FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

| OMB Number: | 3235-0287 |
|-------------------------|-----------|
| Estimated average burde | n |
| 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* <u>COX MARSHALL G</u> | | | | | | 2. Issuer Name and Ticker or Trading Symbol CYTORI THERAPEUTICS, INC. [XMPA] | | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | |
|--|--|--|---|-------|----------------------|--|---|-----|--|---------|--------------------|---|---------------------------|-----------------------|---|---|---|--|--|
| (Last) |) (First) (Middle) | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 12/02/2005 | | | | | | | | | Offic belov | er (give title w) | Other (specify below) | | |
| Street) (City) (State) (Zip) | | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Indi Line) X | Forn Forn | dual 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/Date) | | | | | Ex Day/Year) if a | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | Transaction Dispos Code (Instr. 5) | | | | | | Securi Benef | cially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | | Code | v | Amount | (A (C |) or)) | Price | Transa | action(s) 3 and 4) | | (511 4) | |
| COMMON STOCK 12/02/ | | | | | | 2/2005 | | | S | s 15,00 | | 00 D S | | \$8.43 | 506,659(1) | | D | | |
| | 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/Ye | Date, | Code (Inst | | n of | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | Der Sec (Ins | rice of ivative urity tr. 5) | | 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 | or Numl of Share | ber | | | | | |

Explanation of Responses:

1. This number does not reflect 5,334 shares owned by the spouse of Mr. Cox. Mr. Cox disclaims beneficial ownership of the securities owned by his spouse, and this report shall not be deemed an admission that Mr. Cox is the beneficial owner of these securities for purposes of Section 16 or for any other purpose.

Marshall G. Cox 12/06/2005

** 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.