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 [*] MCDADE MARK						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) 05/21/2009									r (give title		(specify	
(Last) (First) (Middle) 280 EAST GRAND AVENUE					0.5/2									below)	below)		
					- 4. lf A	4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)				
(Street) SOUTH SAN CA 94080														X Form filed by One Reporting Person Form filed by More than One Reporting Person				
FRANCISCO					_													
(City) (State) (Zip)																		
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Transacti Date (Month/Day					Execution Date,			Transaction Dispose Code (Instr. and 5)		rities Acquired (A) o ed Of (D) (Instr. 3, 4				6. Ownership Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership			
										/ A	Amount	(A) a (D)	r Price	Following Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)	(Instr. 4)	
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
1. Title of		3. Transaction	3A. Dee		4.		5. Num		6. Date Exerc	5. Date Exercisable and 7. Ti			, nd	8. Price	9. Number		11. Nature	
Derivative Security (Instr. 3)	Conversion or Exercise Price of Derivative Security	Date (Month/Day/Year)	if any		Transac Code (Ir 8)				Expiration Date (Month/Day/Year)			Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		of Derivative Security (Instr. 5)	derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	or Indirec (I) (Instr. 4)	of Indirect Beneficial Ownership (Instr. 4)	
													Amount or	1				
									Date		iration		Number of					
Non-					Code	V	(A)	(D)	Exercisable	Date	•	Title	Shares			_		
Qualified Stock Option (right to buy)	\$1.85	05/21/2009			A		15,000		06/21/2009 ⁽¹⁾	05/2	21/2019	Common Stock	15,000	\$0	15,000	D		
Non- Qualified Stock Option (right to buy)	\$3.83								06/22/2008 ⁽²⁾	05/22	2/2018	Common Stock	15,000		15,000	D		
Non- Qualified Stock Option (right to buy)	\$6.55								05/24/2007	05/24	24/2017	Common Stock	10,000		10,000	D		
Non- Qualified Stock Option (right to buy)	\$6.78								04/05/2006 ⁽³⁾	04/05)5/2015	Common Stock	10,000		10,000	D		
Non- Qualified Stock Option (right to buy)	\$7.29								05/25/2006	05/2:	25/2016	Common Stock	7,500		7,500	D		

Explanation of Responses:

1. This option shall vest and become exercisable as to 15,000 shares divided into equal monthly installments such that the option shall be 100% vested on May 21, 2010.

2. This option shall vest and become exercisable as to 15,000 shares divided into equal monthly installments such that the option shall be 100% vested on May 22, 2009.

3. This option shall vest and become exercisable as to 10,000 shares divided into equal annual installments such that the option shall be 100% vested on 04/05/2008.

By: Sharon Barbari For: Mark <u>05/22/2009</u> <u>McDade</u>

** 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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