

FORM 4

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

| OMB APPROVAL | |
|------------------------------------------------|-----------|
| OMB Number: | 3235-0287 |
| Estimated average burden hours per response... | 0.5 |

Check this box if no 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

(Print or Type Responses)

| | | | | | |
|---------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Name and Address of Reporting Person * George Robert E. | | 2. Issuer Name and Ticker or Trading Symbol Moleculin Biotech, Inc. [MBRX] | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> 10% Owner <input type="checkbox"/> Other (specify below) | |
| (Last) (First) (Middle) C/O MOLECULIN BIOTECH, INC., 2575 WEST BELLFORT, SUITE 333 | | 3. Date of Earliest Transaction (Month/Day/Year) 07/24/2017 | | | |
| (Street) HOUSTON, TX 77054 | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | 6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person | |
| (City) (State) (Zip) | | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | |

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|---|-------------------------------------------------------------------|------------|-------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|
| | | | Code | V | Amount | (A) or (D) | Price | | | |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number. SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|--------------------------------------------|--------------------------------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|---|-----------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------|---------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------|-------|
| | | | | Code | V | | Date Exercisable | Expiration Date | | | | | | Title |
| Option to purchase common stock | \$ 1.87 | 07/24/2017 | | A | | 15,000 | (1) | 07/24/2027 | Common Stock | 15,000 | (2) | 35,000 | D | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|-------------------------------------------------------------------------------------------------------|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| George Robert E. C/O MOLECULIN BIOTECH, INC. 2575 WEST BELLFORT, SUITE 333 HOUSTON, TX 77054 | X | | | |

Signatures

/s/ Jonathan Foster by Power of Attorney 07/26/2017
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).

(1) The options set forth in this table vest in three equal annual installments beginning on the first anniversary of the Transaction Date, subject to the grantee's continued service on the Company's Board of Directors on each vesting date.

(2) The options were issued in connection with the reporting person's Board of Director service to the Company.

Remarks:

Exhibit 24 - Limited Power of Attorney

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.

POWER OF ATTORNEY

The undersigned, as a person who are required to file with the Securities Exchange Commission ("SEC") public reports disclosing their holdings of, and transactions in, the equity securities of Moleculin Biotech, Inc. (the "Company") under Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (the "1934 Act"), hereby constitutes and appoints each of Walter Klemp and Jonathan Foster as the undersigned's true and lawful attorney-in-fact to:

1. Complete and execute Forms 3, 4 and 5 and other forms and all amendments thereto as such attorney-in-fact shall in his discretion determine to be required or advisable pursuant to Section 16 of the 1934 Act, as a consequence of the undersigned's ownership, acquisition or disposition of any equity securities of the Company; and
2. Do all acts necessary in order to file such forms with the SEC, any securities exchange or national association, the Company and such other person or agency as the attorney-in-fact shall deem appropriate.

Each of said attorneys-in-fact shall individually have the authority to act in accordance with this Power of Attorney. The undersigned hereby ratifies and confirms all that each of said attorneys-in-fact and agents shall do or cause to be done by virtue hereof. The undersigned acknowledges that each of the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, is not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the 1934 Act.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the Company and any one of the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 29th day of September, 2016.

Signature: /s/ Robert E. George

Print Name: Robert E. George
