

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

Amendment No. 2  
to

**Form S-1**

REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

**Matinas BioPharma Holdings, Inc.**

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

**Delaware**

**2834**

**46-3011414**

(State or other jurisdiction of incorporation  
or organization)

(Primary Standard Industrial Classification  
Code Number)

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

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

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

**Roelof Rongen**

**Chief Executive Officer**

**Matinas BioPharma Holdings, Inc.**

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

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

**Copies to:**

**Michael J. Lerner, Esq.**

**Steven M. Skolnick, Esq.**

**Lowenstein Sandler LLP**

**1251 Avenue of the Americas**

**New York, New York 10020**

**Telephone: (212) 262-6700**

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 <sup>(1)</sup>	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Shares of common stock sold to selling stockholders in private placement <sup>(2)</sup>	15,000,000	\$ 1.00	\$ 15,000,000	\$ 1,932
Shares of common stock underlying warrants sold to selling stockholders in private placement <sup>(3)</sup>	7,500,000	\$ 2.00	\$ 15,000,000	\$ 1,932
Other shares of common stock underlying warrants held by selling stockholders <sup>(4)</sup>	5,500,000	\$ 2.00	\$ 11,000,000	\$ 1,417
<b>Total</b>	<b>28,000,000</b>	<b>\$</b>	<b>\$ 41,000,000</b>	<b>\$ 5,281*</b>

\* Fee previously paid.

- (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.**

### **EXPLANATORY NOTE**

This Amendment No. 2 (the "Amendment") to the Registration Statement on Form S-1 (the "Form S-1") of Matinas BioPharma Holdings, Inc., which was filed on January 21, 2014, is being filed solely for the purpose of re-filing the exhibit 23.1 to add the date on which the consent was issued and the city and state in which the consent was issued. Other than the exhibits and the signature page to the Form S-1, the remainder of the Form S-1 is unchanged. Accordingly, the prospectus that forms a part of the Form S-1 is not reproduced in this Amendment.

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## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

Our estimated expenses in connection with the issuance and distribution of the securities being registered are:

SEC Registration Fee	\$ 5,281
Accounting Fees and Expenses	\$ 110,000
Legal Fees and Expenses	\$ 150,000
Miscellaneous Fees and Expenses	\$ 15,000
<b>Total</b>	<b>\$ 280,281</b>

#### ITEM 14. INDEMNIFICATION OF OFFICERS AND DIRECTORS

Section 145 of the Delaware General Corporation Law (the "DGCL") provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Our certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the DGCL, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any stockholders' or directors' resolution or by contract. In addition, we plan to enter into director and officer indemnification agreements with each of our directors and officers that provide, among other things, for the indemnification to the fullest extent permitted or required by Delaware law, provided that no indemnitee will be entitled to indemnification in connection with any claim initiated by the indemnitee against us or our directors or officers unless we join or consent to the initiation of the claim, or the purchase and sale of securities by the indemnitee in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended.

Any repeal or modification of these provisions approved by our stockholders will be prospective only and will not adversely affect any limitation on the liability of any of our directors or officers existing as of the time of such repeal or modification.

We are also permitted to apply for insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the DGCL would permit indemnification.

## **ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES**

Since January 1, 2011, the Company made sales of the following unregistered securities:

### ***Original Issuances of Stock and Warrants***

#### *Formation of Holdings*

In connection with our formation in June 2013, we sold an aggregate of 7,500,000 shares of our common stock and 3,750,000 warrants to purchase 3,750,000 shares of our common stock, for an aggregate of \$375,000 (\$0.10 for two shares and one warrant), to 31 accredited investors.

#### *2013 Private Placement*

In July and August 2013, we sold an aggregate of 15,000,000 shares of our common stock and warrants to purchase an aggregate of 7,500,000 shares of our common stock with an exercise price of \$2.00 per share to 119 accredited investors.

In connection with the 2013 Private Placement, we issued (x) a warrant to the Placement Agent to purchase 750,000 shares of our common stock with an exercise price of \$2.00 per share and (y) a warrant to the Placement Agent to purchase 1,500,000 shares of our common stock with an exercise price of \$1.00 per share.

#### *Merger Transaction*

On July 30, 2013, pursuant to the terms of the Merger Agreement between Matinas BioPharam, Holdings and Merger Sub, a wholly owned subsidiary of Holdings, the Merger Sub merged with and into Matinas BioPharma and Matinas BioPharma became a wholly owned subsidiary of Holdings. In connection with the Merger, we issued an aggregate of 9,000,000 shares of our common stock and warrants to purchase 1,000,000 shares of our common stock at an exercise price of \$2.00 per share to 15 stockholders of Matinas BioPharma.

#### *Warrant Private Placement*

On July 30, 2013, we sold 500,000 warrants to purchase 500,000 shares of our common stock at an exercise price of \$2.00 per share to one accredited investor for a purchase price of \$0.04 per warrant.

#### *Consulting Agreement*

On December 26, 2013, we issued 500,000 shares of restricted common stock to a consultant as compensation pursuant to the terms of a consulting agreement.

### ***Stock Options***

Since January 1, 2011, the Company granted stock options under its 2013 Equity Compensation Plan to purchase an aggregate of 3,160,000 at an exercise price of \$0.94 per share.

### ***Securities Act Exemptions***

We deemed the offers, sales and issuances of the securities described above under “—Original Issuances of Stock and Warrants” to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, relative to transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the shares for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the grants of stock options and issuances of common stock upon exercise of such options described above under “—Stock Options” to be exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

## ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Exhibit No.	Description
2.1	Merger Agreement, dated July 11, 2013, by and among the Company, Matinas Merger Sub, Inc., and Matinas BioPharma, Inc.**
3.1	Certificate of Incorporation**
3.2	Bylaws**
4.1	Form of Warrant**
4.2	Form of Placement Agent Warrant**
4.3	Registration Rights Agreement dated July 30, 2013**
5.1	Opinion of Lowenstein Sandler LLP**
10.1	Placement Agency Agreement, dated July 11, 2013, between the Company and Aegis Capital Corp.**
10.2	Consulting Agreement, dated July 30, 2013, between the Company and Aegis Capital Corp.**
10.3	Form of Subscription Agreement for the Company's 2013 private placement**
10.4	Form of Subscription Agreement for the Company's 2013 warrant private placement**
10.5	Voting Agreement, dated July 30, 2013, by and among the Company and the stockholders named therein**
10.6	Matinas BioPharma Holdings, Inc. 2013 Equity Compensation Plan**
10.7	Form of Incentive Stock Option Agreement**
10.8	Form of Non-Qualified Stock Option Agreement**
10.9	Employment Agreement, dated July 30, 2013, between the Company and Roelof Rongen**
10.10	Employment Agreement, dated July 30, 2013, between the Company and George Bobotas**
10.11	Employment Agreement, dated July 30, 2013, between the Company and Abdel A. Fawzy**
10.12	Employment Agreement effective as of October 4, 2013 between the Company and Jerome Jabbour**
10.13	Offer Letter, dated October 31, 2013, between the Company and Gary Gaglione**
10.14	Form of Indemnification Agreement**
10.15	Form of Securities Purchase Agreement (Warrants) for the Company's formation private placement**
10.16	Form of Securities Purchase Agreement (Units) for the Company's formation private placement**
10.17	Lease, effective as of November 4, 2013, by and between the Company and A-K Bedminster Associates, L.P.**
21.1	List of Subsidiaries of the Company**
23.1	Consent of EisnerAmper LLP*
23.2	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)**
24.1	Power of Attorney (included on the signature page of this Registration Statement)**

\* Filed herewith

\*\* Previously filed



## ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:



- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Inssofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Bedminster, State of New Jersey on February 11, 2014.

### MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Roelof Rongen

Name: Roelof Rongen

Title: President & Chief Executive Officer

By: /s/ Gary Gaglione

Name: Gary Gaglione

Title: Interim Chief Financial Officer

Pursuant to the requirements of the Securities Act, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Person</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Roelof Rongen</u> Roelof Rongen	President, Chief Executive Officer and Director (Principal Executive Officer)	February 11, 2014
<u>/s/ Gary Gaglione</u> Gary Gaglione	Interim Chief Financial Officer (Principal Financial and Accounting Officer)	February 11, 2014
* <u>Herbert Conrad</u>	Chairman of the Board	February 11, 2014
* <u>Stefano Ferrari</u>	Director	February 11, 2014
* <u>James S. Scibetta</u>	Director	February 11, 2014
* <u>Adam K. Stern</u>	Director	February 11, 2014

\*By: /s/ Roelof Rongen

Roelof Rongen, Attorney-in-fact

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the inclusion in this Registration Statement of Matinas BioPharma Holdings, Inc. on Form S-1 filed on January 21, 2014 of our report dated June 4, 2013 on our audits of the financial statements as of December 31, 2012 and 2011 and for the periods then ended December 31, 2012 and the cumulative period from August 11, 2011 (date of inception) to December 31, 2012. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-1.

/s/ EISNER AMPER LLP

Edison, New Jersey  
January 21, 2014

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