

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

---

FORM 8-K

---

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the  
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 1, 2015

---

MATINAS BIOPHARMA HOLDINGS, INC.  
(Exact name of registrant as specified in its charter)

---

Delaware  
(State or other jurisdiction  
of incorporation)

(Commission  
File Number)

46-3011414  
(IRS Employer  
ID Number)

1545 Route 206 South, Suite 302  
Bedminster, New Jersey  
(Address of principal executive offices)

07921  
(Zip Code)

Registrant's telephone number, including area code: (908) 443-1860

Not Applicable  
(Former name or former address, if changed since last report.)

---

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-

**Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

On September 1, 2015, Matinas Biopharma Holdings, Inc. (the “Company”) appointed Raphael J. Mannino, age 68, as the Company’s Senior Vice President and Chief Technology Officer effective September 1, 2015. From 1990 until August 2015, Dr. Mannino was an Associate Professor of Pathology and Laboratory Medicine at Rutgers University, New Jersey Medical School. Dr. Mannino founded BioDelivery Sciences, Inc., and served as its President, Chief Executive Officer and Chief Scientific Officer and a member of its Board of Directors from 1995 to 2000, when it was acquired by BioDelivery Sciences International, Inc. (NASDAQ: BDSI). Dr. Mannino served as BDSI’s Executive Vice President and Chief Scientific Officer from 2001 to 2009 and a member of its Board of Directors from 2000 to 2007. Dr. Mannino’s previous experience includes positions as Assistant, then Associate Professor, Albany Medical College (1980 to 1990), and Instructor then Assistant Professor, Rutgers Medical School (1977 to 1980). His postdoctoral training was from 1973 to 1976 at the Biocenter in Basel, Switzerland. Dr. Mannino received his Ph.D. in Biological Chemistry in 1973 from the Johns Hopkins University, School of Medicine.

On September 1, 2015, the Company entered into an employment agreement with Dr. Mannino (the “Employment Agreement”). Dr. Mannino will receive an annual base salary of \$150,000 (the “Base Salary”), which will increase to \$200,000 upon the closing of an additional financing meeting the conditions specified in the Employment Agreement and also is subject to periodic adjustment by the Company’s Board of Directors (the “Board”) or the Compensation Committee. Dr. Mannino is also eligible for an annual bonus with a target amount of up to 30% of the Base Salary, based on the achievement of certain individual and/or corporate performance targets established by the Board or Compensation Committee. The actual amount of such bonus will be determined annually based upon individual and/or the Company’s achievement of certain performance targets, as determined by the CEO, the Board or the Compensation Committee, in his or its reasonable discretion. In addition, at the next regularly scheduled Compensation Committee meeting, Dr. Mannino will receive a grant of options to purchase 338,888 shares of the Company’s common stock, par value \$0.0001 per share, pursuant to the Company’s 2013 Equity Incentive Plan (the “Plan”), with an exercise price equal to fair market value (as defined in the Plan) on the date of grant. Dr. Mannino is eligible to participate in employee benefit plans generally available to the Company’s senior executives, subject to the terms of those plans.

The Employment Agreement further provides that in the event of termination without cause or with good reason, as described below, subject to the execution and non-revocation of a release agreement, Dr. Mannino will be entitled to receive (i) the amount of his accrued but unpaid Base Salary and any accrued but unused vacation as of the date of termination, (ii) reimbursement of any expenses properly incurred on our behalf prior to any such termination and not yet reimbursed, (iii) continuation of his base salary, at the rate then in effect, for a period of nine months, payable in accordance with the Company’s customary payroll practices and procedures and (iv) the vesting of his outstanding options will be accelerated by six months. The Employment Agreement further provides that in the event of termination without cause or with good reason within the twenty-four month period following a change in control, subject to the execution and non-revocation of a release agreement, Dr. Mannino will be entitled to receive (i) the amount of his accrued but unpaid Base Salary and any accrued but unused vacation as of the date of termination, (ii) reimbursement of any expenses properly incurred on our behalf prior to any such termination and not yet reimbursed, (iii) continuation of his base salary, at the rate then in effect, for a period of eighteen months, payable in accordance with the Company’s customary payroll practices and procedures and (iv) the vesting of his outstanding options will be accelerated in full.

---

Under the Employment Agreement, the terms below are generally defined as follows: (i) “cause” means: (a) a material act, or act of fraud, committed by Dr. Mannino that is intended to result in his personal enrichment to the detriment or at the expense of the Company or any of its affiliates; (b) Dr. Mannino is convicted of a felony; (c) willful misconduct or gross negligence or uncured failure by Dr. Mannino to perform the duties or obligations reasonably assigned to Dr. Mannino by the Board or the Chief Executive Officer from time to time; or (d) Dr. Mannino violates the Covenants Agreement (as defined below); and (ii) “good reason” means that Dr. Mannino has complied with the appropriate notice procedures following the occurrence of any of the following without Dr. Mannino’s advance written consent: (a) a material breach by the Company of the Employment Agreement, (b) a material reduction in the Base Salary; (c) a material diminution of Dr. Mannino’s authority, duties or responsibilities; or (d) a material change in the geographic location at which Dr. Mannino performs services for the Company.

In addition, Dr. Mannino has entered into the Company’s standard form agreement with respect to non-disclosure and assignment of inventions (the “Covenants Agreement”).

The foregoing description of the Employment Agreement is intended to be a summary and is qualified in its entirety by reference to such document, which is attached as Exhibit 10.1 and is incorporated by reference herein.

**Item 7.01. Regulation FD Disclosure.**

On September 1, 2015, the Company issued a press release announcing the appointment of Dr. Mannino as the Company’s Senior Vice President and Chief Technology Officer. A copy of the press release is furnished as Exhibit 99.1 hereto. In accordance with General Instruction B.2 of Form 8-K, the information in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Exchange Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing.

**Item 9.01. Financial Statements and Exhibits**

<b>Exhibit</b>	<b>Description</b>
10.1	Employment Agreement, dated September 1, 2015, between Matinas Biopharma Holdings, Inc. and Raphael J. Mannino.
99.1	Press release dated September 1, 2015.

---

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**MATINAS BIOPHARMA HOLDINGS, INC.**

Date: September 1, 2015

/s/ Roelof Rongen

Roelof Rongen, President and Chief Executive Officer

---

**EMPLOYMENT AGREEMENT**

This EMPLOYMENT AGREEMENT (this “Agreement”), dated as of September 1, 2015 (the “Effective Date”), is by and between MATINAS BIOPHARMA HOLDINGS, INC., a Delaware corporation (the “Company”) and Raphael J. Mannino (the “Executive”).

**WITNESSETH:**

**WHEREAS**, the Company desires to employ the Executive as its Senior Vice President and Chief Technology 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 services to the Company. The Executive shall serve in the capacity of Senior Vice President and Chief Technology Officer.

Section 2.2. Duties. The Executive shall report to the Company’s Chief Executive Officer (“CEO”) 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 Senior Vice President and Chief Technology Officer as the Board (and/or the CEO) 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 Exhibit C 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 as well as the Company's laboratory and clinical development facilities located within reasonable distance from 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 \$150,000, 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 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 aggregate gross proceeds of at least \$15 million, the annualized rate of Base Salary shall increase to \$200,000. 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, 2015), 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 CEO 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 CEO 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) 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 338,888 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. 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.

(d) 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.

(e) 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 to 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 60<sup>th</sup> 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 as of the Effective Date ("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.  
1545 Route 206 South, Suite 302  
Bedminster, NJ 07921  
Attn: General Counsel

**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:**

518 Lannon Lane  
Glen Gardner, NJ 08826

**With a copy to:**

\_\_\_\_\_  
\_\_\_\_\_

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 RESPECT 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 the Company and the Executive or any other person. To the extent that any person acquires a right to receive payments from the Company hereunder, such right, without prejudice to rights which employees may have, shall be no greater than the right of an unsecured creditor of the 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.

Section 5.18. Recoupment of Erroneously Awarded Compensation. Any incentive-based or other compensation paid to the Executive under this Agreement or any other agreement or arrangement with the Company which is subject to recovery under any law, government regulation, stock exchange listing requirement or any clawback policy adopted by the Company from time to time will be subject to the deductions and clawback as may be required by such law, government regulation, stock exchange listing requirement or clawback policy. In addition, if the executive is or becomes an executive officer subject to the incentive compensation repayment requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), then if required by the Dodd-Frank Act or any of its regulations he will enter into an amendment to this Agreement or a separate written agreement with the Company to comply with the Dodd-Frank Act and any of its regulations.

*[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/ Roelof Rongen

Name: Roelof Rongen

Title: Chief Executive Officer

**EXECUTIVE**

/s/ Raphael J. Mannino

Raphael J. Mannino

[Signature Page to Employment Agreement]

---



**Matinas BioPharma Appoints Cochleate Technology Pioneer Raphael J. Mannino, Ph.D., as Senior Vice President and Chief Technology Officer**

*- Co-inventor of the Company's proprietary lipid-crystal nano-particle cochleate technology joins management Sept. 1 -*

**Bedminster, NJ (September 1, 2015)** – Matinas BioPharma Holdings, Inc. (**OTCQB: MTNB**), a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective antifungal and anti-bacterial therapeutics for the treatment of serious and life-threatening infections, today announced that Raphael J. Mannino, Ph.D., has been appointed Senior Vice President and Chief Technology Officer effective Sept. 1, 2015.

Dr. Mannino is an internationally recognized expert in the use of artificial lipid-based structures for the formulation and delivery of biologicals and pharmaceuticals, and has pioneered the use of cochleate technology for this purpose. He is a co-inventor of the proprietary, disruptive lipid-crystal nano-particle cochleate technology utilized by Matinas BioPharma to encapsulate existing drugs, making them safer, more tolerable, less toxic and orally available. Dr. Mannino has been a member of Matinas BioPharma's Scientific Advisory Board since January 2015 and was an Associate Professor of Pathology and Laboratory Medicine at Rutgers University, New Jersey Medical School from 1990 until August 2015.

"We have been working very closely with Dr. Mannino as a scientific advisor and we are honored to officially welcome him as a member of our management team," stated Roelof Rongen, President and Chief Executive Officer of Matinas BioPharma. "Dr. Mannino's research efforts and scientific contributions throughout the last 20 years have resulted in the cochleate delivery methods that are the cornerstone of our novel antifungal and anti-infective drug candidate programs which are progressing in collaboration with the National Institutes of Health. We look forward to advancing our clinical program for the lead drug candidate MAT2203, and our development program for MAT2501 under the guidance of one of the leading experts in the field."

Dr. Mannino said, "I am very pleased to be joining the Matinas BioPharma team to lead the Company's initiatives as we work to advance our orally-administered, encochleated broad spectrum fungicidal and broad spectrum aminoglycoside antibiotic drug formulations from clinical development toward commercialization to help treat patients with serious and life-threatening infections. Additionally, I look forward to working with the team to continue to explore the potential therapeutic opportunity and broad utility of our proprietary cochleate nanoparticle delivery platform across numerous other infectious disease targets."

Previously, Dr. Mannino was the founder of BioDelivery Sciences, Inc., and served as its President, Chief Executive Officer and Chief Scientific Officer and as a member of its Board of Directors from 1995 to 2000, when it was acquired by BioDelivery Sciences International, Inc. (BDSI). He served as BDSI's Executive Vice President and Chief Scientific Officer from 2001 to 2009, and was a member of its Board of Directors from 2000 to 2007. In addition to his experience at BDSI, Dr. Mannino was an Assistant, then Associate Professor, at Albany Medical College from 1980 to 1990, and an Instructor then Assistant Professor at Rutgers Medical School from 1977 to 1980. He completed his postdoctoral training from 1973 to 1976 at the Biocenter in Basel, Switzerland and received his Ph.D. in Biological Chemistry in 1973 from the Johns Hopkins University, School of Medicine.

## About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective broad spectrum antifungal and anti-bacterial therapeutics for the treatment of serious and life-threatening infections. The Company's proprietary, disruptive technology utilizes lipid-crystal nano-particle cochleate to nano-encapsulate existing drugs, making them safer, more tolerable, less toxic and orally available. The Company's lead drug candidate is MAT2203, an orally-administered, encochleated formulation of amphotericin B (a broad spectrum fungicidal agent). The Company also intends to file an investigational new drug application (IND) for MAT2501, which is an orally-administered, encochleated formulation of Amikacin (a broad spectrum aminoglycoside antibiotic agent) for gram-negative and intracellular bacterial infections. In addition, the Company is exploring development and partnership options for MAT9001, a prescription-only omega-3 fatty acid-based composition under development for hypertriglyceridemia, which has shown superiority versus Vascepa<sup>®</sup> (icosapent ethyl) in reducing serum triglycerides, Total- and Non-HDL-Cholesterol, apolipoproteins and PCSK9 levels.

The Company's lead anti-infective product candidates, MAT2203 and MAT2501, position Matinas BioPharma to become a leader in the safe and effective delivery of anti-infective therapies utilizing its proprietary lipid-crystal nano-particle cochleate formulation technology.

For more information, please visit [www.matinasbiopharma.com](http://www.matinasbiopharma.com) and connect with the Company on Twitter, LinkedIn, Facebook, and Google+.

**Forward Looking Statements:** *This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including those relating to the Company's strategic focus and the future development of its product candidates, including MAT2203, the anticipated timing of regulatory submissions and the ability to obtain required regulatory approval and other statements that are predictive in nature, that depend upon or refer to future events or conditions. All statements other than statements of historical fact are statements that could be forward-looking statements. Forward-looking statements include words such as "expects," "anticipates," "intends," "plans," "could," "believes," "estimates" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from any future results expressed or implied by the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, our ability to obtain additional capital to meet our liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials of our product candidates; our ability to successfully complete research and further development and commercialization of our product candidates; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; our ability to protect the Company's intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the other factors listed under "Risk Factors" in our filings with the SEC, including Forms 10-K, 10-Q and 8-K. Investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this release. Except as may be required by law, the Company does not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's product candidates are all in a development stage and are not available for sale or use.*

**Investor Contact**

Jenene Thomas

Jenene Thomas Communications, LLC

Phone: +1 (908) 938-1475

Email: [jthomas@matinasbiopharma.com](mailto:jthomas@matinasbiopharma.com)

Media Contact:

David Connolly

LaVoieHealthScience

Phone: +1 (617) 374-8800

Email: [dconnolly@lavoiehealthscience.com](mailto:dconnolly@lavoiehealthscience.com)

Source: Matinas BioPharma Holdings, Inc.

###