UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G/A

(Amendment No. 1) UNDER THE SECURITIES EXCHANGE ACT OF 1934

CYTORI THERAPEUTICS, INC.

, ______

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

23283K105

(CUSIP Number)

DECEMBER 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

|X| Rule 13d-1(b)

|_| Rule 13d-1(c)

|_| Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

PERSONS WHO ARE TO RESPOND TO THE COLLECTION OF INFORMATION CONTAINED IN THIS FORM ARE NOT REQUIRED TO RESPOND UNLESS THE FORM DISPLAYS A CURRENTLY VALID OMB CONTROL NUMBER.

SEC 1745 (12-02)

	NUMBER OF SHARES	5.	SOLE VOTING POWER			 	0
4.			PLACE OF ORGANIZATIC)N		 	
3.	SEC US	SE ONLY				 	
 2. 	СНЕСК	THE APPRC	OPRIATE BOX IF A GROU	IP*		 	(a) (b) X
 1. 	I.R.S.		TING PERSONS ICATION NO. OF ABOVE IES LLC	PERSONS (ENTI	TIES ONLY)	 	

	BENEFICIALLY OWNED BY		SHARED VOTING POWER	1,141,443
	EACH REPORTING		SOLE DISPOSITIVE POWER	0
	PERSON WITH:	8.	SHARED DISPOSTIVE POWER	1,141,443
9.	AGGREGATE	e amoun	T BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,141,443
- 10 -		(IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)	
- 11 -	-	OF CLAS	S REPRESENTED BY AMOUNT IN ROW (9)	2.9 %
- 12 -		REPORTI	NG PERSON (SEE INSTRUCTIONS)	IA

13.			TING PERSONS ICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
	NEIL GA	GNON		
14.	СНЕСК Т	HE APPRO	DPRIATE BOX IF A GROUP*	(a) (b) X
15.	SEC USE	ONLY		
16.	CITIZEN	SHIP OR	PLACE OF ORGANIZATION	
	USA			
 NU	IMBER OF SHARES	17.	SOLE VOTING POWER	1,624,625
	IEFICIALLY DWNED BY	18.	SHARED VOTING POWER	1,393,510
 RE	EACH EPORTING	19.	SOLE DISPOSITIVE POWER	1,624,625
 PEF	SON WITH:	20.	SHARED DISPOSTIVE POWER	1,459,962
21.	AGGREGA	TE AMOUN	NT BENEFICIALLY OWNED BY EACH REPORTING PERSON	3,084,587
22.	CHECK B	0X IF TH	HE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)	
23.	PERCENT	OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	7.8 %
24.	TYPE OF	REPORTI	ING PERSON (SEE INSTRUCTIONS)	IN

(a) Name of Issuer: Cytori Therapeutics, Inc. 3020 Callan Road

(b) Address of Issuer's Principal Executive Offices: San Diego, CA 92121

Item 2.

This Schedule 13G/A is being filed by Gagnon Securities LLC and Neil Gagnon (together, the "Reporting Persons"). Gagnon Securities LLC is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 and furnishes investment advice to several customer accounts, foundations, partnerships, trusts, and private investment funds (collectively, the "Funds"). Mr. Gagnon is the managing member and the principal owner of Gagnon Securities LLC. In its role as investment manager to the Funds, Gagnon Securities LLC shares investment and/or voting power with Mr. (a) Name of Person Filing: Gagnon with respect to certain securities of the Issuer described in this schedule that are owned by the Funds. Additionally, $\operatorname{Mr.}$ Gagnon has sole voting power and sole dispositive power with respect to certain securities of the Issuer, he shares voting power and dispositive power with respect to certain other securities of the Issuer with certain persons, and he shares dispositive power with certain persons but has no voting power with respect to certain other securities of the Issuer. The Reporting Persons expressly disclaim beneficial ownership of all securities held in the Funds' accounts. No single client's interest as reported in the customer accounts at Gagnon Securities LLC exceeds 5% of the outstanding Common Stock of the Issuer. In addition, the filing of this Schedule 13G/A shall not be construed as an admission that the Reporting Persons or any of their affiliates are beneficial owners of any securities covered by this Schedule 13G/A for any other purposes than Section 13(d) of the Securities Exchange Act of 1934.

(c) Citizenship:

GAGNON SECURITIES LLC: Delaware Limited Liability Company NEIL GAGNON: USA

(d) Title of Class of Securities: Common Stock, par value \$0.001 per share

(e) CUSIP Number: 23283K105

ITEM 1.

Item 3. If this statement is filed pursuant to ss.ss.240.13d-1(b) or

- 240.13d-2(b) or (c), check whether the person filing is a: [] Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). (a) [] Broker or dealer registered under section 15 of the Act (15 U.S.C. 78c). (b) [] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

- (c) [] Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). (d) [] Investment company registered under section 8 of the Investment Company Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) [X] An investment adviser in accordance with ss.240.13d-1(b)(1)(ii)(E); (f) [] An employee benefit plan or endowment fund in accordance with
- ss.240.13d-1(b)(1)(ii)(F);
- (g) [] A parent holding company or control person in accordance with ss. 240.13d-1(b)(1)(ii)(G);
 (h) [] A savings associations as defined in Section 3(b) of the Federal Deposit Insurance
- Act (12 U.S.C. 1813);
- (i) [] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) [] Group, in accordance with ss.240.13d-1(b)(1)(ii)(J).
 - ITEM 4. OWNERSHIP.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:	GAGNON SECURITIES LLC: 1,141,443 NEIL GAGNON: 3,084,587
	GAGNON SECURITIES LLC: 2.9% NEIL GAGNON: 7.8%
(b) Percent of class:	Calculation of percentage of beneficial ownership is based on the sum of (i) 38,753,669 outstanding shares of Issuer's Common Stock as filed with the SEC on November 11, 2009 and (ii) 698,423 shares of Issuer's Common Stock issuable upon the exercise of warrants issued to the accounts managed by the Reporting Person.

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:	GAGNON SECURITIES LLC: NEIL GAGNON:	0 1,624,625
(ii) Shared power to vote or to direct the vote:	GAGNON SECURITIES LLC: NEIL GAGNON:	1,141,443 1,393,510
<pre>(iii) Sole power to dispose or to direct the</pre>	GAGNON SECURITIES LLC:	0
disposition of:	NEIL GAGNON:	1,624,625
<pre>(iv) Shared power to dispose or to direct the</pre>	GAGNON SECURITIES LLC:	1,141,443
disposition of:	NEIL GAGNON:	1,459,962

ITEM 5 OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

Not applicable. ITEM 6 OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

The Funds described above in Item the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities held in their respective accounts. To the knowledge of the Reporting Person, the interest in any such Fund does not exceed 5% of the class of securities. The Reporting Person disclaims beneficial ownership of all such securities.

ITEMS 7 - 9 Not Applicable

ITEM 10	CERTIFICATION
	The following certification shall be included if the statement
	is filed pursuant to ss.240.13d-1(b): By signing below I
	certify that, to the best of my knowledge and belief, the
	securities referred to above were acquired and are held in the
	ordinary course of business and were not
(a)	acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the
	securities and were not acquired and are not held in connection
	with or as a participant in any transaction having that purpose
	or effect. [X]

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, ${\tt I}$ certify that the information set forth in this statement is true, complete and correct.

February 12, 2010 Date

GAGNON SECURITIES LLC

/s/ Neil Gagnon Signature

Neil Gagnon Name/Title

February 12, 2010 Date

/s/ Neil Gagnon Signature

Neil Gagnon Name/Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. SEE ss.240.13d-7 for other parties for whom copies are to be sent.

ATTENTION: INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACT CONSTITUTE FEDERAL CRIMINAL VIOLATIONS (SEE 18 U.S.C. 1001)