

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* <u>TRAUTMAN JAY K</u> _____ (Last) (First) (Middle) <u>280 EAST GRAND AVENUE</u> _____ (Street) <u>SOUTH SAN FRANCISCO CA 94080</u> _____ (City) (State) (Zip)			2. Issuer Name and Ticker or Trading Symbol <u>CYTOKINETICS INC [CYTK]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>VP, Discovery Research</u>		
3. Date of Earliest Transaction (Month/Day/Year) <u>08/10/2007</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		

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	08/10/2007		M ⁽¹⁾		17,500	A	\$1.2	35,396	D	
Common Stock	08/10/2007		M ⁽¹⁾		12,500	A	\$1.2	47,896	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. 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
Incentive Stock Option (right to buy)	\$1.2	08/10/2007		M			17,500	07/10/2002 ⁽²⁾	07/10/2012	Common Stock	17,500	\$0	0	D	
Incentive Stock Option (right to buy)	\$1.2	08/10/2007		M			12,500	05/21/2003 ⁽³⁾	05/21/2013	Common Stock	12,500	\$0	0	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, 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	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:

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

By: Robert I. Blum For: Jay K. Trautman, Ph.D. 08/13/2007

** 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.

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.