FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL | | | | | | | | | |
|--------------|----------|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-028 | | | | | | | | |
| F-4: | | | | | | | | | |

37 Estimated average burden 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).

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

| 1. Name and Address of Reporting Person* Frank Steven | | | | | 2. Issuer Name and Ticker or Trading Symbol INTREXON CORP [XON] | | | | | | | | (Ch | Relationshi leck all app X Direc | olicable) | g Person(s) to | ssuer |
|--|--|-------|---------------|---------------------------|---|--|---|-------------------|---|--------------------|---|---|---|---|---|--|----------------|
| (Last) (First) (Middle) 20374 SENECA MEADOWS PARKWAY | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 01/20/2014 | | | | | | | | | Offic belo | er (give title w) | Othe belov | (specify /) |
| (Street) GERMA (City) | NTOWN M | | 20876 Zip) | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | Lin | e) <mark>X</mark> Forr Forr | ridual 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 | | | | Execution Date, | | Code (Instr. 5) | | | | | | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | | |
| | | | | | | | | Code | v | Amount | (A) or (D) Pr | | Price | Trans | action(s) 3 and 4) | | (iiisti. 4) |
| Common Stock | | | 01/20 | /2014 | | A | | 20 | | A | \$36.8 | 32 | 4,011 | D | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
| L. Title of Derivative Security Instr. 3) 2. Conversion or Exercise Price of Derivative Security Security 3. Transaction Date (Month/Day/Year) Execution if any (Month/Day/Year) | | Date, | | Transaction of Derivative | | rative rities ired r osed) | Expiration Date (Month/Day/Year) Amo Secu Undu Deriv Secu and | | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amount or Number | | 8. Price of Derivative Security Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | (A) | (D) | Date Exercisal | | Expiration Date | Title | of Shai | es | | | | |

Explanation of Responses:

Remarks:

/s/ Steven Frank, by Donald P. Lehr, Power of Attorney

01/22/2014

** 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.