## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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* SPUDICH JAMES A						2. Issuer Name and Ticker or Trading Symbol CYTOKINETICS INC [ CYTK ]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
(Last) (First) (Middle)					- 3. Da	3. Date of Earliest Transaction (Month/Day/Year) 10/03/2007								Х	Direct Office below	r (give title		10% O Other ( below)	(specify	
280 EAST GRAND AVENUE						4. If Amendment, Date of Original Filed (Month/Day/Year)								5. Indiv	vidual or	Joint/Grou	p Filir	ng (Check A	Applicable	
(Street) SOUTH SAN FRANCISCO CA 94080				-									Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person							
(City)	(S	tate)	Zip)		-															
		Tab	le I -	Non-Deri	vative	Sec	curiti	es A	cquired,	Dis	posed o	of, or B	enefici	ially	Owne	d				
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/					Exec if an	. Deemed ecution Date, ny onth/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (# Disposed Of (D) (Instr. 3 5)			3, 4 and Securi Benefi Owned		cially	6. Ownership Form: Direct (D) or Indirect (I)		7. Nature of Indirect Beneficial Ownership		
									Code	v	Amount	(A) or (D) Pr			Following Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)		(Instr. 4)	
Common	n Stock			10/03/2	2007				<b>S</b> <sup>(1)</sup>		3,000	) D	\$5.4	107	19	5,600		D		
		т	able I						quired, D s, option						wned					
1. Title of Derivative Security (Instr. 3)	Security or Exercise (Month/Day/Yea			3A. Deemed Execution Date, if any (Month/Day/Year)		4. Transaction Code (Instr. 8)		nber vative urities uired or oosed )) tr. 3, d 5)	6. Date Exercisable Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)				9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	у	Ownershi Form: Direct (D) or Indirec (I) (Instr. 4)	Beneficial Ownership	
					Code	v	(A)	(D)	Date Exercisable		Expiration Date	Title	Amoun or Numbe of Shares	r						
Non- Qualified Stock Option (right to buy)	\$1.2								07/10/2002	(2)	07/10/2012	Common Stock	10,00	0		10,000		D		
Non- Qualified Stock Option (right to buy)	\$5.55								05/19/2005	5 0	95/19/2015	Common Stock	7,500	)		7,500		D		
Non- Qualified Stock Option (right to buy)	\$6.55								05/24/2007	7 0	95/24/2017	Common Stock	7,500	)		7,500		D		
Non- Qualified Stock Option (right to buy)	\$7.29								05/25/2000	5 0	05/25/2016	Common Stock	7,500	)		7,500		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 February 8, 2007.

2. This option is immediately exercisable upon grant and shall vest as to 417 shares on 06/01/02 and the balance of 9,583 divided into equal monthly installments thereafter such that the option shall be 100% vested on 05/01/04.

<u>A. Spudich</u> \*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 $^{\star}$  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.