| SEC | Form | 4 |
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Instruction 1(b)

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

| OMB Number: | 3235-0287 | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| 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 | |
| | |

| | | | 01.50 | | vestine | | inpurity Act of 10 | 540 | | | | |
|---|----------------------------|--|--|--------------------------------------|----------|--|--------------------|-------|---|---|---|----|
| 1. Name and Addre <u>SMITH IAN</u> (Last) C/O VERTEX F INCORPORAT | F (First) PHARMACEUT | VEF MA 3. Date | er Name and Ticke <u>TEX PHARN</u> [VRTX] e of Earliest Transac /2012 | <u>/ACI</u> | EŬT | ICALS IN | I <u>C /</u> | | ationship of Reportin all applicable) Director Officer (give title below) EVP | 10% 0 | Owner (specify | |
| 130 WAVERLY (Street) CAMBRIDGE (City) | ST MA (State) | 02139 (Zip) | 4. If Ar | nendment, Date of (| Original | Filed | (Month/Day/Ye | ar) | 6. Indiv Line) X | vidual or Joint/Group Form filed by One Form filed by Mor Person | e Reporting Pers | on |
| | | Table I - No | n-Derivative S | Securities Acq | uired, | Dis | posed of, o | r Ben | eficially | Owned | | |
| | | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transa Code (8) Code | | 4. Securities A Disposed Of (Amount | | | 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) | |

| 1 | | | | | | | | | | | | | |
|--|------------------|--|-------------------------------|-------------------|----|---------------------------------------|--------|---------------------------|--------|---------------------------------------|---------------------------------------|---------------------|---|
| Common | 1 Stock | | 02/ | /02/2012 | | Α | 12,084 | (1) A | \$0.01 | 33, | 835 | D | |
| Common | 1 Stock | | | | | | | | | 4,9 | 908 | Ι | 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 | 2. Conversion | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, | 4. Transaction | of | 6. Date Ex Expiration (Month/Da | | 7. Title an of Securit | ies | 8. Price of Derivative Security | 9. Number derivative Securities | of 10. Ownership | 11. Nature of Indirect Beneficial |

| Derivative Security (Instr. 3) | Conversion or Exercise Price of Derivative Security | Date (Month/Day/Year) | Execution Date, if any (Month/Day/Year) | Transa Code (8) | | of Derivati Securiti Acquire (A) or Dispose of (D) (I 3, 4 and | ies ed ed nstr. | | (Month/Day/Year) | | of Securities Underlying Derivative Security (Instr. 3 and 4) | | derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | of Indirect Beneficial Ownership (Instr. 4) |
|--------------------------------------|---|--------------------------|---|------------------------|---|---|--------------------------|---------------------------|--------------------|-----------------|--|--------|--|---|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Stock Option | \$37.86 | 02/02/2012 | | A | | 54,375 | | 05/02/2012 ⁽²⁾ | 02/01/2022 | Common Stock | 54,375 | \$0.00 | 54,375 | D | |

Explanation of Responses:

1. Stock grant under 2006 Stock and Option Plan, vesting on 2/2/2016, subject to (i) earlier acceleration of 50% of shares upon (A) reaching specified aggregate product and royalty sales levels or (B) completing enrollment of a pivotal trial in two distinct disease indications other than HCV and cystic fibrosis and (ii) earlier acceleration of 50% of shares upon receiving filing confirmation for an NDA for an all-oral regimen for the treatment of HCV infection.

2. Right to buy under 2006 Stock and Option Plan, vesting in 16 quarterly installments from 02/02/2012.

Remarks:

Valerie L. Andrews, Attorney-In-Fact

02/06/2012

** 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.