

INITIAL STATEMENT OF 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* Cermak Elizabeth (Last) (First) (Middle) C/O MOLECULIN BIOTECH, INC., 5300 MEMORIAL DR., SUITE 950 (Street) HOUSTON, TX 77007 (City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year) 10/02/2020 | 3. Issuer Name and Ticker or Trading Symbol Moleculin Biotech, Inc. [MBRX] | |
| | | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) | 5. 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 | |

Table I - Non-Derivative Securities Beneficially Owned

| | | | |
|---------------------------------|---|--|---|
| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|

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

SEC 1473 (7-02)

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.

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

| | | | | | | | |
|--|--|-----------------|---|----------------------------|--|---|---|
| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| Cermak Elizabeth C/O MOLECULIN BIOTECH, INC. 5300 MEMORIAL DR., SUITE 950 HOUSTON, TX 77007 | X | | | |

Signatures

| | | |
|--|--|---------------------|
| /s/ Jonathan Foster by Power of Attorney | | 10/05/2020 |
| <small>**Signature of Reporting Person</small> | | <small>Date</small> |

Explanation of Responses:

No securities are beneficially owned

* If the form is filed by more than one reporting person, see Instruction 5(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).

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 her 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 2^d day of October, 2020.

Signature: /s/ Elizabeth Cermak
Elizabeth Cermak