FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

| OMB APPROVAL             |  |  |  |  |  |  |  |  |  |  |
|--------------------------|--|--|--|--|--|--|--|--|--|--|
| OMB Number: 3235-028     |  |  |  |  |  |  |  |  |  |  |
| Estimated average burden |  |  |  |  |  |  |  |  |  |  |
| hours per response: 0    |  |  |  |  |  |  |  |  |  |  |

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 |   |         |            |  | <u>CY</u>      | 2. Issuer Name and Ticker or Trading Symbol  CYTOKINETICS INC [ CYTK ] |                  |   |   |   |                  |   |                                   |             | 5. Relationship of Reporting Pe<br>(Check all applicable)<br>Director                                  |   |   |   | Person(s) to Issuer  |  |
|--|---|---------|------------|--|----------------|--|------------------|---|---|---|------------------|---|-----------------------------------|-------------|--|---|---|---|--|--|
| (Last) 280 EAS   | (F<br>ST GRAND  |         | (Middle)   |  |                | 3. Date of Earliest Transaction (Month/Day/Year) 01/02/2009            |                  |   |   |   |                  |   |                                   |             | below  | ,   | Other (specification below)                   |   | specify  |  |
| (Street) SOUTH FRANCE  | ( )   | Α !     | 94080      |  | 4. If <i>I</i> | 4. If Amendment, Date of Original Filed (Month/Day/Year)               |                  |   |   |   |                  |   |                                   |             | vidual or Joint/Group Filing (C<br>Form filed by One Reporting<br>Form filed by More than On<br>Person |   |   | orting Perso  | on   |  |
| (City)   | (S  | tate) ( | (Zip)      |  |                |  |                  |   |   |   |                  |   |                                   |             |  |   |   |   |  |  |
|  |   | Tab     | le I - N   | lon-Deri                                   | vative         | Sec  | uriti            | es A  | quired, l                               | Dis   | posed (          | of, or B  | enefi                             | cially      | Owne   | d   | ,   |   |  |  |
| 1. Title of  | Security (Ins   | str. 3) |            | 2. Transaction<br>Date<br>(Month/Day/Year) |                | Execution Date,  |                  | Code (In  | Transaction Dispose Code (Instr. and 5) |   |                  | urities Acquired (A) or<br>sed Of (D) (Instr. 3, 4  |                                   |             | Securities<br>Beneficially<br>Owned  |   | n: Direct<br>r<br>ect (I)                     | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership                         |  |  |
|  |   |         |            |  |                |  |                  |   | Code                                    | v   | Amoun            | t (A)   | or Pi                             | rice        | Report<br>Transa   | Following<br>Reported<br>Transaction(s)<br>(Instr. 3 and 4)   |   | r. 4)   | (Instr. 4)   |  |
| Common   | Stock   |         |            | 01/02/2009                                 |                |  |                  |   | S <sup>(1)</sup>                        |   | 400              | ) [   | ) \$                              | 52.71       | 74   | 4,100   |   | D   |  |  |
| Common   | Stock   |         |            | 01/02/                                     |                |  |                  | S <sup>(1)</sup>                                |   | 312   | 2 Г              | ) \$  | \$2.75                            |             | 3,788  |   | D   |   |  |  |
| Common   | Stock   |         |            | 01/02/                                     |                |  |                  | S <sup>(1)</sup>                                |   | 288   | 3 I              | 9   | \$2.76                            |             | 73,500   |   | D   |   |  |  |
| Common   |   |         |            | 01/02/2009                                 |                |  |                  | S <sup>(1)</sup>                                | _                                       | 100   | ) [              |   |                                   |             | 3,400  |   | D   |   |  |  |
| Common Stock   |   |         |            | /02/2009                                   |                |  |                  | S <sup>(1)</sup>                                |   | 128   |                  | <del>-</del>  | 52.79                             |             | 3,272  |   | D   |   |  |  |
| Common Stock   |   |         |            |  | 01/02/2009     |  |                  |   | S <sup>(1)</sup>                        |   | 300              |   | -                                 | \$2.8       |  | 2,972   | _   | D   |  |  |
| Common Stock   |   |         | 01/02/     |  |                |  | S <sup>(1)</sup> |   | 200                                     |   | _                | 52.81   |                                   | 2,772       |  | D   |   |   |  |  |
| Common Stock   |   |         | 01/02/     |  |                |  | S <sup>(1)</sup> |   | 400                                     |   | <del>-   '</del> |   |                                   | 2,372       |  | D   |   |   |  |  |
| Common Stock   |   |         | 01/02/     |  |                |  | S <sup>(1)</sup> | L   | 900                                     |   | D \$2.8°         |   |                                   | .,472       | -  | D   |   |   |  |  |
| Common Stock   |   |         | 01/02/2009 |  |                |  |                  | S <sup>(1)</sup>                                |   | 1,12  |                  | _   | 52.88<br>52.89                    | +           | 0,625<br>0,500   |   | D<br>D  |   |  |  |
| Common Stock Table   |   |         |            |  |                | ative Securities Acqu  |                  |   |   | spo   | <u> </u>         | sed of, or Beneficial   |                                   |             |  | 7,300   | <u>                                      </u> | D   |  |  |
|  |   | l       |            |  |                | calls  | s, wa            | rrant   | s, options                              |   |                  |   |                                   | -           |  | I   | .   |   | I  |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)          | Perivative Conversion Date Execution I Execution I Execution I Exercise (Month/Day/Year) if any |         |            |  |                | ction Numb<br>Instr. of<br>Deriv                                       |                  | vative<br>irities<br>uired<br>or<br>oosed<br>0) |   | . Date Exercise<br>Expiration Date<br>Month/Day/Yea |                  | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative Sec<br>(Instr. 3 and 4) |                                   | o<br>D<br>S | erivative<br>ecurity   | 9. Number<br>derivative<br>Securities<br>Beneficial<br>Owned<br>Following<br>Reported<br>Transactic<br>(Instr. 4) | ly  | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr.<br>4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|  |   |         |            |  | Code           | v  | (A)              | (D)   | Date<br>Exercisable                     |   | xpiration<br>ate | Title   | Amor<br>or<br>Numl<br>of<br>Share | ber         |  |   |   |   |  |  |
| Incentive<br>Stock<br>Option<br>(right to<br>buy)            | \$3.37  |         |            |  |                |  |                  |   | 03/29/2008 <sup>(2</sup>                | 2) 0  | 2/28/2018        | Common<br>Stock   | 27,7                              | '14         |  | 27,714  |   | D   |  |  |
| Incentive<br>Stock<br>Option<br>(right to<br>buy)            | \$6.5   |         |            |  |                |  |                  |   | 04/08/2004 <sup>(3</sup>                | 0.  | 3/08/2014        | Common<br>Stock   | 34,0                              | 000         |  | 34,000  |   | D   |  |  |

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |        |  |   |                                   |   |     |     |   |                    |   |  |  |  |   |  |
|--|--------|--|---|-----------------------------------|---|-----|-----|---|--------------------|---|--|--|--|---|--|
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  |        | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transaction<br>Code (Instr. |   | 5.  |     | 6. Date Exerc<br>Expiration Day<br>(Month/Day/\ | ate                | 7. Title at<br>Amount of<br>Securities<br>Underlyit<br>Derivativ<br>(Instr. 3 a | of<br>s<br>ng<br>e Security            | 8. Price<br>of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr.<br>4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|  |        |  |   | Code                              | v | (A) | (D) | Date<br>Exercisable                             | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of<br>Shares |  |  |   |  |
| Incentive<br>Stock<br>Option<br>(right to<br>buy)  | \$6.59 |  |   |                                   |   |     |     | 04/11/2005 <sup>(4)</sup>                       | 04/11/2015         | Common<br>Stock   | 35,995                                 |  | 35,995   | D   |  |
| Incentive<br>Stock<br>Option<br>(right to<br>buy)  | \$6.81 |  |   |                                   |   |     |     | 04/01/2007 <sup>(5)</sup>                       | 03/14/2017         | Common<br>Stock   | 14,810                                 |  | 14,810   | D   |  |
| Incentive<br>Stock<br>Option<br>(right to<br>buy)  | \$7.15 |  |   |                                   |   |     |     | 03/01/2006 <sup>(6)</sup>                       | 03/01/2016         | Common<br>Stock   | 15,388                                 |  | 15,388   | D   |  |
| Non-<br>Qualified<br>Stock<br>Option<br>(right to<br>buy)  | \$3.37 |  |   |                                   |   |     |     | 03/29/2008 <sup>(2)</sup>                       | 02/28/2018         | Common<br>Stock   | 122,286                                |  | 122,286  | D   |  |
| Non-<br>Qualified<br>Stock<br>Option<br>(right to<br>buy)  | \$6.59 |  |   |                                   |   |     |     | 04/11/2005 <sup>(4)</sup>                       | 04/11/2015         | Common<br>Stock   | 14,005                                 |  | 14,005   | D   |  |
| Non-<br>Qualified<br>Stock<br>Option<br>(right to<br>buy)  | \$6.81 |  |   |                                   |   |     |     | 04/01/2007 <sup>(5)</sup>                       | 03/14/2017         | Common<br>Stock   | 50,190                                 |  | 50,190   | D   |  |
| Non-<br>Qualified<br>Stock<br>Option<br>(right to<br>buy)  | \$7.15 |  |   |                                   |   |     |     | 03/01/2006 <sup>(6)</sup>                       | 03/01/2016         | Common<br>Stock   | 44,612                                 |  | 44,612   | 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 September 30, 2008.
- 2. When the ISO and NQ dated 02/29/2008 are combined for a total grant of 150,000 shares, the option shall vest and become exercisable as to 3,125 shares on 03/29/08 and the balance of 146,875 divided into equal monthly installments thereafter such that the option shall be 100% vested on 02/29/12.
- 3. 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
- 4. 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.
- 5. When the ISO and NQ dated 03/14/2007 are combined for a total grant of 65,000 shares, the option shall vest and become exercisable as to 1,354 shares on 04/01/07 and the balance of 63,646 divided into equal monthly installments thereafter such that the option shall be 100% vested on 03/01/11.
- 6. 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.

<u>David J. Morgans, Jr., Ph.D.</u> <u>01/05/2009</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.