

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

| OMB APPROVAL                                 |           |
|--|-----------|
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|   |         |          |  |  |  |   |  |  |  |
|---|---------|----------|--|--|--|---|--|--|--|
| 1. Name and Address of Reporting Person*<br><b>HEDRICK MARC H</b> |         |          | 2. Issuer Name and Ticker or Trading Symbol<br><b>CYTORI THERAPEUTICS, INC. [ CYTX ]</b> |  |  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><input checked="" type="checkbox"/> Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><b>President</b> |  |  |  |
| (Last)  | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year)<br><b>12/19/2012</b>                    |  |  |   |  |  |  |
| 3020 CALLAN ROAD  |         |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)<br><b>12/21/2012</b>            |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br>Form filed by More than One Reporting Person   |  |  |  |
| (Street)  | (City)  | (State)  | (Zip)  |  |  |   |  |  |  |
| SAN DIEGO CA 92121  |         |          |  |  |  |   |  |  |  |
| (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) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |                       | 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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-----------------------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price                 |   |  |   |
| Common Stock                    | 12/19/2012                           |  | P                              |   | 10,000  | A          | \$2.85 <sup>(1)</sup> | 458,238   | D <sup>(2)</sup>   |   |
| Common Stock                    |                                      |  |                                |   |   |            |                       | 9,600   | I  | By Family Trust <sup>(3)</sup>                        |
| Common Stock                    |                                      |  |                                |   |   |            |                       | 7,500   | I  | By IRA  |
| Restricted Stock (Common Stock) |                                      |  |                                |   |   |            |                       | 36,850  | D  |   |
| Restricted Stock (Common Stock) |                                      |  |                                |   |   |            |                       | 25,000  | 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/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 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 |   |  |  |   |  |

**Explanation of Responses:**

- Dr. Hedrick purchased the shares in connection with a public offering of company shares which closed on December 19, 2012.
- This amends the Form 4 filed earlier on 12/21/2012 to reflect that the shares will be held directly by Dr. Hedrick.
- These securities are owned by M Hedrick & T Hedrick TTEE Dr. Marc Hamilton Hedrick & TRA U/A DTD 09/13/1999.

**Remarks:**

Jonathan E. Soneff, By Power of Attorney For: Marc H. Hedrick 12/21/2012

\*\* 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.