| SEC 1 | Form 4 |
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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

|) | Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). |
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

| OMB AP | PROVAL |
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| | hours per response: | 0.5 | | |
| - 1 | | | | |

| 1. Name and Address of Reporting Person* MUELLER PETER (Last) (First) (Middle) | | | 2. Issuer Name and Ticker or Trading Symbol <u>VERTEX PHARMACEUTICALS INC /</u> <u>MA</u> [VRTX] | | tionship of Reporting Perso all applicable) Director Officer (give title below) | n(s) to Issuer 10% Owner Other (specify below) |
|---|---------|------------|--|-------------------|---|---|
| (Last) (First) (Middle) C/O VERTEX PHARMACEUTICALS INCORPORATED 130 WAVERLY STREET | | (<i>,</i> | 3. Date of Earliest Transaction (Month/Day/Year) 05/15/2009 | | EVP Global R&D | , CSO |
| | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) | dual or Joint/Group Filing (Check Applicable | |
| (Street) | | | | X | Form filed by One Report | ing Person |
| CAMBRIDGE | MA | 02139 | | | Form filed by More than C Person | One Reporting |
| (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) | | | | | | 5. Amount of Securities Beneficially Owned Following Reported | 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 | Transaction(s) (Instr. 3 and 4) | | (1150.4) |
| Common Stock | 05/15/2009 | | М | | 2,400 | A | \$9.69 | 119,274 | D | |
| Common Stock | 05/15/2009 | | S ⁽¹⁾ | | 2,400 | D | \$28.56 ⁽²⁾⁽³⁾ | 116,874 | D | |
| Common Stock | | | | | | | | 3,882 | I | 401(k) |

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. Transa Code (8) | | of Deri Sec Acq (A) (Disp of (I | osed)) tr. 3, 4 | Expiration Date (Month/Day/Year) S | | Amount of Securities | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|---|--|---|------------------------------|---|--|------------------------|--|--------------------|-------------------------|--|---|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Stock Option | \$9.69 | 05/15/2009 | | М | | | 2,400 | (4) | 03/16/2014 | Common Stock | 2,400 | \$0 | 4,800 | D | |

Explanation of Responses:

1. Transaction made pursuant to Dr. Mueller's company approved trading plan under Rule 10b5-1.

2. Open market sales reported on this line occurred at a weighted average price of \$28.56 (range \$28.42 to \$28.73).

3. Dr. Mueller undertakes to provide (upon request by the SEC staff, the issuer or a security holder of the issuer) full information regarding the number of shares sold at each separate price. 4. Fully vested.

Remarks:

Valerie L. Andrews, Attorney-

In-Fact

05/19/2009

** 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.