FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	OMB APPROVAL	
	OMB Number:	3235-0287
l	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 5. Relationship of Reporting Person(s) to Issuer 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person (Check all applicable) CYTORI THERAPEUTICS, INC. [CYTX] **HOLMES E CARMACK** Director 10% Owner Officer (give title Other (specify 3. Date of Earliest Transaction (Month/Dav/Year) below) below) (First) (Middle) (Last) 01/01/2011 3020 CALLAN ROAD 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) (Street) X Form filed by One Reporting Person **SAN DIEGO** 92121 CA Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 2. Transaction 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 1. Title of Security (Instr. 3) 2A. Deemed 5. Amount of 6. Ownership 7. Nature of Transaction **Execution Date** Securities Form: Direct Indirect if any Beneficial (Month/Day/Year) Code (Instr. 5) Beneficially (D) or Indirect (Month/Day/Year) 8) Owned Following (I) (Instr. 4) Ownership Reported Transaction(s) (Instr. 3 and 4) (Instr. 4) (A) or (D) ν Price By Restricted Stock Award (Common Stock)(1) 01/01/2011 6,000 \$0 24,401 Α T Trust⁽²⁾ Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 1. Title of 3. Transaction 3A. Deemed 5. Number 6. Date Exercisable and 7. Title and Amount 8. Price of 9. Number of 11. Nature Transaction Derivative Conversion Ownership Date Execution Date. Expiration Date of Securities Derivative derivative of Indirect (Month/Day/Year) Security (Instr. 3) or Exercise Price of if any (Month/Day/Year) Code (Instr. Derivative (Month/Day/Year) Underlying Derivative Security Security (Instr. 5) Securities Form: Beneficial 8) Direct (D) Securities Beneficially Ownership Derivative Acquired (Instr. 3 and 4) Owned or Indirect (Instr. 4) (A) or Disposed Security (I) (Instr. 4) Reported of (D) (Instr. 3, 4 and 5) Transaction(s) (Instr. 4)

Explanation of Responses:

1. The Restricted Stock Award ("Award") vests in full on December 31, 2011, subject to the terms of the Company's 2004 Equity Incentive Plan

Code

Α

- 2. These shares are held of record by E. Carmack Holmes & Carolyn K Holmes TTEE, Holmes Living Trust DD 05/15/92.
- 3. The Option vests 1/24th per month from date of grant, subject to the terms of the Company's 2004 Equity Incentive Plan.

Remarks:

Non-Qualified

Stock

Option

Jonathan E. Soneff, By Power of Attorney For: E. Carmack Holmes

Amount or Number

Shares

15,000

Title

Stock

01/04/2011

230,000

D

** 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).

01/01/2011

** 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.

(A)

15,000

(D)

Exercisable

 $02/01/2011^{(3)}$

Date

01/01/2021