executive, to accept the Executive's notice of resignation and to accelerate such notice and make the Executive's resignation effective immediately, or on such other date prior to Executive's intended last day of work as the Company deems appropriate. It is understood and agreed that the Company's election to accelerate Executive's notice of resignation shall not be deemed a termination by the Company without Cause for purposes of Section 4.1 of this Agreement or otherwise or constitute Good Reason (as defined in Section 4.1) for purposes of Section 4.1 of this Agreement or otherwise. The Executive's employment shall automatically terminate upon the expiration of the Term in accordance with Section 1.2.

(b) If the Executive's employment is terminated pursuant to Section 4.2(a), the Executive shall, in full discharge of all of the Company's obligations to the Executive, be entitled to receive, and the Company's sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive, the following (collectively, the "Accrued Obligations"):

(i) the Executive's earned, but unpaid, Base Salary through the final date of the Executive's employment by the Company (the "Termination Date"), payable in accordance with the Company's standard payroll practices;

(ii) the Executive's accrued, but unused, vacation (in accordance with the Company's policies);

(iii) expenses reimbursable under Section 3.2 above incurred on or prior to the Termination Date but not yet reimbursed; and

(iv) any amounts or benefits that are vested amounts or vested benefits or that the Executive is otherwise entitled to receive under any plan, program, policy or practice (with the exception of those, if any, relating to severance) on the Termination Date, in accordance with such plan, program, policy, or practice.

Section 4.3. Termination Resulting from Death or Disability.

(c) As the result of any Disability suffered by the Executive, the Company may, upon five (5) days prior notice to the Executive, terminate the Executive's employment under this Agreement. The Executive's employment shall automatically terminate upon his death.

(d) “Disability” means a determination by the Company in accordance with applicable law that as a result of a physical or mental injury or illness, the Executive is unable to perform the essential functions of his job with or without reasonable accommodation for a period of (i) ninety (90) consecutive days; or (ii) one hundred twenty (120) days during any twelve (12) month period.

(e) If the Executive’s employment is terminated pursuant to Section 4.3(a), the Executive or the Executive’s estate, as the case may be, shall be entitled to receive, and the Company’s sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive or the Executive’s estate, as the case may be, the Accrued Obligations.

Section 4.4. Release Agreement. In order to receive the Pre-CIC Severance Payments or the Post-CIC Severance Payments (collectively referred to herein as the “Severance Payments”) or the Pre-CIC COBRA Assistance or the Post-CIC COBRA Assistance (collectively referred to herein as the “COBRA Assistance”) set forth in Section 4.1 (if eligible), the Executive must timely execute (and not revoke) a separation agreement and general release (the “Release Agreement”) in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion. If the Executive is eligible for Severance Payments and COBRA Assistance pursuant to Section 4.1, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the Termination Date. The Severance Payments and COBRA Assistance are subject to the Executive’s execution of such Release Agreement within 45 days of the Executive’s receipt of the Release Agreement and the Executive’s non-revocation of such Release Agreement.

Section 4.5. Post-Termination Breach. Notwithstanding anything to the contrary contained in this Agreement, the Company’s obligations to provide the Severance Payments and the COBRA Assistance will immediately cease if the Executive breaches any of the provisions of the Covenants Agreement, the Release Agreement or any other agreement the Executive has with the Company.

Section 4.6. Removal from any Boards and Position. If the Executive’s employment is terminated for any reason under this Agreement, he shall be deemed (without further action, deed or notice) to resign (i) if a member, from the Board or board of directors (or similar governing body) of any Affiliate of the Company or any other board to which he has been appointed or nominated by or on behalf of the Company and (ii) from all other positions with the Company or any subsidiary or other Affiliate of the Company, including, but not limited to, as an officer of the Company and any of its subsidiaries or other Affiliates.

ARTICLE 5 GENERAL PROVISIONS

Section 5.1. Company Non-Disclosure and Invention Assignment Agreement. The Executive acknowledges and confirms that the Non-Disclosure and Invention Assignment Agreement executed by the Executive in favor of the Company as of the date hereof (the “Covenants Agreement”), the terms of which are incorporated herein by reference, remains in full force and effect and binding upon the Executive. The Covenants Agreement shall survive the termination of this Agreement and the Executive’s employment by the Company for the applicable period(s) set forth therein.

Section 5.2. Expenses. Each of the Company and the Executive shall bear its/his own costs, fees and expenses in connection with the negotiation, preparation and execution of this Agreement.

Section 5.3. Entire Agreement. This Agreement and the Covenants Agreement contain the entire agreement of the parties hereto with respect to the terms and conditions of the Executive's employment during the Term and activities following termination of this Agreement and the Executive's employment with the Company and supersede any and all prior agreements and understandings, whether written or oral, between the parties hereto with respect to the subject matter of this Agreement or the Covenants Agreement. Each party hereto acknowledges that no representations, inducements, promises or agreements, whether oral or in writing, have been made by any party, or on behalf of any party, which are not embodied herein or in the Covenants Agreement. The Executive acknowledges and agrees that the Company has fully satisfied, and has no further, obligations to the Executive arising under, or relating to, any other employment or consulting arrangement or understanding (including, without limitation, any claims for compensation or benefits of any kind) or otherwise. No agreement, promise or statement not contained in this Agreement or the Covenants Agreement shall be valid and binding, unless agreed to in writing and signed by the parties sought to be bound thereby.

Section 5.4. No Other Contracts. The Executive represents and warrants to the Company that neither the execution and delivery of this Agreement by the Executive nor the performance by the Executive of the Executive's obligations hereunder, shall constitute a default under or a breach of the terms of any other agreement, contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound, nor shall the execution and delivery of this Agreement by the Executive nor the performance by the Executive of his duties and obligations hereunder give rise to any claim or charge against either the Executive, the Company or any Affiliate, based upon any other contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound. The Executive further represents and warrants to the Company that he is not a party to or subject to any restrictive covenants, legal restrictions or other agreement, contract or arrangement, whether written or oral, in favor of any entity or person which would in any way preclude, inhibit, impair or limit the Executive's ability to perform his obligations under this Agreement, including, but not limited to, non-competition agreements, non-solicitation agreements or confidentiality agreements. The Executive shall defend, indemnify and hold the Company harmless from and against all claims, actions, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and amounts paid in settlement in good faith) arising from or relating to any breach of the representations and warranties made by the Executive in this Section 5.4.

Section 5.5. Notices. Any notice or other communication required or permitted hereunder shall be in writing and shall be delivered personally or sent by nationally recognized overnight courier service (with next business day delivery requested). Any such notice or communication shall be deemed given and effective, in the case of personal delivery, upon receipt by the other party, and in the case of a courier service, upon the next business day, after dispatch of the notice or communication. Any such notice or communication shall be addressed as follows:

If to the Company, to:

Matinas BioPharma Holdings, Inc.
915 Klosterman Road, East
Tarpon Springs, Florida 34689

Attn: Board of Directors

With a copy to:

Lowenstein Sandler LLP
1251 Avenue of the Americas
New York, New York 10020
Attn: Michael J. Lerner, Esq.

If to the Executive, to:

Roelof Rongen

Any person named above may designate another address or fax number by giving notice in accordance with this Section to the other persons named above.

Section 5.6. Governing Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New Jersey, without regard to principles of conflicts of law. Any and all actions arising out of this Agreement or Employee's employment by Company or termination therefrom shall be brought and heard in the state and federal courts of the State of New Jersey and the parties hereto hereby irrevocably submit to the exclusive jurisdiction of any such courts. THE COMPANY AND THE EXECUTIVE HEREBY WAIVE THEIR RESPECTIVE RIGHT TO TRIAL BY JURY IN ANY ACTION CONCERNING THIS AGREEMENT OR ANY AND ALL MATTERS ARISING DIRECTLY OR INDIRECTLY HEREFROM AND REPRESENT THAT THEY HAVE CONSULTED WITH COUNSEL OF THEIR CHOICE OR HAVE CHOSEN VOLUNTARILY NOT TO DO SO SPECIFICALLY WITH RESEPCT TO THIS WAIVER.

Section 5.7. Waiver. Either party hereto may waive compliance by the other party with any provision of this Agreement. The failure of a party to insist on strict adherence to any term of this Agreement on any occasion shall not be considered a waiver or deprive that party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. No waiver of any provision shall be construed as a waiver of any other provision. Any waiver must be in writing.

Section 5.8. Severability. If any one or more of the terms, provisions, covenants and restrictions of this Agreement shall be determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated and the parties will attempt to agree upon a valid and enforceable provision which shall be a reasonable substitute for such invalid and unenforceable provision in light of the tenor of this Agreement, and, upon so agreeing, shall incorporate such substitute provision in this Agreement. In addition, if any one or more of the provisions contained in this Agreement shall for any reason be determined by a court of competent jurisdiction to be excessively broad as to duration, geographical scope, activity or subject, it shall be construed, by limiting or reducing it, so as to be enforceable to the extent compatible with then applicable law.

Section 5.9. Counterparts. This Agreement may be executed in any number of counterparts and each such duplicate counterpart shall constitute an original, any one of which may be introduced in evidence or used for any other purpose without the production of its duplicate counterpart. Moreover, notwithstanding that any of the parties did not execute the same counterpart, each counterpart shall be deemed for all purposes to be an original, and all such counterparts shall constitute one and the same instrument, binding on all of the parties hereto.

Section 5.10. Advice of Counsel. This Agreement was prepared by Lowenstein Sandler LLP in its capacity as legal counsel to the Company. Both parties hereto acknowledge that they have had the opportunity to seek and obtain the advice of counsel before entering into this Agreement and have done so to the extent desired, and have fully read the Agreement and understand the meaning and import of all the terms hereof.

Section 5.11. Assignment. This Agreement shall inure to the benefit of the Company and its successors and assigns (including, without limitation, the purchaser of all or substantially all of its assets) and shall be binding upon the Company and its successors and assigns. This Agreement is personal to the Executive, and the Executive shall not assign or delegate his rights or duties under this Agreement, and any such assignment or delegation shall be null and void.

Section 5.12. Agreement to Take Actions. Each party to this Agreement shall execute and deliver such documents, certificates, agreements and other instruments, and shall take all other actions, as may be reasonably necessary or desirable in order to perform his or its obligations under this Agreement.

Section 5.13. No Attachment. Except as required by law, no right to receive payments under this Agreement shall be subject to anticipation, commutation, alienation, sale, assignment, encumbrance, charge, pledge, or hypothecation or to execution, attachment, levy or similar process or assignment by operation of law, and any attempt, voluntary or involuntary, to effect any such action shall be null, void and of no effect; provided, however, that nothing in this Section 5.13 shall preclude the assumption of such rights by executors, administrators or other legal representatives of the Executive or the Executive's estate and their assigning any rights hereunder to the person or persons entitled thereto.

Section 5.14. Source of Payment. Except as otherwise provided under the terms of any applicable employee benefit plan, all payments provided for under this Agreement shall be paid in cash from the general funds of Company. The Company shall not be required to establish a special or separate fund or other segregation of assets to assure such payments, and, if the Company shall make any investments to aid it in meeting its obligations hereunder, the Executive shall have no right, title or interest whatever in or to any such investments except as may otherwise be expressly provided in a separate written instrument relating to such investments. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind, or a fiduciary relationship, between Company and the Executive or any other person. To the extent that any person acquires a right to receive payments from Company hereunder, such right, without prejudice to rights which employees may have, shall be no greater than the right of an unsecured creditor of Company. The Executive shall not look to the owners of the Company for the satisfaction of any obligations of the Company under this Agreement.

Section 5.15. Tax Withholding. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

Section 5.16. 409A Compliance. All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder ("Section 409A"). As used in this Agreement, the "Code" means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an "additional tax" under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an "additional tax" within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to "specified employees," any payment on account of the Executive's separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the Termination Date and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Section 4.1 unless the Executive would be considered to have incurred a "termination of employment" from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

Section 5.17. 280G Modified Cutback.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would subject the Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar (\$1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 5.17, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

COMPANY

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Stephen P. Harrington

Name: Stephen P. Harrington

Title: President

EXECUTIVE

/s/ Roelof Rongen

Roelof Rongen

[Signature Page to Employment Agreement]

EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT (this "Agreement"), dated July 30, 2013 and effective on the date of the initial closing of the private placement offering of the Company's common stock (the "Effective Date"), is by and between MATINAS BIOPHARMA HOLDINGS, INC., a Delaware corporation (the "Company") and George Bobotas, PhD (the "Executive").

WITNESSETH:

WHEREAS, the Company desires to employ the Executive as its Executive Vice President and Chief Scientific Officer and the Executive desires to accept such employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall govern the terms of employment between the Executive and the Company.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

ARTICLE 1

EMPLOYMENT; TERM OF AGREEMENT

Section 1.1. Employment and Acceptance. During the Term (as defined in Section 1.2), the Company shall employ the Executive, and the Executive shall accept such employment and serve the Company, in each case, subject to the terms and conditions of this Agreement.

Section 1.2. Term. The employment relationship hereunder shall be for the period commencing on the Effective Date and, subject to earlier termination as provided in ARTICLE 4, ending on the third anniversary of the Effective Date (the "Term"). In the event that the Executive's employment with the Company terminates, the Company's obligation to continue to pay, after the Termination Date (as defined in Section 4.2(b)), Base Salary (as defined in Section 3.1(a)), Annual Bonus (as defined in Section 3.1(b)) and other unaccrued benefits shall terminate, except as may be provided for in ARTICLE 4.

ARTICLE 2

TITLE; DUTIES AND OBLIGATIONS; LOCATION

Section 2.1. Title. The Company shall employ the Executive to render exclusive and full-time services to the Company. The Executive shall serve in the capacity of Executive Vice President and Chief Scientific Officer.

Section 2.2. Duties. The Executive shall report to the Company's Chief Executive Officer and be subject to the lawful direction of the Company's Board of Directors (the "Board") and/or the CEO. The Executive agrees to perform to the best of his ability, experience and talent those acts and duties, consistent with the position of Executive Vice President and Chief Scientific Officer as the Board (and/or the Chief Executive Officer) shall from time to time direct. During the Term, the Executive also shall serve in such other executive-level positions or capacities as may, from time to time, be reasonably requested by the Board and/or the CEO, including, without limitation (subject to election, appointment, re-election or re-appointment, as applicable) as (a) a member of the Board and/or as a member of the board of directors or similar governing body of any of the Company's subsidiaries or other Affiliates (as defined below), (b) an officer of any of the Company's subsidiaries or other Affiliates, and/or (c) a member of any committee of the Company and/or any of its subsidiaries or other Affiliates, in each case, for no additional compensation. As used in this Agreement, "Affiliate" of any individual or entity means any other individual or entity that directly or individual controls, is controlled by, or is under common control with, the individual or entity. For avoidance of doubt, any election of the Executive as a member of the Board is independent from the employment of the Executive under this Agreement and subject to normal procedures, bylaws and agreements regulating the election and/or removal of the members of the Board; provided, however, that, as set forth above, such service shall be for no additional compensation.

Section 2.3. Compliance with Policies, etc. During the Term, the Executive shall be bound by, and comply fully with, all of the Company's policies and procedures for employees and officers in place from time to time, including, but not limited to, all terms and conditions set forth in the Company's employee handbook, compliance manual, codes of conduct and any other memoranda and communications applicable to the Executive pertaining to the policies, procedures, rules and regulations, as currently in effect and as may be amended from time to time. These policies and procedures include, among other things and without limitation, the Executive's obligations to comply with the Company's rules regarding confidential and proprietary information and trade secrets.

Section 2.4. Time Commitment. During the Term, the Executive shall use his best efforts to promote the interests of the Company (including its subsidiaries and other Affiliates) and shall devote all of his business time, ability and attention to the performance of his duties for the Company and shall not, directly or indirectly, render any services to any other person or organization, whether for compensation or otherwise, except with the Board's prior written consent or as specified on Schedule A of the Covenants Agreement (as defined in Section 5.1), provided that the foregoing shall not prevent the Executive from (i) participating in charitable, civic, educational, professional, community or industry affairs, or (ii) managing the Executive's passive personal investments, so long as, in each case, such activities individually or in the aggregate do not materially interfere or conflict with the Executive's duties hereunder or create a potential business or fiduciary conflict (in each case, as determined by the Board).

Section 2.5. Location. The Executive's principal place of business for the performance of his duties under this Agreement shall be at the principal executive office of the Company. Notwithstanding, the foregoing, the Executive shall be required to travel as necessary to perform his duties hereunder.

ARTICLE 3
COMPENSATION AND BENEFITS; EXPENSES

Section 3.1. Compensation and Benefits. For all services rendered by the Executive in any capacity during the Term (including, without limitation, serving as an officer, director or member of any committee of the Company or any of its subsidiaries or other Affiliates), the Executive shall be compensated as follows (subject, in each case, to the provisions of ARTICLE 4 below):

(a) Base Salary. During the Term, the Company shall pay the Executive a base salary (the "Base Salary") at the annualized rate of \$250,000, which shall be subject to customary withholdings and authorized deductions and be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base salary shall be subject to periodic adjustments as the Board and/or the Compensation Committee of the Board (the "Compensation Committee") shall in its/their discretion deem appropriate; provided, however, that upon the later to occur of (i) the closing of an additional round of financing (including equity, debt or convertible debt financing, and whether in one transaction or a series of related transactions) with gross proceeds of at least \$15 million following the current private placement offering (the initial closing of which is occurring as of the Effective Date), and (ii) the initiation of the first Phase III trial of MAT9001, the annualized rate of Base Salary shall increase by \$50,000, and upon each one-year anniversary thereof during the term, shall be increased by an additional \$50,000. As used in this Agreement, the term "Base Salary" shall refer to Base Salary as may be adjusted from time to time.

(b) Annual Bonus. For each calendar year ending during the Term (beginning with the calendar year ending December 31, 2013), the Executive shall be eligible to receive an annual bonus (the "Annual Bonus") with a target amount equal to thirty percent (30%) of the Base Salary earned by the Executive for such calendar year (the "Target Annual Bonus"). The actual amount of each Annual Bonus will be based upon the level of achievement of the Company's corporate objectives and the Executive's individual objectives, in each case, as established by the Board or the Compensation Committee (taking into account the input of the Chief Executive Officer with respect to the establishment of the Executive's individual objectives) for the calendar year with respect to which such Annual Bonus relates. The determination of the level of achievement of the corporate objectives and the Executive's individual performance objectives for a year shall be made by the Board or the Compensation Committee (taking into account the input of the Chief Executive Officer with respect to the level of achievement of the Executive's individual objectives), in its reasonable discretion. Each Annual Bonus for a calendar year, to the extent earned, will be paid in a lump sum in the following calendar year, within the first 75 days of such following year. The Annual Bonus shall not be deemed earned until the date that it is paid. Accordingly, in order for the Executive to receive an Annual Bonus, the Executive must be actively employed by the Company at the time of such payment.

(c) Signing Bonus. Within thirty (30) days following the Effective Date, the Company will pay to the Executive in a lump sum the amount of \$125,000 as a signing bonus.

(d) Equity Compensation. The Company will recommend to the Compensation Committee at its next regularly scheduled meeting following the Effective Date a grant to the Executive of options to purchase up to 350,000 shares of the Company's common stock pursuant to the Company's 2013 Equity Compensation Plan (the "2013 Plan"), on the terms and conditions determined by the Compensation Committee, with such grant subject to stockholder approval of the Company's 2013 Equity Compensation Plan. During the Term, subject to the terms and conditions established within the 2013 Plan or any successor equity compensation plan as may be in place from time to time and separate Award Agreements (as defined in the 2013 Plan), the Executive also shall be eligible to receive from time to time additional Stock Options, Stock Unit Awards, Performance Shares, Performance Units, Incentive Bonus Awards, Other Cash-Based Awards and/or Other Stock-Based Awards (as such capitalized terms are defined in the 2013 Plan), in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

(e) Benefit Plans. The Executive shall be entitled to participate in all employee benefit plans and programs (excluding severance plans, if any) generally made available by the Company to senior executives of the Company, to the extent permissible under the general terms and provisions of such plans or programs and in accordance with the provisions thereof. The Company may amend, modify or rescind any employee benefit plan or program and/or change employee contribution amounts to benefit costs without notice in its discretion. Prior to establishing such benefit plans, the Company may pay the expense of health and dental insurance maintained by the Executive for his own benefit plus his immediate family at the Effective Date up to an amount of \$2,500 per month.

(f) Paid Vacation. The Executive shall be entitled to paid vacation days in accordance with the Company's vacation policies in effect from time to time for its executive team; provided, however, that the Executive shall be entitled to no less than fifteen (15) paid vacation days per calendar year during the Term.

Section 3.2. Expense Reimbursement. The Company shall reimburse the Executive during the Term, in accordance with the Company's expense reimbursement policies in place from time, for all reasonable out-of-pocket business expenses incurred by the Executive in the performance of his duties hereunder. In order to receive such reimbursement, the Executive shall furnish to the Company documentary evidence of each such expense in the form required to comply with the Company's policies in place from time to time.

ARTICLE 4 TERMINATION OF EMPLOYMENT

Section 4.1. Termination Without Cause or Resignation for Good Reason.

(a) The Company may terminate the Executive's employment hereunder at any time without Cause (other than by reason of death or Disability) upon sixty (60) days prior written notice to the Executive. Executive may terminate his employment hereunder for Good Reason upon written notice to the Company in accordance with the provisions set forth in Section 4.1(c).

(b) As used in this Agreement, “Cause” means: (i) a material act, or act of fraud, committed by the Executive that is intended to result in the Executive’s personal enrichment to the detriment or at the expense of the Company or any of its Affiliates; (ii) the Executive is convicted of a felony; (iii) gross negligence or willful misconduct by the Executive, or failure by the Executive to perform the duties or obligations reasonably assigned to the Executive by the Board or the CEO from time to time, which is not cured upon ten (10) days prior written notice (unless such negligence, misconduct or failure is not susceptible to cure, as determined in the reasonable discretion of the Board); or (iv) the Executive violates the Covenants Agreement (as defined in Section 5.1 below).

(c) As used in this Agreement, “Good Reason” means the occurrence of any of the following: (1) a material breach by the Company of the terms of this Agreement; (2) a material reduction in the Executive’s Base Salary; (3) a material diminution in the Executive’s authority, duties or responsibilities; or (4) a material change in the geographic location at which the Executive performs services for the Company; provided, however, that the Executive must notify the Company within ninety (90) days of the occurrence of any of the foregoing conditions that he considers it to be a “Good Reason” condition and provide the Company with at least thirty (30) days in which to cure the condition. If the Executive fails to provide this notice and cure period prior to his resignation, or resigns more than six (6) months after the initial existence of the condition, his resignation will not be deemed to be for “Good Reason.”

(d) If the Executive’s employment is terminated pursuant to Section 4.1(a) other than during the Post-Change in Control Period (as defined in Section 4.1(e)), the Executive shall, in full discharge of all of the Company’s obligations to the Executive, be entitled to receive, and the Company’s sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations (as defined in Section 4.2(b));

(ii) six (6) months accelerated vesting of all of the Executive’s outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to nine (9) months of the Executive’s Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company’s customary payroll practices, commencing sixty (60) days following the Termination Date (the “Pre-CIC Severance Payments”); and

(B) if the Executive then participates in the Company’s medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“COBRA”), the Company will pay monthly, on the Executive’s behalf, a portion of the cost of such coverage for the nine (9) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the “Pre-CIC COBRA Assistance”); provided, however, that if and to the extent that the Company may not provide such Pre-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Pre-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A (as defined in Section 5.16).

(e) If the Executive's employment is terminated pursuant to Section 4.1(a) during the twenty-four (24) months immediately following a Change in Control (as defined below) (the "Post-Change in Control Period"), the Executive shall, in full discharge of all of the Company's obligations to the Executive (and in lieu of any payments and benefits set forth in Section 4.1(d)), be entitled to receive, and the Company's sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations;

(ii) full accelerated vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to eighteen (18) months of the Executive's Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the Termination Date (the "Post-CIC Severance Payments");

(B) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company will pay monthly, on the Executive's behalf, a portion of the cost of such coverage for the eighteen (18) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the "Post-CIC COBRA Assistance"); provided, however, that if and to the extent that the Company may not provide such Post-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Post-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A; and

(C) a payment equal to the Executive's Target Annual Bonus for the calendar year in which the Termination Date occurs, payable in a lump sum on the 60th day following the Termination Date.

(f) As used in this Agreement, “Change in Control” means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company’s Assets. A change in the ownership of a substantial portion of the Company’s assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person’s status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term “corporation” shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

Section 4.2. Termination for Cause; Voluntary Termination; Expiration of Term.

(a) The Company may terminate the Executive's employment hereunder at any time for Cause upon written notice to the Executive. The Executive may voluntarily terminate his employment hereunder at any time without Good Reason upon sixty (60) days prior written notice to the Company; provided, however, the Company reserves the right, upon written notice to the Executive, to accept the Executive's notice of resignation and to accelerate such notice and make the Executive's resignation effective immediately, or on such other date prior to Executive's intended last day of work as the Company deems appropriate. It is understood and agreed that the Company's election to accelerate Executive's notice of resignation shall not be deemed a termination by the Company without Cause for purposes of Section 4.1 of this Agreement or otherwise or constitute Good Reason (as defined in Section 4.1) for purposes of Section 4.1 of this Agreement or otherwise. The Executive's employment shall automatically terminate upon the expiration of the Term in accordance with Section 1.2.

(b) If the Executive's employment is terminated pursuant to Section 4.2(a), the Executive shall, in full discharge of all of the Company's obligations to the Executive, be entitled to receive, and the Company's sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive, the following (collectively, the "Accrued Obligations"):

(i) the Executive's earned, but unpaid, Base Salary through the final date of the Executive's employment by the Company (the "Termination Date"), payable in accordance with the Company's standard payroll practices;

(ii) the Executive's accrued, but unused, vacation (in accordance with the Company's policies);

(iii) expenses reimbursable under Section 3.2 above incurred on or prior to the Termination Date but not yet reimbursed;
and

(iv) any amounts or benefits that are vested amounts or vested benefits or that the Executive is otherwise entitled to receive under any plan, program, policy or practice (with the exception of those, if any, relating to severance) on the Termination Date, in accordance with such plan, program, policy, or practice.

Section 4.3. Termination Resulting from Death or Disability.

(c) As the result of any Disability suffered by the Executive, the Company may, upon five (5) days prior notice to the Executive, terminate the Executive's employment under this Agreement. The Executive's employment shall automatically terminate upon his death.

(d) "Disability" means a determination by the Company in accordance with applicable law that as a result of a physical or mental injury or illness, the Executive is unable to perform the essential functions of his job with or without reasonable accommodation for a period of (i) ninety (90) consecutive days; or (ii) one hundred twenty (120) days during any twelve (12) month period.

(e) If the Executive's employment is terminated pursuant to Section 4.3(a), the Executive or the Executive's estate, as the case may be, shall be entitled to receive, and the Company's sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive or the Executive's estate, as the case may be, the Accrued Obligations.

Section 4.4. Release Agreement. In order to receive the Pre-CIC Severance Payments or the Post-CIC Severance Payments (collectively referred to herein as the "Severance Payments") or the Pre-CIC COBRA Assistance or the Post-CIC COBRA Assistance (collectively referred to herein as the "COBRA Assistance") set forth in Section 4.1 (if eligible), the Executive must timely execute (and not revoke) a separation agreement and general release (the "Release Agreement") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion. If the Executive is eligible for Severance Payments and COBRA Assistance pursuant to Section 4.1, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the Termination Date. The Severance Payments and COBRA Assistance are subject to the Executive's execution of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

Section 4.5. Post-Termination Breach. Notwithstanding anything to the contrary contained in this Agreement, the Company's obligations to provide the Severance Payments and the COBRA Assistance will immediately cease if the Executive breaches any of the provisions of the Covenants Agreement, the Release Agreement or any other agreement the Executive has with the Company.

Section 4.6. Removal from any Boards and Position. If the Executive's employment is terminated for any reason under this Agreement, he shall be deemed (without further action, deed or notice) to resign (i) if a member, from the Board or board of directors (or similar governing body) of any Affiliate of the Company or any other board to which he has been appointed or nominated by or on behalf of the Company and (ii) from all other positions with the Company or any subsidiary or other Affiliate of the Company, including, but not limited to, as an officer of the Company and any of its subsidiaries or other Affiliates.

ARTICLE 5
GENERAL PROVISIONS

Section 5.1. Company Non-Disclosure and Invention Assignment Agreement. The Executive acknowledges and confirms that the Non-Disclosure and Invention Assignment Agreement executed by the Executive in favor of the Company dated as of the date hereof ("Covenants Agreement"), the terms of which are incorporated herein by reference, remains in full force and effect and binding upon the Executive. The Covenants Agreement shall survive the termination of this Agreement and the Executive's employment by the Company for the applicable period(s) set forth therein.

Section 5.2. Expenses. Each of the Company and the Executive shall bear its/his own costs, fees and expenses in connection with the negotiation, preparation and execution of this Agreement.

Section 5.3. Entire Agreement. This Agreement and the Covenants Agreement contain the entire agreement of the parties hereto with respect to the terms and conditions of the Executive's employment during the Term and activities following termination of this Agreement and the Executive's employment with the Company and supersede any and all prior agreements and understandings, whether written or oral, between the parties hereto with respect to the subject matter of this Agreement or the Covenants Agreement. Each party hereto acknowledges that no representations, inducements, promises or agreements, whether oral or in writing, have been made by any party, or on behalf of any party, which are not embodied herein or in the Covenants Agreement. The Executive acknowledges and agrees that the Company has fully satisfied, and has no further, obligations to the Executive arising under, or relating to, any other employment or consulting arrangement or understanding (including, without limitation, any claims for compensation or benefits of any kind) or otherwise. No agreement, promise or statement not contained in this Agreement or the Covenants Agreement shall be valid and binding, unless agreed to in writing and signed by the parties sought to be bound thereby.

Section 5.4. No Other Contracts. The Executive represents and warrants to the Company that neither the execution and delivery of this Agreement by the Executive nor the performance by the Executive of the Executive's obligations hereunder, shall constitute a default under or a breach of the terms of any other agreement, contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound, nor shall the execution and delivery of this Agreement by the Executive nor the performance by the Executive of his duties and obligations hereunder give rise to any claim or charge against either the Executive, the Company or any Affiliate, based upon any other contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound. The Executive further represents and warrants to the Company that he is not a party to or subject to any restrictive covenants, legal restrictions or other agreement, contract or arrangement, whether written or oral, in favor of any entity or person which would in any way preclude, inhibit, impair or limit the Executive's ability to perform his obligations under this Agreement, including, but not limited to, non-competition agreements, non-solicitation agreements or confidentiality agreements. The Executive shall defend, indemnify and hold the Company harmless from and against all claims, actions, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and amounts paid in settlement in good faith) arising from or relating to any breach of the representations and warranties made by the Executive in this Section 5.4.

Section 5.5. Notices. Any notice or other communication required or permitted hereunder shall be in writing and shall be delivered personally or sent by nationally recognized overnight courier service (with next business day delivery requested). Any such notice or communication shall be deemed given and effective, in the case of personal delivery, upon receipt by the other party, and in the case of a courier service, upon the next business day, after dispatch of the notice or communication. Any such notice or communication shall be addressed as follows:

If to the Company, to:

Matinas BioPharma Holdings, Inc.
915 Klosterman Road, East
Tarpon Springs, Florida 34689

Attn: Board of Directors

With a copy to:

Lowenstein Sandler PC
1251 Avenue of the Americas
New York, New York 10020
Attn: Michael J. Lerner, Esq.

If to the Executive, to:

George Bobotas, PhD

Any person named above may designate another address or fax number by giving notice in accordance with this Section to the other persons named above.

Section 5.6. Governing Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New Jersey, without regard to principles of conflicts of law. Any and all actions arising out of this Agreement or Employee's employment by Company or termination therefrom shall be brought and heard in the state and federal courts of the State of New Jersey and the parties hereto hereby irrevocably submit to the exclusive jurisdiction of any such courts. THE COMPANY AND THE EXECUTIVE HEREBY WAIVE THEIR RESPECTIVE RIGHT TO TRIAL BY JURY IN ANY ACTION CONCERNING THIS AGREEMENT OR ANY AND ALL MATTERS ARISING DIRECTLY OR INDIRECTLY HEREFROM AND REPRESENT THAT THEY HAVE CONSULTED WITH COUNSEL OF THEIR CHOICE OR HAVE CHOSEN VOLUNTARILY NOT TO DO SO SPECIFICALLY WITH RESEPCT TO THIS WAIVER.

Section 5.7. Waiver. Either party hereto may waive compliance by the other party with any provision of this Agreement. The failure of a party to insist on strict adherence to any term of this Agreement on any occasion shall not be considered a waiver or deprive that party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. No waiver of any provision shall be construed as a waiver of any other provision. Any waiver must be in writing.

Section 5.8. Severability. If any one or more of the terms, provisions, covenants and restrictions of this Agreement shall be determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated and the parties will attempt to agree upon a valid and enforceable provision which shall be a reasonable substitute for such invalid and unenforceable provision in light of the tenor of this Agreement, and, upon so agreeing, shall incorporate such substitute provision in this Agreement. In addition, if any one or more of the provisions contained in this Agreement shall for any reason be determined by a court of competent jurisdiction to be excessively broad as to duration, geographical scope, activity or subject, it shall be construed, by limiting or reducing it, so as to be enforceable to the extent compatible with then applicable law.

Section 5.9. Counterparts. This Agreement may be executed in any number of counterparts and each such duplicate counterpart shall constitute an original, any one of which may be introduced in evidence or used for any other purpose without the production of its duplicate counterpart. Moreover, notwithstanding that any of the parties did not execute the same counterpart, each counterpart shall be deemed for all purposes to be an original, and all such counterparts shall constitute one and the same instrument, binding on all of the parties hereto.

Section 5.10. Advice of Counsel. This Agreement was prepared by Lowenstein Sandler LLP in its capacity as legal counsel to the Company. Both parties hereto acknowledge that they have had the opportunity to seek and obtain the advice of counsel before entering into this Agreement and have done so to the extent desired, and have fully read the Agreement and understand the meaning and import of all the terms hereof.

Section 5.11. Assignment. This Agreement shall inure to the benefit of the Company and its successors and assigns (including, without limitation, the purchaser of all or substantially all of its assets) and shall be binding upon the Company and its successors and assigns. This Agreement is personal to the Executive, and the Executive shall not assign or delegate his rights or duties under this Agreement, and any such assignment or delegation shall be null and void.

Section 5.12. Agreement to Take Actions. Each party to this Agreement shall execute and deliver such documents, certificates, agreements and other instruments, and shall take all other actions, as may be reasonably necessary or desirable in order to perform his or its obligations under this Agreement.

Section 5.13. No Attachment. Except as required by law, no right to receive payments under this Agreement shall be subject to anticipation, commutation, alienation, sale, assignment, encumbrance, charge, pledge, or hypothecation or to execution, attachment, levy or similar process or assignment by operation of law, and any attempt, voluntary or involuntary, to effect any such action shall be null, void and of no effect; provided, however, that nothing in this Section 5.13 shall preclude the assumption of such rights by executors, administrators or other legal representatives of the Executive or the Executive's estate and their assigning any rights hereunder to the person or persons entitled thereto.

Section 5.14. Source of Payment. Except as otherwise provided under the terms of any applicable employee benefit plan, all payments provided for under this Agreement shall be paid in cash from the general funds of Company. The Company shall not be required to establish a special or separate fund or other segregation of assets to assure such payments, and, if the Company shall make any investments to aid it in meeting its obligations hereunder, the Executive shall have no right, title or interest whatever in or to any such investments except as may otherwise be expressly provided in a separate written instrument relating to such investments. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind, or a fiduciary relationship, between Company and the Executive or any other person. To the extent that any person acquires a right to receive payments from Company hereunder, such right, without prejudice to rights which employees may have, shall be no greater than the right of an unsecured creditor of Company. The Executive shall not look to the owners of the Company for the satisfaction of any obligations of the Company under this Agreement.

Section 5.15. Tax Withholding. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

Section 5.16. 409A Compliance. All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder (“Section 409A”). As used in this Agreement, the “Code” means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an “additional tax” under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an “additional tax” within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to “specified employees,” any payment on account of the Executive’s separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the Termination Date and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive’s lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Section 4.1 unless the Executive would be considered to have incurred a “termination of employment” from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

Section 5.17. 280G Modified Cutback.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the “Parachute Payments”) would subject the Executive to the excise tax imposed under Section 4999 of the Code (the “Excise Tax”), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar (\$1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 5.17, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

COMPANY

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Stephen P. Harrington

Name: Stephen P. Harrington

Title: President

EXECUTIVE

/s/ George Bobotas, PhD.

George Bobotas, PhD

[Signature Page To Employment Agreement]

EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT (this "Agreement"), dated July 30, 2013 and effective on the date of the initial closing of the private placement offering of the Company's common stock (the "Effective Date"), is by and between MATINAS BIOPHARMA HOLDINGS, INC., a Delaware corporation (the "Company") and Abdel A. Fawzy, PhD (the "Executive").

WITNESSETH:

WHEREAS, the Company desires to employ the Executive as its Executive Vice President, Pharmaceutical Development and Supply Chain Development and the Executive desires to accept such employment, on the terms and conditions set forth in this Agreement; and

WHEREAS, the Company and the Executive have mutually agreed that, as of the Effective Date, this Agreement shall govern the terms of employment between the Executive and the Company.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

ARTICLE 1 EMPLOYMENT; TERM OF AGREEMENT

Section 1.1. Employment and Acceptance. During the Term (as defined in Section 1.2), the Company shall employ the Executive, and the Executive shall accept such employment and serve the Company, in each case, subject to the terms and conditions of this Agreement.

Section 1.2. Term. The employment relationship hereunder shall be for the period commencing on the Effective Date and, subject to earlier termination as provided in ARTICLE 4, ending on the third anniversary of the Effective Date (the "Term"). In the event that the Executive's employment with the Company terminates, the Company's obligation to continue to pay, after the Termination Date (as defined in Section 4.2(b)), Base Salary (as defined in Section 3.1(a)), Annual Bonus (as defined in Section 3.1(b)) and other unaccrued benefits shall terminate, except as may be provided for in ARTICLE 4.

ARTICLE 2 TITLE; DUTIES AND OBLIGATIONS; LOCATION

Section 2.1. Title. The Company shall employ the Executive to render exclusive and full-time services to the Company. The Executive shall serve in the capacity of Executive Vice President, Pharmaceutical Development and Supply Chain Development.

Section 2.2. Duties. The Executive shall report to the Company's Chief Executive Officer and be subject to the lawful direction of the Company's Board of Directors (the "Board") and/or the CEO. The Executive agrees to perform to the best of his ability, experience and talent those acts and duties, consistent with the position of Executive Vice President, Pharmaceutical Development and Supply Chain Development as the Board (and/or the Chief Executive Officer) shall from time to time direct. During the Term, the Executive also shall serve in such other executive-level positions or capacities as may, from time to time, be reasonably requested by the Board and/or the CEO, including, without limitation (subject to election, appointment, re-election or re-appointment, as applicable) as (a) a member of the Board and/or as a member of the board of directors or similar governing body of any of the Company's subsidiaries or other Affiliates (as defined below), (b) an officer of any of the Company's subsidiaries or other Affiliates, and/or (c) a member of any committee of the Company and/or any of its subsidiaries or other Affiliates, in each case, for no additional compensation. As used in this Agreement, "Affiliate" of any individual or entity means any other individual or entity that directly or individual controls, is controlled by, or is under common control with, the individual or entity. For avoidance of doubt, any election of the Executive as a member of the Board is independent from the employment of the Executive under this Agreement and subject to normal procedures, bylaws and agreements regulating the election and/or removal of the members of the Board; provided, however, that, as set forth above, such service shall be for no additional compensation.

Section 2.3. Compliance with Policies, etc. During the Term, the Executive shall be bound by, and comply fully with, all of the Company's policies and procedures for employees and officers in place from time to time, including, but not limited to, all terms and conditions set forth in the Company's employee handbook, compliance manual, codes of conduct and any other memoranda and communications applicable to the Executive pertaining to the policies, procedures, rules and regulations, as currently in effect and as may be amended from time to time. These policies and procedures include, among other things and without limitation, the Executive's obligations to comply with the Company's rules regarding confidential and proprietary information and trade secrets.

Section 2.4. Time Commitment. During the Term, the Executive shall use his best efforts to promote the interests of the Company (including its subsidiaries and other Affiliates) and shall devote all of his business time, ability and attention to the performance of his duties for the Company and shall not, directly or indirectly, render any services to any other person or organization, whether for compensation or otherwise, except with the Board's prior written consent or as specified on Schedule A of the Covenants Agreement (as defined in Section 5.1), provided that the foregoing shall not prevent the Executive from (i) participating in charitable, civic, educational, professional, community or industry affairs, or (ii) managing the Executive's passive personal investments, so long as, in each case, such activities individually or in the aggregate do not materially interfere or conflict with the Executive's duties hereunder or create a potential business or fiduciary conflict (in each case, as determined by the Board).

Section 2.5. Location. The Executive's principal place of business for the performance of his duties under this Agreement shall be at the principal executive office of the Company. Notwithstanding, the foregoing, the Executive shall be required to travel as necessary to perform his duties hereunder.

ARTICLE 3
COMPENSATION AND BENEFITS; EXPENSES

Section 3.1. Compensation and Benefits. For all services rendered by the Executive in any capacity during the Term (including, without limitation, serving as an officer, director or member of any committee of the Company or any of its subsidiaries or other Affiliates), the Executive shall be compensated as follows (subject, in each case, to the provisions of ARTICLE 4 below):

(a) Base Salary. During the Term, the Company shall pay the Executive a base salary (the "Base Salary") at the annualized rate of \$250,000, which shall be subject to customary withholdings and authorized deductions and be payable in equal installments in accordance with the Company's customary payroll practices in place from time to time. The Executive's Base salary shall be subject to periodic adjustments as the Board and/or the Compensation Committee of the Board (the "Compensation Committee") shall in its/their discretion deem appropriate; provided, however, that upon the later to occur of (i) the closing of an additional round of financing (including equity, debt or convertible debt financing, and whether in one transaction or a series of related transactions) with gross proceeds of at least \$15 million following the current private placement offering (the initial closing of which is occurring as of the Effective Date), and (ii) the initiation of the first Phase III trial of MAT9001, the annualized rate of Base Salary shall increase by \$50,000, and upon each one-year anniversary thereof during the term, shall be increased by an additional \$50,000. As used in this Agreement, the term "Base Salary" shall refer to Base Salary as may be adjusted from time to time.

(b) Annual Bonus. For each calendar year ending during the Term (beginning with the calendar year ending December 31, 2013), the Executive shall be eligible to receive an annual bonus (the "Annual Bonus") with a target amount equal to thirty percent (30%) of the Base Salary earned by the Executive for such calendar year (the "Target Annual Bonus"). The actual amount of each Annual Bonus will be based upon the level of achievement of the Company's corporate objectives and the Executive's individual objectives, in each case, as established by the Board or the Compensation Committee (taking into account the input of the Chief Executive Officer with respect to the establishment of the Executive's individual objectives) for the calendar year with respect to which such Annual Bonus relates. The determination of the level of achievement of the corporate objectives and the Executive's individual performance objectives for a year shall be made by the Board or the Compensation Committee (taking into account the input of the Chief Executive Officer with respect to the level of achievement of the Executive's individual objectives), in its reasonable discretion. Each Annual Bonus for a calendar year, to the extent earned, will be paid in a lump sum in the following calendar year, within the first 75 days of such following year. The Annual Bonus shall not be deemed earned until the date that it is paid. Accordingly, in order for the Executive to receive an Annual Bonus, the Executive must be actively employed by the Company at the time of such payment.

(c) Signing Bonus. Within thirty (30) days following the Effective Date, the Company will pay to the Executive in a lump sum the amount of \$125,000 as a signing bonus.

(d) Equity Compensation. The Company will recommend to the Compensation Committee at its next regularly scheduled meeting following the Effective Date a grant to the Executive of options to purchase up to 350,000 shares of the Company's common stock pursuant to the Company's 2013 Equity Compensation Plan (the "2013 Plan"), on the terms and conditions determined by the Compensation Committee, with such grant subject to stockholder approval of the Company's 2013 Equity Compensation Plan. During the Term, subject to the terms and conditions established within the 2013 Plan or any successor equity compensation plan as may be in place from time to time and separate Award Agreements (as defined in the 2013 Plan), the Executive also shall be eligible to receive from time to time additional Stock Options, Stock Unit Awards, Performance Shares, Performance Units, Incentive Bonus Awards, Other Cash-Based Awards and/or Other Stock-Based Awards (as such capitalized terms are defined in the 2013 Plan), in amounts, if any, to be approved by the Board or the Compensation Committee in its discretion.

(e) Benefit Plans. The Executive shall be entitled to participate in all employee benefit plans and programs (excluding severance plans, if any) generally made available by the Company to senior executives of the Company, to the extent permissible under the general terms and provisions of such plans or programs and in accordance with the provisions thereof. The Company may amend, modify or rescind any employee benefit plan or program and/or change employee contribution amounts to benefit costs without notice in its discretion. Prior to establishing such benefit plans, the Company may pay the expense of health and dental insurance maintained by the Executive for his own benefit plus his immediate family at the Effective Date up to an amount of \$2,500 per month.

(f) Paid Vacation. The Executive shall be entitled to paid vacation days in accordance with the Company's vacation policies in effect from time to time for its executive team; provided, however, that the Executive shall be entitled to no less than fifteen (15) paid vacation days per calendar year during the Term.

Section 3.2. Expense Reimbursement. The Company shall reimburse the Executive during the Term, in accordance with the Company's expense reimbursement policies in place from time, for all reasonable out-of-pocket business expenses incurred by the Executive in the performance of his duties hereunder. In order to receive such reimbursement, the Executive shall furnish to the Company documentary evidence of each such expense in the form required to comply with the Company's policies in place from time to time.

ARTICLE 4 TERMINATION OF EMPLOYMENT

Section 4.1. Termination Without Cause or Resignation for Good Reason.

(a) The Company may terminate the Executive's employment hereunder at any time without Cause (other than by reason of death or Disability) upon sixty (60) days prior written notice to the Executive. Executive may terminate his employment hereunder for Good Reason upon written notice to the Company in accordance with the provisions set forth in Section 4.1(c).

(b) As used in this Agreement, “Cause” means: (i) a material act, or act of fraud, committed by the Executive that is intended to result in the Executive’s personal enrichment to the detriment or at the expense of the Company or any of its Affiliates; (ii) the Executive is convicted of a felony; (iii) gross negligence or willful misconduct by the Executive, or failure by the Executive to perform the duties or obligations reasonably assigned to the Executive by the Board or the CEO from time to time, which is not cured upon ten (10) days prior written notice (unless such negligence, misconduct or failure is not susceptible to cure, as determined in the reasonable discretion of the Board); or (iv) the Executive violates the Covenants Agreement (as defined in Section 5.1 below).

(c) As used in this Agreement, “Good Reason” means the occurrence of any of the following: (1) a material breach by the Company of the terms of this Agreement; (2) a material reduction in the Executive’s Base Salary; (3) a material diminution in the Executive’s authority, duties or responsibilities; or (4) a material change in the geographic location at which the Executive performs services for the Company; provided, however, that the Executive must notify the Company within ninety (90) days of the occurrence of any of the foregoing conditions that he considers it to be a “Good Reason” condition and provide the Company with at least thirty (30) days in which to cure the condition. If the Executive fails to provide this notice and cure period prior to his resignation, or resigns more than six (6) months after the initial existence of the condition, his resignation will not be deemed to be for “Good Reason.”

(d) If the Executive’s employment is terminated pursuant to Section 4.1(a) other than during the Post-Change in Control Period (as defined in Section 4.1(e)), the Executive shall, in full discharge of all of the Company’s obligations to the Executive, be entitled to receive, and the Company’s sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations (as defined in Section 4.2(b));

(ii) six (6) months accelerated vesting of all of the Executive’s outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to nine (9) months of the Executive’s Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company’s customary payroll practices, commencing sixty (60) days following the Termination Date (the “Pre-CIC Severance Payments”); and

(B) if the Executive then participates in the Company’s medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“COBRA”), the Company will pay monthly, on the Executive’s behalf, a portion of the cost of such coverage for the nine (9) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the “Pre-CIC COBRA Assistance”); provided, however, that if and to the extent that the Company may not provide such Pre-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Pre-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A (as defined in Section 5.16).

(e) If the Executive's employment is terminated pursuant to Section 4.1(a) during the twenty-four (24) months immediately following a Change in Control (as defined below) (the "Post-Change in Control Period"), the Executive shall, in full discharge of all of the Company's obligations to the Executive (and in lieu of any payments and benefits set forth in Section 4.1(d)), be entitled to receive, and the Company's sole obligation to the Executive under this Agreement or otherwise shall be to pay or provide to the Executive, the following:

(i) the Accrued Obligations;

(ii) full accelerated vesting of all of the Executive's outstanding stock options, restricted stock and other equity incentive awards; and

(iii) subject to Section 4.4 and Section 4.5:

(A) payments equal to eighteen (18) months of the Executive's Base Salary (at the rate in effect immediately prior to the Termination Date) (less applicable withholdings and authorized deductions), to be paid in equal installments bimonthly in accordance with the Company's customary payroll practices, commencing sixty (60) days following the Termination Date (the "Post-CIC Severance Payments");

(B) if the Executive then participates in the Company's medical and/or dental plans and the Executive timely elects to continue and maintain group health plan coverage pursuant to COBRA, the Company will pay monthly, on the Executive's behalf, a portion of the cost of such coverage for the eighteen (18) months after the Termination Date, which payments will be equal to the amount of the monthly premium for such coverage, less the amount that the Executive would have been required to pay if the Executive had remained an active employee of the Company (the "Post-CIC COBRA Assistance"); provided, however, that if and to the extent that the Company may not provide such Post-CIC COBRA Assistance without incurring tax penalties or violating any requirement of the law, the Company shall use its commercially reasonable best efforts to provide substantially similar assistance in an alternative manner provided that the cost of doing so does not exceed the cost that the Company would have incurred had the Post-CIC COBRA Assistance been provided in the manner described above or cause a violation of Section 409A; and

(C) a payment equal to the Executive's Target Annual Bonus for the calendar year in which the Termination Date occurs, payable in a lump sum on the 60th day following the Termination Date.

(f) As used in this Agreement, “Change in Control” means (x) a change in ownership of the Company under clause (i) below or (y) a change in the ownership of a substantial portion of the assets of the Company under clause (ii) below:

(i) Change in the Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires ownership of capital stock of the Company that, together with capital stock held by such person or group, constitutes more than 50 percent of the total fair market value or total voting power of the capital stock of the Company. However, if any one person or more than one person acting as a group, is considered to own more than 50 percent of the total fair market value or total voting power of the capital stock of the Company, the acquisition of additional capital stock by the same person or persons shall not be considered to be a change in the ownership of the Company. An increase in the percentage of capital stock owned by any one person, or persons acting as a group, as a result of a transaction in which the Company acquires capital stock in the Company in exchange for property will be treated as an acquisition of stock for purposes of this paragraph.

(ii) Change in the Ownership of a Substantial Portion of the Company’s Assets. A change in the ownership of a substantial portion of the Company’s assets shall occur on the date that any one person, or more than one person acting as a group (as defined in clause (iii) below), acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 80 percent of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For this purpose, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets. There is no Change in Control under this clause (ii) when there is a transfer to an entity that is controlled by the shareholders of the Company immediately after the transfer, as provided below in this clause (ii). A transfer of assets by the Company is not treated as a change in the ownership of such assets if the assets are transferred to (a) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its capital stock, (b) an entity, 50 percent or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (c) a person, or more than one person acting as a group, that owns, directly or indirectly, 50 percent or more of the total value or voting power of all the outstanding capital stock of the Company, or (d) an entity, at least 50 percent of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (ii)(c) of this paragraph. For purposes of this clause (ii), a person’s status is determined immediately after the transfer of the assets.

(iii) Persons Acting as a Group. For purposes of clauses (i) and (ii) above, persons will not be considered to be acting as a group solely because they purchase or own capital stock or purchase assets of the Company at the same time. However, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar business transaction with the Company. If a person, including an entity, owns stock in both corporations that enter into a merger, consolidation, purchase or acquisition of assets or capital stock, or similar transaction, such shareholder is considered to be acting as a group with other shareholders in a corporation only with respect to the ownership in that corporation before the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. For purposes of this paragraph, the term "corporation" shall have the meaning assigned such term under Treasury Regulation section 1.280G-1, Q&A-45.

(iv) Each of clauses (i) through (iii) above shall be construed and interpreted consistent with the requirements of Section 409A and any Treasury Regulations or other guidance issued thereunder.

Section 4.2. Termination for Cause; Voluntary Termination; Expiration of Term.

(a) The Company may terminate the Executive's employment hereunder at any time for Cause upon written notice to the Executive. The Executive may voluntarily terminate his employment hereunder at any time without Good Reason upon sixty (60) days prior written notice to the Company; provided, however, the Company reserves the right, upon written notice to the Executive, to accept the Executive's notice of resignation and to accelerate such notice and make the Executive's resignation effective immediately, or on such other date prior to Executive's intended last day of work as the Company deems appropriate. It is understood and agreed that the Company's election to accelerate Executive's notice of resignation shall not be deemed a termination by the Company without Cause for purposes of Section 4.1 of this Agreement or otherwise or constitute Good Reason (as defined in Section 4.1) for purposes of Section 4.1 of this Agreement or otherwise. The Executive's employment shall automatically terminate upon the expiration of the Term in accordance with Section 1.2.

(b) If the Executive's employment is terminated pursuant to Section 4.2(a), the Executive shall, in full discharge of all of the Company's obligations to the Executive, be entitled to receive, and the Company's sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive, the following (collectively, the "Accrued Obligations"):

(i) the Executive's earned, but unpaid, Base Salary through the final date of the Executive's employment by the Company (the "Termination Date"), payable in accordance with the Company's standard payroll practices;

(ii) the Executive's accrued, but unused, vacation (in accordance with the Company's policies);

(iii) expenses reimbursable under Section 3.2 above incurred on or prior to the Termination Date but not yet reimbursed; and

(iv) any amounts or benefits that are vested amounts or vested benefits or that the Executive is otherwise entitled to receive under any plan, program, policy or practice (with the exception of those, if any, relating to severance) on the Termination Date, in accordance with such plan, program, policy, or practice.

Section 4.3. Termination Resulting from Death or Disability.

(c) As the result of any Disability suffered by the Executive, the Company may, upon five (5) days prior notice to the Executive, terminate the Executive's employment under this Agreement. The Executive's employment shall automatically terminate upon his death.

(d) "Disability" means a determination by the Company in accordance with applicable law that as a result of a physical or mental injury or illness, the Executive is unable to perform the essential functions of his job with or without reasonable accommodation for a period of (i) ninety (90) consecutive days; or (ii) one hundred twenty (120) days during any twelve (12) month period.

(e) If the Executive's employment is terminated pursuant to Section 4.3(a), the Executive or the Executive's estate, as the case may be, shall be entitled to receive, and the Company's sole obligation under this Agreement or otherwise shall be to pay or provide to the Executive or the Executive's estate, as the case may be, the Accrued Obligations.

Section 4.4. Release Agreement. In order to receive the Pre-CIC Severance Payments or the Post-CIC Severance Payments (collectively referred to herein as the "Severance Payments") or the Pre-CIC COBRA Assistance or the Post-CIC COBRA Assistance (collectively referred to herein as the "COBRA Assistance") set forth in Section 4.1 (if eligible), the Executive must timely execute (and not revoke) a separation agreement and general release (the "Release Agreement") in a customary form as is determined to be reasonably necessary by the Company in its good faith and reasonable discretion. If the Executive is eligible for Severance Payments and COBRA Assistance pursuant to Section 4.1, the Company will deliver the Release Agreement to the Executive within seven (7) calendar days following the Termination Date. The Severance Payments and COBRA Assistance are subject to the Executive's execution of such Release Agreement within 45 days of the Executive's receipt of the Release Agreement and the Executive's non-revocation of such Release Agreement.

Section 4.5. Post-Termination Breach. Notwithstanding anything to the contrary contained in this Agreement, the Company's obligations to provide the Severance Payments and the COBRA Assistance will immediately cease if the Executive breaches any of the provisions of the Covenants Agreement, the Release Agreement or any other agreement the Executive has with the Company.

Section 4.6. Removal from any Boards and Position. If the Executive's employment is terminated for any reason under this Agreement, he shall be deemed (without further action, deed or notice) to resign (i) if a member, from the Board or board of directors (or similar governing body) of any Affiliate of the Company or any other board to which he has been appointed or nominated by or on behalf of the Company and (ii) from all other positions with the Company or any subsidiary or other Affiliate of the Company, including, but not limited to, as an officer of the Company and any of its subsidiaries or other Affiliates.

ARTICLE 5
GENERAL PROVISIONS

Section 5.1. Company Non-Disclosure and Invention Assignment Agreement. The Executive acknowledges and confirms that the Non-Disclosure and Invention Assignment Agreement executed by the Executive in favor of the Company dated as of the date hereof ("Covenants Agreement"), the terms of which are incorporated herein by reference, remains in full force and effect and binding upon the Executive. The Covenants Agreement shall survive the termination of this Agreement and the Executive's employment by the Company for the applicable period(s) set forth therein.

Section 5.2. Expenses. Each of the Company and the Executive shall bear its/his own costs, fees and expenses in connection with the negotiation, preparation and execution of this Agreement.

Section 5.3. Entire Agreement. This Agreement and the Covenants Agreement contain the entire agreement of the parties hereto with respect to the terms and conditions of the Executive's employment during the Term and activities following termination of this Agreement and the Executive's employment with the Company and supersede any and all prior agreements and understandings, whether written or oral, between the parties hereto with respect to the subject matter of this Agreement or the Covenants Agreement. Each party hereto acknowledges that no representations, inducements, promises or agreements, whether oral or in writing, have been made by any party, or on behalf of any party, which are not embodied herein or in the Covenants Agreement. The Executive acknowledges and agrees that the Company has fully satisfied, and has no further, obligations to the Executive arising under, or relating to, any other employment or consulting arrangement or understanding (including, without limitation, any claims for compensation or benefits of any kind) or otherwise. No agreement, promise or statement not contained in this Agreement or the Covenants Agreement shall be valid and binding, unless agreed to in writing and signed by the parties sought to be bound thereby.

Section 5.4. No Other Contracts. The Executive represents and warrants to the Company that neither the execution and delivery of this Agreement by the Executive nor the performance by the Executive of the Executive's obligations hereunder, shall constitute a default under or a breach of the terms of any other agreement, contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound, nor shall the execution and delivery of this Agreement by the Executive nor the performance by the Executive of his duties and obligations hereunder give rise to any claim or charge against either the Executive, the Company or any Affiliate, based upon any other contract or other arrangement, whether written or oral, to which the Executive is a party or by which the Executive is bound. The Executive further represents and warrants to the Company that he is not a party to or subject to any restrictive covenants, legal restrictions or other agreement, contract or arrangement, whether written or oral, in favor of any entity or person which would in any way preclude, inhibit, impair or limit the Executive's ability to perform his obligations under this Agreement, including, but not limited to, non-competition agreements, non-solicitation agreements or confidentiality agreements. The Executive shall defend, indemnify and hold the Company harmless from and against all claims, actions, losses, liabilities, damages, costs and expenses (including reasonable attorney's fees and amounts paid in settlement in good faith) arising from or relating to any breach of the representations and warranties made by the Executive in this Section 5.4.

Section 5.5. Notices. Any notice or other communication required or permitted hereunder shall be in writing and shall be delivered personally or sent by nationally recognized overnight courier service (with next business day delivery requested). Any such notice or communication shall be deemed given and effective, in the case of personal delivery, upon receipt by the other party, and in the case of a courier service, upon the next business day, after dispatch of the notice or communication. Any such notice or communication shall be addressed as follows:

If to the Company, to:

Matinas BioPharma Holdings, Inc.
915 Klosterman Road, East
Tarpon Springs, Florida 34689

Attn: Board of Directors

With a copy to:

Lowenstein Sandler PC
1251 Avenue of the Americas
New York, New York 10020
Attn: Michael J. Lerner, Esq.

If to the Executive, to:

Abdel A. Fawzy, PhD

Any person named above may designate another address or fax number by giving notice in accordance with this Section to the other persons named above.

Section 5.6. Governing Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New Jersey, without regard to principles of conflicts of law. Any and all actions arising out of this Agreement or Employee's employment by Company or termination therefrom shall be brought and heard in the state and federal courts of the State of New Jersey and the parties hereto hereby irrevocably submit to the exclusive jurisdiction of any such courts. THE COMPANY AND THE EXECUTIVE HEREBY WAIVE THEIR RESPECTIVE RIGHT TO TRIAL BY JURY IN ANY ACTION CONCERNING THIS AGREEMENT OR ANY AND ALL MATTERS ARISING DIRECTLY OR INDIRECTLY HEREFROM AND REPRESENT THAT THEY HAVE CONSULTED WITH COUNSEL OF THEIR CHOICE OR HAVE CHOSEN VOLUNTARILY NOT TO DO SO SPECIFICALLY WITH RESEPCT TO THIS WAIVER.

Section 5.7. Waiver. Either party hereto may waive compliance by the other party with any provision of this Agreement. The failure of a party to insist on strict adherence to any term of this Agreement on any occasion shall not be considered a waiver or deprive that party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. No waiver of any provision shall be construed as a waiver of any other provision. Any waiver must be in writing.

Section 5.8. Severability. If any one or more of the terms, provisions, covenants and restrictions of this Agreement shall be determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated and the parties will attempt to agree upon a valid and enforceable provision which shall be a reasonable substitute for such invalid and unenforceable provision in light of the tenor of this Agreement, and, upon so agreeing, shall incorporate such substitute provision in this Agreement. In addition, if any one or more of the provisions contained in this Agreement shall for any reason be determined by a court of competent jurisdiction to be excessively broad as to duration, geographical scope, activity or subject, it shall be construed, by limiting or reducing it, so as to be enforceable to the extent compatible with then applicable law.

Section 5.9. Counterparts. This Agreement may be executed in any number of counterparts and each such duplicate counterpart shall constitute an original, any one of which may be introduced in evidence or used for any other purpose without the production of its duplicate counterpart. Moreover, notwithstanding that any of the parties did not execute the same counterpart, each counterpart shall be deemed for all purposes to be an original, and all such counterparts shall constitute one and the same instrument, binding on all of the parties hereto.

Section 5.10. Advice of Counsel. This Agreement was prepared by Lowenstein Sandler LLP in its capacity as legal counsel to the Company. Both parties hereto acknowledge that they have had the opportunity to seek and obtain the advice of counsel before entering into this Agreement and have done so to the extent desired, and have fully read the Agreement and understand the meaning and import of all the terms hereof.

Section 5.11. Assignment. This Agreement shall inure to the benefit of the Company and its successors and assigns (including, without limitation, the purchaser of all or substantially all of its assets) and shall be binding upon the Company and its successors and assigns. This Agreement is personal to the Executive, and the Executive shall not assign or delegate his rights or duties under this Agreement, and any such assignment or delegation shall be null and void.

Section 5.12. Agreement to Take Actions. Each party to this Agreement shall execute and deliver such documents, certificates, agreements and other instruments, and shall take all other actions, as may be reasonably necessary or desirable in order to perform his or its obligations under this Agreement.

Section 5.13. No Attachment. Except as required by law, no right to receive payments under this Agreement shall be subject to anticipation, commutation, alienation, sale, assignment, encumbrance, charge, pledge, or hypothecation or to execution, attachment, levy or similar process or assignment by operation of law, and any attempt, voluntary or involuntary, to effect any such action shall be null, void and of no effect; provided, however, that nothing in this Section 5.13 shall preclude the assumption of such rights by executors, administrators or other legal representatives of the Executive or the Executive's estate and their assigning any rights hereunder to the person or persons entitled thereto.

Section 5.14. Source of Payment. Except as otherwise provided under the terms of any applicable employee benefit plan, all payments provided for under this Agreement shall be paid in cash from the general funds of Company. The Company shall not be required to establish a special or separate fund or other segregation of assets to assure such payments, and, if the Company shall make any investments to aid it in meeting its obligations hereunder, the Executive shall have no right, title or interest whatever in or to any such investments except as may otherwise be expressly provided in a separate written instrument relating to such investments. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind, or a fiduciary relationship, between Company and the Executive or any other person. To the extent that any person acquires a right to receive payments from Company hereunder, such right, without prejudice to rights which employees may have, shall be no greater than the right of an unsecured creditor of Company. The Executive shall not look to the owners of the Company for the satisfaction of any obligations of the Company under this Agreement.

Section 5.15. Tax Withholding. The Company or other payor is authorized to withhold from any benefit provided or payment due hereunder, the amount of withholding taxes due any federal, state or local authority in respect of such benefit or payment and to take such other action as may be necessary in the opinion of the Board to satisfy all obligations for the payment of such withholding taxes. The Executive will be solely responsible for all taxes assessed against him with respect to the compensation and benefits described in this Agreement, other than typical employer-paid taxes such as FICA, and the Company makes no representations as to the tax treatment of such compensation and benefits.

Section 5.16. 409A Compliance. All payments under this Agreement are intended to comply with or be exempt from the requirements of Section 409A of the Code and regulations promulgated thereunder (“Section 409A”). As used in this Agreement, the “Code” means the Internal Revenue Code of 1986, as amended. To the extent permitted under applicable regulations and/or other guidance of general applicability issued pursuant to Section 409A, the Company reserves the right to modify this Agreement to conform with any or all relevant provisions regarding compensation and/or benefits so that such compensation and benefits are exempt from the provisions of 409A and/or otherwise comply with such provisions so as to avoid the tax consequences set forth in Section 409A and to assure that no payment or benefit shall be subject to an “additional tax” under Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A, or to the extent any provision in this Agreement must be modified to comply with Section 409A, such provision shall be read in such a manner so that no payment due to the Executive shall be subject to an “additional tax” within the meaning of Section 409A(a)(1)(B) of the Code. If necessary to comply with the restriction in Section 409A(a)(2)(B) of the Code concerning payments to “specified employees,” any payment on account of the Executive’s separation from service that would otherwise be due hereunder within six (6) months after such separation shall be delayed until the first business day of the seventh month following the Termination Date and the first such payment shall include the cumulative amount of any payments (without interest) that would have been paid prior to such date if not for such restriction. Each payment in a series of payments hereunder shall be deemed to be a separate payment for purposes of Section 409A. In no event may the Executive, directly or indirectly, designate the calendar year of payment. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during the Executive’s lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding anything contained herein to the contrary, the Executive shall not be considered to have terminated employment with the Company for purposes of Section 4.1 unless the Executive would be considered to have incurred a “termination of employment” from the Company within the meaning of Treasury Regulation §1.409A-1(h)(1)(ii). In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Executive by Section 409A or damages for failing to comply with Section 409A.

Section 5.17. 280G Modified Cutback.

(a) If any payment, benefit or distribution of any type to or for the benefit of the Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the “Parachute Payments”) would subject the Executive to the excise tax imposed under Section 4999 of the Code (the “Excise Tax”), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar (\$1.00) less than the amount which would cause the Parachute Payments to be subject to the Excise Tax; provided that the Parachute Payments shall only be reduced to the extent the after-tax value of amounts received by the Executive after application of the above reduction would exceed the after-tax value of the amounts received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment and excise taxes applicable to such amount. Unless the Executive shall have given prior written notice to the Company to effectuate a reduction in the Parachute Payments if such a reduction is required, which notice shall be consistent with the requirements of Section 409A to avoid the imputation of any tax, penalty or interest thereunder, then the Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating accelerated vesting of stock options or similar awards, then reducing or eliminating any cash payments (with the payments to be made furthest in the future being reduced first), then by reducing or eliminating any other remaining Parachute Payments; provided, that no such reduction or elimination shall apply to any non-qualified deferred compensation amounts (within the meaning of Section 409A) to the extent such reduction or elimination would accelerate or defer the timing of such payment in manner that does not comply with Section 409A.

(b) An initial determination as to whether (x) any of the Parachute Payments received by the Executive in connection with the occurrence of a change in the ownership or control of the Company or in the ownership of a substantial portion of the assets of the Company shall be subject to the Excise Tax, and (y) the amount of any reduction, if any, that may be required pursuant to the previous paragraph, shall be made by an independent accounting firm selected by the Company (the "Accounting Firm") prior to the consummation of such change in the ownership or effective control of the Company or in the ownership of a substantial portion of the assets of the Company. The Executive shall be furnished with notice of all determinations made as to the Excise Tax payable with respect to the Executive's Parachute Payments, together with the related calculations of the Accounting Firm, promptly after such determinations and calculations have been received by the Company.

(c) For purposes of this Section 5.17, (i) no portion of the Parachute Payments the receipt or enjoyment of which the Executive shall have effectively waived in writing prior to the date of payment of the Parachute Payments shall be taken into account; (ii) no portion of the Parachute Payments shall be taken into account which in the opinion of the Accounting Firm does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code; (iii) the Parachute Payments shall be reduced only to the extent necessary so that the Parachute Payments (other than those referred to in the immediately preceding clause (i) or (ii)) in their entirety constitute reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) of the Code or are otherwise not subject to disallowance as deductions, in the opinion of the auditor or tax counsel referred to in such clause (ii); and (iv) the value of any non-cash benefit or any deferred payment or benefit included in the Parachute Payments shall be determined by the Company's independent auditors based on Sections 280G and 4999 of the Code and the regulations for applying those sections of the Code, or on substantial authority within the meaning of Section 6662 of the Code.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

COMPANY

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Stephen P. Harrington

Name: Stephen P. Harrington

Title: President

EXECUTIVE

/s/ Abdel A. Fawzy

Abdel A. Fawzy, PhD

[Signature Page to Employment Agreement]
