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

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longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* Giordano Natasha (Last) (First) (Middle) C/O MATINAS BIOPHARMA HOLDINGS, INC., 1545 ROUTE 206 SOUTH SUITE 302 (Street) | | | 2. Issuer Name and Ticker or Trading Symbol Matinas BioPharma Holdings, Inc. [MTNB] | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)XDirector10% Owner | | | | | | |
|---|---|---------------------|--|--|---|--|---|---|---|--|---|---------------------------------|---|---|--|
| | | | LDINGS, | Date of Earliest Transaction (Month/Day/Year) 11/01/2021 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | - | Officer (give title below) Other (specify below) 6. Individual or Joint/Group Filing(Check Applicable Line) X_ Form filed by One Reporting Person Form filed by More than One Reporting Person tired, Disposed of, or Beneficially Owned | | | | | |
| | | | | | | | | | | | | | | | |
| BEDMINSTER,, NJ 07921 (City) (State) (Zip) | | | (Zip) | Table I - Non-Derivative Securities Acqu | | | | | | | | | | es Acquir | |
| 1.Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Yea | | | 2A. Deemed Execution Date, any (Month/Day/Yea | | Date, if Cod (Inst | | (A | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | | d (| 6. 7. Nature Ownership Form: Beneficia | | |
| | | | | | | Code | V A | mount (A) or (D) | | nstr. 3 and 4) | tr. 3 and 4) | | | wnership nstr. 4) | |
| Reminder: | Report on a . | | | | | | ii | n this f | who respor orm are not r a currently | equired | to respond | unless the | | ea SEC 14 | 74 (9-02) |
| Reminder: | report on a . | • | | | | | |)areanc | who roenor | nd to the | collection | of informat | ion contain | | 74 (0 02) |
| 1. Title of Derivative | | 3. Transaction Date | 3A. Deemed Execution Date, if | 4. Transac | ts, calls, 5. No of I | warrai umber erivati | cquired nts, opti | n this folioplays I, Disposions, contact Exertification I | orm are not rest a currently sed of, or Benevertible securicisable and Date | required valid OM eficially Orities) 7. Title a of Under | to respond IB control r Owned and Amount rlying | unless the number. | 9. Number of Derivative | 10. Ownership | 11. Natu |
| 1. Title of | 2. | 3. Transaction Date | 3A. Deemed Execution Date, if | 4. Transac Code | ts, calls, 5. N of I Sec or I of (| umber verivation veriv | cquirecents, optimal (Model A) | n this folioplays I, Dispolons, contact Exer | orm are not rest a currently sed of, or Benevertible securicisable and Date | required valid OM eficially Orities) | to respond B control r Owned and Amount rlying es | unless the number. | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(| To 10. Ownership Form of Derivative Security: Direct (D) or Indirect (S) (I) | 11. Natu of Indire Benefici Ownersh (Instr. 4) |
| 1. Title of Derivative Security | 2. Conversion or Exercise Price of Derivative | 3. Transaction Date | 3A. Deemed Execution Date, if any | 4. Transac Code | ts, calls, 5. N tion of I Sec or I of ((Ins and | warran umber verivati urities uired (vispose D) tr. 3, 4, | cequirecents, optimal | n this folisplays I, Dispo I, Dispo I ons, cor I or Exert I or I o | orm are not rest a currently sed of, or Benevertible securicisable and Date | required valid OM reficially Orities) 7. Title a of Under Securities | to respond B control r Owned and Amount rlying es | 8. Price of Derivative Security | 9. Number of Derivative Securities Beneficially Owned Following Reported | Ownership Form of Derivative Security: Direct (D) or Indirect | 11. Natu of Indire Benefici Ownersh (Instr. 4) |

Reporting Owners

| | Relationships | | | | | |
|---|---------------|--------------|---------|-------|--|--|
| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other | | |
| Giordano Natasha C/O MATINAS BIOPHARMA HOLDINGS, INC. 1545 ROUTE 206 SOUTH SUITE 302 BEDMINSTER,, NJ 07921 | X | | | | | |

Signatures

| /s/ Keith A. Kucinski, attorney-in fact for Natasha Giordano | 11/02/2021 |
|--|------------|
| **Signature of Reporting Person | Date |

Explanation of Responses:

- If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

The option award was made in accordance with the terms of the Issuer's Amended and Restated 2013 Equity Incentive Plan (the "2013 Plan"). The option vests in equal monthly installments over a period of 12 months commencing on December 1, 2021. The exercise price is based on the closing price for the shares of the Common Stock on the date of grant in accordance with the terms of the 2013 Plan.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.