

| 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*<br><b>BARBARI SHARON SURREY</b><br><br>(Last) (First) (Middle)<br><b>280 EAST GRAND AVENUE</b><br><br>(Street)<br><b>SOUTH SAN FRANCISCO CA 94080</b><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><b>CYTOKINETICS INC [ CYTK ]</b> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><br>Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><b>EVP, Finance &amp; CFO</b> |
|  | 3. Date of Earliest Transaction (Month/Day/Year)<br><b>09/03/2013</b>           |  |
| 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                    | 09/03/2013                           |  | M                              |   | 16,666  | A          | (1)    | 31,040  | D  |   |
| Common Stock                    | 09/03/2013                           |  | F(2)                           |   | 6,262   | D          | \$7.65 | 24,778  | 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 |
| Restricted Stock Units                     | (1)  | 09/03/2013                           |  | M                              |   |  | 16,666 | (3)  | (3)             | Common Stock  | 16,666                                     | \$0  | 0   | D  |       |

**Explanation of Responses:**

- Each restricted stock unit represents a contingent right to receive one share of CYTK common stock at a purchase price of \$0.001 per share which is the current par value of the common stock.
- Shares withheld by Issuer to cover taxes associated with settlement of Restricted Stock Units
- The restricted stock units vest in two equal annual installments. Vested shares will be delivered to the reporting person on 9/4/2012 and 9/3/2013.

Sharon A. Barbari 09/05/2013  
 \*\* 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.