

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* MORGANS DAVID J JR			2. Issuer Name and Ticker or Trading Symbol CYTOKINETICS INC [CYTK]			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) SVP-Drug Discovery and Dev		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 12/15/2006					
280 EAST GRAND AVENUE			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 Form filed by More than One Reporting Person		
(Street) SOUTH SAN FRANCISCO CA 94080								
(City)	(State)	(Zip)						

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	12/15/2006		M ⁽¹⁾		5,000	A	\$1.2	50,000	D	
Common Stock	12/15/2006		S ⁽²⁾		5,000	D	\$6.95	45,000	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	12/15/2006		M			5,000	07/10/2002 ⁽³⁾	07/10/2012	Common Stock	5,000	\$0	10,000	D	
Incentive Stock Option (right to buy)	\$1.2							05/21/2003 ⁽⁴⁾	05/21/2013	Common Stock	54,500		54,500	D	
Incentive Stock Option (right to buy)	\$6.5							04/08/2004 ⁽⁵⁾	03/08/2014	Common Stock	34,000		34,000	D	
Incentive Stock Option (right to buy)	\$6.59							04/11/2005 ⁽⁶⁾	04/11/2015	Common Stock	35,995		35,995	D	
Incentive Stock Option (right to buy)	\$7.15							03/01/2006 ⁽⁷⁾	03/01/2016	Common Stock	15,388		15,388	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				
Non-Qualified Stock Option (right to buy)	\$6.59							04/11/2005 ⁽⁶⁾	04/11/2015	Common Stock	14,005		14,005	D	
Non-Qualified Stock Option (right to buy)	\$7.15							03/01/2006 ⁽⁷⁾	03/01/2016	Common Stock	44,612		44,612	D	

Explanation of Responses:

- The exercise reported in this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 15, 2005.
- The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 15, 2005.
- This option is immediately exercisable upon grant and shall vest as to 833 shares on 04/15/02 and the balance of 49,167 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/15/07.
- This option is immediately exercisable upon grant and shall vest as to 1,135 shares on 04/01/03 and the balance of 53,365 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 708 shares on 04/08/04 and the balance of 33,292 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/08/08.
- When the ISO and NQ dated 04/11/05 are combined for a total grant of 50,000 shares, the option shall vest and become exercisable as to 50,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2009.
- When the ISO and NQ dated 03/01/2006 are combined for a total grant of 60,000 shares, the option shall vest and become exercisable as to 60,000 shares divided into equal monthly installments such that the option shall be 100% vested on 03/01/2010.

David J. Morgans, Jr., Ph.D. 12/18/2006

** 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.