FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPRO | OVAL | | | | | |
|------------------------|-----------|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | |
| Estimated average burd | en | | | | | |
| 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).

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* Mitchell David Chilton | | | | | AC | 2. Issuer Name and Ticker or Trading Symbol AQUINOX PHARMACEUTICALS, INC AQXP | | | | | | | | | | all app | o of Reportin olicable) ctor er (give title | g Perso | 10% C | |
|--|--|----|--|-------|---|--|--------------------|---|------------------------------------|---|---------------------|---|---------|-----------------------|----------------------|--|---|--------------------------------------|--|--|
| (Last) (First) (Middle) C/O AQUINOX PHARMACEUTICALS, INC. 450 - 887 GREAT NORTHERN WAY | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 08/24/2015 | | | | | | | | | Α | VP Global Regulatory & Quality | | | | |
| (Street) VANCOU | treet) ANCOUVER A1 V5T 4T5 | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | . Indiv ine) X | ividual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da | | | | | | r) E | Execution f any | A. Deemed xecution Date, any Month/Day/Year) | | 3. Transaction Code (Instr. 8) | | | | | 4 and See Be | | Amount of ecurities eneficially wned Following eported | | nership Direct Indirect etr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | Code | v | Amount | nount (A | | Price | Trans | | action(s) 3 and 4) | | | (111501.4) | | | |
| Common Stock 08/24/2 | | | | | | 2015 | | P | | 3,575 | | A | \$17.81 | | 3,575 | | | Ι | By spouse | |
| Common Stock | | | | | | | | | | | | | | | 1,600 | | | D | | |
| | | Та | | | | | | • | • | | sed of, onvertib | | | | • | vned | | | | |
| 1. Title of Derivative Security (Instr. 3) | tive Conversion Date Execution Date, or Exercise (Month/Day/Year) if any | | | Date, | 4. Transaction Code (Instr. 8) | | n of | | 6. Date E Expiratio (Month/D | n Dat | е | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Own For Dire or I (I) (I | vnership | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | Code V | | (A) | (D) | Date Exercisable | | Expiration Date | Amoun or Numbe of Title Shares | | mber | | | | | | |

Explanation of Responses:

Remarks:

/s/ David C. Mitchell

08/26/2015

** Signature of Reporting Person Date

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 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).

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.