

**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	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* <b>RICKEY DAVID</b>			2. Issuer Name and Ticker or Trading Symbol <b>CYTORI THERAPEUTICS, INC. [ CYTX ]</b>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <b>01/21/2010</b>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
3020 CALLAN ROAD			4. If Amendment, Date of Original Filed (Month/Day/Year) <b>01/21/2010</b>					
(Street) <b>SAN DIEGO CA 92121</b>								
(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	01/21/2010		M		5,625	A	\$4.4	130,425	I	By Trust <sup>(1)</sup>
Common Stock	01/21/2010		M		4,375	A	\$3.12	134,800	I	By Trust <sup>(1)</sup>
Common Stock								20,911	I	By Charitable Foundation <sup>(2)</sup>
Common Stock								34,909	I	By Family Partnership <sup>(3)</sup>

**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						Title
Non-Qualified Stock Option (right to buy)	\$4.4	01/21/2010		M		5,625		02/28/2003 <sup>(4)</sup>	01/28/2013	Common Stock	5,625	\$0	124,375	D	
Non-Qualified Stock Option (right to buy)	\$3.12	01/21/2010		M		4,375		03/02/2005 <sup>(4)</sup>	02/02/2015	Common Stock	4,375	\$0	120,000	D	

**Explanation of Responses:**

- These securities are owned by David Rickey, TTEE FBO the David Rickey Trust.
- These securities are owned by the Dave Rickey and Daughters Foundation.
- These securities are owned by the Rickey Family Limited Partnership.
- The stock options vested 1/48th each month from date of grant.

**Remarks:**

Jonathan E. Soneff, By Power of Attorney For: David Rickey 01/22/2010

\*\* 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.