

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>Sabry James H</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>CYTKINETICS INC [ CYTK ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) <input checked="" type="checkbox"/> Other (specify below) <u>Former Executive Chairman</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>05/18/2010</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**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	05/18/2010		M		25,000	A	\$0.58	25,000	D	
Common Stock	05/18/2010		S		200	D	\$2.975	24,800	D	
Common Stock	05/18/2010		S		300	D	\$2.98	24,500	D	
Common Stock	05/18/2010		S		100	D	\$2.985	24,400	D	
Common Stock	05/18/2010		S		1,600	D	\$2.99	22,800	D	
Common Stock	05/18/2010		S		500	D	\$2.9925	22,300	D	
Common Stock	05/18/2010		S		3,400	D	\$2.995	18,900	D	
Common Stock	05/18/2010		S		9,300	D	\$3	9,600	D	
Common Stock	05/18/2010		S		100	D	\$3.005	9,500	D	
Common Stock	05/18/2010		S		1,900	D	\$3.01	7,600	D	
Common Stock	05/18/2010		S		400	D	\$3.015	7,200	D	
Common Stock	05/18/2010		S		2,365	D	\$3.02	4,835	D	
Common Stock	05/18/2010		S		300	D	\$3.025	4,535	D	
Common Stock	05/18/2010		S		1,433	D	\$3.03	3,102	D	
Common Stock	05/18/2010		S		100	D	\$3.035	3,002	D	
Common Stock	05/18/2010		S		454	D	\$3.04	2,548	D	
Common Stock	05/18/2010		S		848	D	\$3.05	1,700	D	
Common Stock	05/18/2010		S		700	D	\$3.06	1,000	D	
Common Stock	05/18/2010		S		1,000	D	\$3.07	0	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)	\$0.58	05/18/2010		M			25,000	11/14/2000 <sup>(1)</sup>	11/14/2010	Common Stock	25,000	\$0	25,267	D	
Incentive Stock Option (right to buy)	\$1.2							07/10/2002 <sup>(2)</sup>	07/10/2012	Common Stock	7,132		7,132	D	
Incentive Stock Option (right to buy)	\$1.2							05/21/2003 <sup>(3)</sup>	05/21/2013	Common Stock	75,000		75,000	D	
Incentive Stock Option (right to buy)	\$6.5							04/08/2004 <sup>(4)</sup>	03/08/2014	Common Stock	66,943		66,943	D	
Incentive Stock Option (right to buy)	\$6.59							04/11/2005 <sup>(5)</sup>	04/11/2015	Common Stock	15,154		15,154	D	
Incentive Stock Option (right to buy)	\$6.81							04/01/2007 <sup>(6)</sup>	03/14/2017	Common Stock	11,091		11,091	D	
Incentive Stock Option (right to buy)	\$7.15							03/01/2006 <sup>(7)</sup>	03/01/2016	Common Stock	18,464		18,464	D	
Non-Qualified Stock Option (right to buy)	\$1.2							07/10/2002 <sup>(2)</sup>	07/10/2012	Common Stock	75,455		75,455	D	
Non-Qualified Stock Option (right to buy)	\$6.5							04/08/2004 <sup>(4)</sup>	03/08/2014	Common Stock	19,557		19,557	D	
Non-Qualified Stock Option (right to buy)	\$6.59							04/11/2005 <sup>(5)</sup>	04/11/2015	Common Stock	69,846		69,846	D	
Non-Qualified Stock Option (right to buy)	\$6.81							04/01/2007 <sup>(6)</sup>	03/14/2017	Common Stock	88,909		88,909	D	
Non-Qualified Stock Option (right to buy)	\$7.15							03/01/2006 <sup>(7)</sup>	03/01/2016	Common Stock	131,536		131,536	D	

**Explanation of Responses:**

1. When the ISO and NQ dated 11/14/00 are combined for a total grant of 250,000 shares, the option is immediately exercisable upon grant and shall vest as to 4,167 shares on 12/14/00 and the balance of 245,833 divided into equal monthly installments thereafter such that the option shall be 100% vested on 11/14/05.

2. When the ISO and NQ dated 07/10/02 are combined for a total grant of 300,000 shares, the option is immediately exercisable upon grant and shall vest as to 5,000 shares on 04/15/02 and the balance of 295,000 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/15/07.
3. This option is immediately exercisable upon grant and shall vest as to 1,563 shares on 04/01/03 and the balance of 73,437 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/01/07.
4. When the ISO and NQ dated 03/08/04 are combined for a total grant of 86,500 shares, the option shall vest and become exercisable as to 1,802 shares on 04/08/04 and the balance of 84,698 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/08/08.
5. When the ISO and NQ dated 04/11/05 are combined for a total grant of 85,000 shares, the option shall vest and become exercisable as to 85,000 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 100,000 shares, the option shall vest and become exercisable as to 2,083 shares on 04/01/07 and the balance of 97,917 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 03/01/2006 are combined for a total grant of 150,000 shares, the option shall vest and become exercisable as to 150,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2010.

By: Sharon Barbari For: James H. Sabry, M.D., Ph.D. 05/20/2010

\*\* 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.

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