FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL
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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

1. Name and Address of Reporting Person [*] TRAUTMAN JAY K					2. Issuer Name and Ticker or Trading Symbol <u>CYTOKINETICS INC</u> [CYTK]									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
						3. Date of Earliest Transaction (Month/Day/Year)								-	Director 10% Owner Officer (give title Other (spec					
(Last)						05/10/2007									X below	r (give title /) P, Discov	ery R	below)	specity	
280 EAST GRAND AVENUE					- 4 If 4	4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable														
(Street)					4. 11 /	4. IT Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)						
SOUTH SAN CA 94080															X Form filed by One Reporting Person					
FRANCISCO															Form filed by More than One Reporting Person					
(City) (State) (Zip)																				
		Tab	le I - N	lon-Deriv	vative	Sec	uriti	es A	cquired, I	Disp	osed o	of, or B	enef	icia	lly Owne	d				
1. Title of Security (Instr. 3) Date (Month/Day						Execution Dat			Code (Instr.		4. Securities Acquired Disposed Of (D) (Instr. and 5)				r 5. Amo Securit Benefic Owned Follow	ties Fo cially (D I In		n: Direct	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
									Code	v	Amoun	t (A) (D)		Price	Report Transa	Reported Transaction(s) (Instr. 3 and 4)		,		
Common Stock 05/10/2					2007	:007			S ⁽¹⁾		1,50	0 I	>	\$7. <mark>0</mark>	1 17	7,896		D		
		т	able II						uired, Di						/ Owned					
						alls		rrant	s, options			1		es)				10.	11. Nature	
Control of the security (Instr. 3)	Derivative Conversion Date Execution Date, Security or Exercise (Month/Day/Year) if any				4. Transac Code (li 8)	Secu Acqu (A) o	vative rities uired or osed) r. 3,		Expiration Date Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)			8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		Ownership Form: Direct (D) or Indirect (I) (Instr. 4)			
					Code		(A)	(D)	Date Exercisable	Ex	piration	Title	Amo or Nun of Sha							
Incentive Stock Option (right to buy)	\$1.2								07/10/2002 ⁽²	T	/10/2012	Common Stock		500		17,500		D		
Incentive Stock Option (right to buy)	\$1.2								05/21/2003 ⁽³) 05	/21/2013	Common Stock	12,	500		12,500		D		
Incentive Stock Option (right to buy)	\$6.5								04/08/2004 ⁽⁴) 03	/08/2014	Common Stock	25,	000		25,000		D		
Incentive Stock Option (right to buy)	\$6.59								04/11/2005 ⁽⁵) 04	/11/2015	Common Stock	30,	000		30,000		D		
Incentive Stock Option (right to buy)	\$6.81								04/01/2007 ⁽⁶) 03	/14/2017	Common Stock	12,	500		12,500		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,	4. Transaction Code (Instr.		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	Amount or Number of Shares				
Incentive Stock Option (right to buy)	\$6.88							01/07/2006 ⁽⁷⁾	12/15/2015	Common Stock	21,504		21,504	D	
Incentive Stock Option (right to buy)	\$7.15							03/01/2006 ⁽⁸⁾	03/01/2016	Common Stock	2,500		2,500	D	
Non- Qualified Stock Option (right to buy)	\$6.81							04/01/2007 ⁽⁶⁾	03/14/2017	Common Stock	27,500		27,500	D	
Non- Qualified Stock Option (right to buy)	\$6.88							01/07/2006 ⁽⁷⁾	12/15/2015	Common Stock	43,496		43,496	D	
Non- Qualified Stock Option (right to buy)	\$7.15							03/01/2006 ⁽⁸⁾	03/01/2016	Common Stock	37,500		37,500	D	

Explanation of Responses:

1. The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 10, 2005.

2. This option is immediately exercisable upon grant and shall vest as to 15,625 shares on 06/03/03 and the balance of 46,875 divided into equal monthly installments thereafter such that the option shall be 100% vested on 06/03/06.

3. This option is immediately exercisable upon grant and shall vest as to 573 shares on 04/01/03 and the balance of 26,927 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/01/07.

4. This option shall vest and become exercisable as to 521 shares on 04/08/04 and the balance of 24,479 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/08/08.

5. This option shall vest and become exercisable as to 30,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2009.

6. When the ISO and NQ dated 03/14/2007 are combined for a total grant of 40,000 shares, the option shall vest and become exercisable as to 833 shares on 04/01/07 and the balance of 39,167 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/01/11.

7. When the ISO and NQ dated 12/15/05 are combined for a total grant of 65,000 shares, the option shall vest and become exercisable as to 65,000 shares divided into equal monthly installments such that the option shall be 100% vested on 12/07/2009.

8. When the ISO and NQ dated 03/01/2006 are combined for a total grant of 40,000 shares, the option shall vest and become exercisable as to 40,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2010.

Jay K. Trautman, Ph.D. 05/11/2007

** 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.

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