



DIVISION OF  
CORPORATION FINANCE

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

January 6, 2014

Via E-mail

Roelof Rongen  
Chief Executive Officer  
Matinas BioPharma Holdings, Inc.  
1545 Route 206 South, Suite 302  
Bedminster, NJ 07921

**Re: Matinas BioPharma Holdings, Inc.  
Amendment No. 1 to Draft Registration Statement on Form S-1  
Submitted December 20, 2013  
CIK No. 0001582554**

Dear Mr. Rongen:

We have reviewed your amended confidential draft registration statement and have the following additional comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended confidential draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended confidential draft registration statement or filed registration statement, we may have additional comments.

General

1. Please refer to prior comment 2. As previously requested, please provide the financial statements of the registrant, Matinas BioPharma Holdings, Inc. Refer to Rules 3-01 and 3-02 of Regulation S-X.

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Application of Critical Accounting Policies  
Stock-Based Compensation, page 40

2. Please refer to prior comment 9 and address the following:

- As previously requested please update your discussion to include a table that discloses the terms of all equity issuances, including warrants, common stock, and preferred stock through the date of effectiveness.
- Where applicable as it pertains to the preceding bullet provide in the filing an analysis of the valuation method and assumptions used to determine the fair value of the equity issuances.
- As a reminder, please disclose any equity issuances made up to the date of filing and disclose the reasons for differences between the fair value used for these equity issuances and your anticipated IPO price. Please note that we are deferring a final evaluation of stock compensation and other costs recognized until the amendment containing your estimated offering price is filed.

#### Liquidity and Capital Resources

##### Cash Flows, page 45

3. Your tabular disclosure for nine months ended September 30, 2012 does not agree to the financial statements. Please advise.

#### Business

##### Overview, page 48

4. We note your response to our prior comment 10 and reissue the comment. In particular, we note your disclosure regarding “management’s experience working on pharmacological formulation, evaluation and clinical development in the field of lipid science.” Please expand the discussion to describe the particular members of management that you are referring to and their specific background experience relevant to lipid science.

##### Currently Available Treatment Options and Market Opportunity, page 49

5. We note your response to our prior comment 5 and reissue the comment in part. On this page, you disclose that omega-3 fatty acid based products “have been proven to...reduce the rate of adverse cardiovascular events in humans at high risk for such events.” However, in this regard, we note that both Lovaza and Vascepa, which you reference on this page, contain the following statement on their labels under “limitations of use”: “The effect of LOVAZA/VASCEPA on cardiovascular mortality and morbidity in patients with elevated triglycerides/ severe hypertriglyceridemia has not been determined.” Please include in your discussion the fact that at least two potential competitors are required to include this limitation of use on the labels for their products. In addition, please revise the statement referenced above on page 49 that omega-3 fatty acid based products “have been proven” to reduce cardiovascular morbidity in humans to eliminate the suggestion that omega-3 has been proven to reduce cardiovascular morbidity. Finally, please remove the remaining reference to “the proven therapeutic benefits of omega-3 fatty acids” on page F-27.

Plan of Distribution, page 94

6. We note your response to our prior comment 19 and reissue the comment in part. Please disclose in this section that all selling stockholders who are also broker-dealers are rather than “may be” underwriters.

Statements of Redeemable Convertible Preferred Stock and Stockholders’ Equity (Deficit), page F-5

7. Please refer to prior comment 21. Please disclose the individual costs comprising the \$2.4 million of private placement issuance costs offset against additional paid-in capital. Also, quantify the costs expensed to date for your initial public offering.

Notes to Consolidated Financial Statements

Note D, Financing Transactions – Principally Related Party Transactions, page F-13

8. Please refer to prior comment 23. You disclose that the former owners of Matinas BioPharma, Inc. hold approximately 28.5% of your issued shares. Please identify the parties that hold the other 71.5% of your issued shares and tell us whether they are related to the former owners of Matinas BioPharma Holdings and if so, the nature of these relationships.
9. As previously requested in prior comment 23, tell us how the voting agreement, discussed on page 78, affected your decision as the accounting acquirer in this merger and how warrants issued to the former shareholders of Matinas BioPharma, Adam Stern and the shareholders of Holdings, Inc. affected your conclusion as to the degree of control to be held by the former owners of Matinas BioPharma, Inc. and your conclusion that recapitalization accounting treatment was appropriate. In addition, please explain to us how you restated capital and earnings per share in accordance with the exchange ratio established in this merger. Refer to ASC 805-40 and any other technical guidance upon which you relied.
10. Please refer to prior comment 25. As previously requested, for the 2013 Private Placements, tell us the percentage of stock sold to related parties.
11. Please refer to prior comment 26. You recognized a discount of \$1,400,491 for equity issuances related to the formation of holdings and a discount of \$216,632 offered to Herb Conrad as deemed dividends, but you recognized a discount of \$108,316 offered to Adam Stern as compensation expense. Please disclose and tell us how you determined the fair value of each instrument and refer us to the technical guidance upon which you based this accounting treatment. Also, tell us why the accounting for Mr. Stern’s discount differed from the others.

12. Please refer to prior comment 27. You plan to record the impact of the strike price resetting for all outstanding stock options in October 2013, which was based on an independent valuation at September 1, 2013. Please quantify the impact of this strike price resetting and explain your basis for determining the timing of this accounting treatment.
13. Please refer to prior comment 28. Please describe the terms governing the exercise of outstanding warrants, particularly those “certain events” that trigger future exercise price adjustment. Also, describe those “provisions which require liability accounting under ASC 815” that you have concluded did not exist in the terms governing these instruments.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division’s October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Frank Wyman at (202) 551-3660 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Austin Stephenson at (202) 551-3192 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
Steven Skolnick, Esq.  
Lowenstein Sandler LLP