FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB Number: 3235-0104
Estimated average burden
hours per response: 0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person* Horton Amy | 2. Date of Even Requiring State (Month/Day/Yea | ment | 3. Issuer Name and Ticker or Trading Symbol CRYOLIFE INC [CRY] | | | | | |
|---|--|--------------------|--|--|--|--|---|--|
| (Last) (First) (Middle) | 08/01/2006 | | 4. Relationship of Reporting Per (Check all applicable) | , , | (Mo | 5. If Amendment, Date of Original Filed (Month/Day/Year) | | |
| CRYOLIFE, INC. 1655 ROBERTS BLVD., NW (Street) KENNESAW GA 30144 | _ | | Director X Officer (give title below) Chief Accounting | 10% Owner Other (spe below) g Officer | ecify App | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | |
| (City) (State) (Zip) | | | | | | | | |
| | Table I - Noi | n-Derivati | ve Securities Beneficial | ly Owned | | | | |
| 1. Title of Security (Instr. 4) | | | Amount of Securities eneficially Owned (Instr. 4) | | | 4. Nature of Indirect Beneficial Ownership (Instr. 5) | | |
| Common Stock | | | 12,819(1) | D | | | | |
| | | | Securities Beneficially nts, options, convertible | | s) | | | |
| Title of Derivative Security (Instr. 4) | Date Exercisable and Expiration Date (Month/Day/Year) | | 3. Title and Amount of Securities Underlying Derivative Security (In | | 4. Conversion or | Form: | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | |
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | Exercise Price of Derivative Security | Direct (D) or Indirect (I) (Instr. 5) | | |
| Stock Option (Date of Grant: 6-29-04) | 06/29/2005 ⁽²⁾ | 12/29/2009 | Common Stock | 8,838 | 5.36 | D | | |
| Stock Option (Date of Grant: 6-29-04) | 06/29/2005 ⁽²⁾ | 12/29/2009 | Common Stock | 1,162 | 5.36 | D | | |
| | | 08/21/2011 | 6 6 1 | 0.000 | 4.25 | D | | |
| Stock Option (Date of Grant: 2-21-06) | 02/21/2007 ⁽²⁾ | 08/21/2011 | Common Stock | 9,000 | 7.23 | | | |
| Stock Option (Date of Grant: 2-21-06) Stock Option (Date of Grant: 8-31-02) | 02/21/2007 ⁽²⁾ 08/31/2003 ⁽²⁾ | 02/29/2008 | Common Stock Common Stock | 16,465 | 2.2 | D | | |
| , | | | | 7, , , , | | - | | |

Explanation of Responses:

- 1. Includes 1,715 shares acquired under the CryoLife, Inc. Employee Stock Purchase Plan.
- 2. Stock options vest in 20% increments beginning on first anniversary of grant date
- 3. Original vesting schedule of stock options was in 20% increments beginning on first anniversary of grant date, however, vesting was accelerated so that all options became fully vested on 9/30/05.

Remarks:

/s/ Amy Horton

08/10/2006

** 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 5 (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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