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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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 OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response: 0.5

1. Name and Address of Reporting Person*			2. Issuer Name and Ticker or Trading Symbol <u>CYTORI THERAPEUTICS, INC.</u> [CYTX]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
CALHOUR	HOUN CHRISTOPHER J (First) (Middle)		X	Director	10% Owner				
(Last) (First 3020 CALLAN ROAI	(First)	, , , ,	3. Date of Earliest Transaction (Month/Day/Year)	X	Officer (give title below)	Other (specify below)			
	()		05/15/2009		Chief Executive Officer				
(Street)			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line)	vidual or Joint/Group Fil	ling (Check Applicable			
SAN DIEGO	CA	92121		X	Form filed by One R	eporting Person			
(City)	(State)	(Zip)	—		Form filed by More th Person	han One Reporting			

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

Table 1 - Non-Derivative decunities Acquired, Disposed of, or Denenotary 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 Disposed Of 5)			5. Amount of Securities Beneficially Owned Following Reported	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership		
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(Instr. 4)		
Common Stock	05/15/2009		Р		600	A	\$2.79	20,600	Ι	By 401(k) Plan		
Common Stock	05/15/2009		Р		2,900	A	\$2.79	23,500	I	By 401(k) Plan		
Common Stock	05/18/2009		Р		500	A	\$2.83	24,000	I	By 401(k) Plan		
Common Stock	05/18/2009		Р		3,000	A	\$2.84	27,000	I	By 401(k) Plan		
Common Stock								100,000	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. Transa Code (8)		of		6. Date Exerc Expiration Da (Month/Day/Y	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	Amount or Number of Shares				

Explanation of Responses:

Remarks:

Jonathan E. Soneff, By Power

of Attorney For: Christopher J.

Calhoun

** Signature of Reporting Person Date

05/18/2009

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.