

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>CYTOKINETICS INC [CYTK]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Executive Chairman</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>09/26/2008</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 | 09/26/2008 | | S | | 396 | D | \$4.65 | 169,154 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 2,098 | D | \$4.66 | 167,056 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 506 | D | \$4.68 | 166,550 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 200 | D | \$4.69 | 166,350 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 400 | D | \$4.7 | 165,950 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 100 | D | \$4.73 | 165,850 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 403 | D | \$4.77 | 165,447 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 297 | D | \$4.8 | 165,150 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 100 | D | \$4.81 | 165,050 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 2,205 | D | \$4.83 | 162,845 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 395 | D | \$4.84 | 162,450 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 300 | D | \$4.85 | 162,150 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 700 | D | \$4.88 | 161,450 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 100 | D | \$4.89 | 161,350 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 1,600 | D | \$4.9 | 159,750 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 1,700 | D | \$4.91 | 158,050 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 800 | D | \$4.92 | 157,250 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 600 | D | \$4.93 | 156,650 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 1,000 | D | \$4.96 | 155,650 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 3,600 | D | \$4.99 | 152,050 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 2,100 | D | \$5 | 149,950 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 300 | D | \$5.01 | 149,650 | I | by Trust |
| Common Stock | 09/26/2008 | | S | | 100 | D | \$4.78 | 149,550 | I | by Trust |

**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 | | | | | | | 09/28/1999 ⁽¹⁾ | 09/28/2009 | Common Stock | 62,500 | | 62,500 | D | |
| Incentive Stock Option (right to buy) | \$0.58 | | | | | | | 11/14/2000 ⁽²⁾ | 11/14/2010 | Common Stock | 172,413 | | 172,413 | D | |
| Incentive Stock Option (right to buy) | \$1.2 | | | | | | | 07/10/2002 ⁽³⁾ | 07/10/2012 | Common Stock | 83,333 | | 83,333 | D | |
| Incentive Stock Option (right to buy) | \$1.2 | | | | | | | 05/21/2003 ⁽⁴⁾ | 05/21/2013 | Common Stock | 75,000 | | 75,000 | D | |
| Incentive Stock Option (right to buy) | \$6.5 | | | | | | | 04/08/2004 ⁽⁵⁾ | 03/08/2014 | Common Stock | 66,943 | | 66,943 | D | |
| Incentive Stock Option (right to buy) | \$6.59 | | | | | | | 04/11/2005 ⁽⁶⁾ | 04/11/2015 | Common Stock | 15,154 | | 15,154 | D | |
| Incentive Stock Option (right to buy) | \$6.81 | | | | | | | 04/01/2007 ⁽⁷⁾ | 03/14/2017 | Common Stock | 11,091 | | 11,091 | D | |
| Incentive Stock Option (right to buy) | \$7.15 | | | | | | | 03/01/2006 ⁽⁸⁾ | 03/01/2016 | Common Stock | 18,464 | | 18,464 | D | |
| Non-Qualified Stock Option (right to buy) | \$1.2 | | | | | | | 07/10/2002 ⁽³⁾ | 07/10/2012 | Common Stock | 161,254 | | 161,254 | D | |
| Non-Qualified Stock Option (right to buy) | \$6.5 | | | | | | | 04/08/2004 ⁽⁵⁾ | 03/08/2014 | Common Stock | 19,557 | | 19,557 | D | |
| Non-Qualified Stock Option (right to buy) | \$6.59 | | | | | | | 04/11/2005 ⁽⁶⁾ | 04/11/2015 | Common Stock | 69,846 | | 69,846 | D | |
| Non-Qualified Stock Option (right to buy) | \$6.81 | | | | | | | 04/01/2007 ⁽⁷⁾ | 03/14/2017 | Common Stock | 88,909 | | 88,909 | 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) | \$7.15 | | | | | | | 03/01/2006 ⁽⁸⁾ | 03/01/2016 | Common Stock | 131,536 | | 131,536 | D | |

Explanation of Responses:

- This option is immediately exercisable upon grant and shall vest as to 15,625 shares on 05/01/99 and the balance of 46,875 divided into equal monthly installments thereafter such that the option shall be 100% vested on 05/01/02.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

James H. Sabry, M.D., Ph.D. 09/30/2008

** 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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