FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

| OMB APP | ROVAL | | | | | |
|--------------------------|-------|--|--|--|--|--|
| OMB Number: 3235-010 | | | | | | |
| Estimated average burden | | | | | | |
| hours per response: | 0.5 | | | | | |

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

| SHREWSBURY STEPHEN B | 2. Date of Event Requiring Stater Month/Day/Yea 03/06/2014 | nent | 3. Issuer Name and Ticker or Tradi AQUINOX PHARMAC | or Trading Symbol MACEUTICALS, INC [AQXP] | | | | | | |
|--|---|--------------------|--|---|---|--|---|--|--|--|
| (Last) (First) (Middle) C/O AQUINOX PHARMACEUTICALS, INC. | | | 4. Relationship of Reporting Person (Check all applicable) Director Office of circle title | 10% Owne | r (Mor | 5. If Amendment, Date of Original Filed (Month/Day/Year) | | | | |
| 450 - 887 GREAT NORTHERN WAY | | | X Officer (give title below) CMO; Senior VP Cli | Other (spective) below) nical Dev. | 6. In | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person | | | | |
| (Street) VANCOUVER A1 V5T 4T5 | | | | | | Form filed by More than One Reporting Person | | | | |
| (City) (State) (Zip) | | | | | | | | | | |
| Table I - Non-Derivative Securities Beneficially Owned | | | | | | | | | | |
| 1. Title of Security (Instr. 4) | | | eneficially Owned (Instr. 4) | | | 4. Nature of Indirect Beneficial Ownership (Instr. 5) | | | | |
| 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 | 5. Ownership Form: Direct (D) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | | | |
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | Derivative Security | or Indirect (I) (Instr. 5) | | | | |
| Stock Option (Right to Buy) | (1) | 04/01/2023 | Common Stock ⁽²⁾ | 39,062 | 5.76 | D | | | | |

Explanation of Responses:

- 1. The option securities subject to this option shall vest and become exercisable at a rate of twenty-five percent of the option securities underlying the options on the one-year anniversary of the vesting commencement date and 1/48th of the option securities underlying the options each monthly anniversary of the vesting commencement date thereafter for so long as the recipient of the option provides continuous service to the issuer, such that the total option securities underlying the options shall be fully vested on the four-year anniversary of the vesting commencement date. However, if Mr. Shrewsbury terminates his employment for good reason within 12 months following a change of control, 100% of the then unvested shares immediately become fully vested.
- 2. Each option granted under the issuer's Joint Canadian Stock Option Plan is exercisable for one "option security." Prior to the closing of the issuer's initial public offering, an option security is comprised of one common exchangeable share and one special voting share of Aquinox Pharmaceuticals Inc., a corporation under the Canadian Business Corporations Act. Following the closing of the issuer's initial public offering, an option security will be comprised of one share of the issuer's common stock.

Remarks:

/s/Stephen B. Shrewsbury

** Signature of Reporting Person Date

03/06/2014

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

- * 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.

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 Number.