

**Matinas BioPharma Holdings, Inc.  
1545 Route 206 South, Suite 302  
Bedminster, New Jersey 07921**

May 5, 2015

VIA EDGAR

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street N.E.  
Washington, D.C. 20549  
Attn: Scot Foley

**Re: Matinas BioPharma Holdings, Inc. Post-Effective Amendment No. 2 to Registration Statement on Form S-1 (File No. 333-193455)**

Dear Mr. Foley:

In accordance with Rule 461 under the Securities Act of 1933, as amended, Matinas BioPharma Holdings, Inc. (the "Company") hereby requests that the above-referenced Post-Effective Amendment No. 2 to Registration Statement on Form S-1 (File No. 333-193455) (the "Registration Statement") be declared effective by the Securities and Exchange Commission (the "Commission") at 4:00 p.m., Eastern Standard Time, on Thursday, May 7, 2015, or as soon as practicable thereafter.

In connection with the acceleration of the Registration Statement, the Company hereby acknowledges the following:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert staff comments and the declaration of effectiveness of the Registration Statement as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please call Steven M. Skolnick of Lowenstein Sandler LLP at (973) 597-2476 to confirm the effectiveness of the Registration Statement or with any questions.

Very truly yours,

MATINAS BIOPHARMA HOLDINGS, INC.

By: /s/ Roelof Rongen

Name: Roelof Rongen

Title: Chief Executive Officer

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