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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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FORM 8-K

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CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

DATE OF REPORT (DATE OF EARLIEST EVENT REPORTED): APRIL 11, 2005

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CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

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FLORIDA
(State or Other Jurisdiction of Incorporation)

1-13165 (Commission File Number)

59-2417093 (IRS Employer Identification No.)

1655 ROBERTS BOULEVARD, N.W., KENNESAW, GEORGIA 30144 (Address of principal executive office) (zip code)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: (770) 419-3355

(Former name or former address, if changed since last report)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- $|\_|$  Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- |\_| Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- |\_| Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- |\_| Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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SECTION 1 REGISTRANT'S BUSINESS AND OPERATIONS.
ITEM 1.02. TERMINATION OF A MATERIAL DEFINITIVE CONTRACT.

On April 11, 2005, Dr. Thomas J. Lynch submitted his resignation as Vice President, Regulatory Affairs and Quality Assurance of the Company, effective as of April 14, 2005, which the Company accepted. Dr. Lynch has accepted a position with another company. Dr. Lynch worked under an employment agreement entered into in August 2003 at an annual salary of \$240,000. Since his resignation was voluntary, he is not entitled to receive severance payments under his employment agreement.

There are no material relationships between the Company and Dr. Lynch except as may be described in the Company's Form 10-K for the year ended December 31, 2004.

SECTION 7 REGULATION FD ITEM 8.01 OTHER EVENTS

David M. Fronk has replaced Dr. Lynch as the Company's Vice President, Regulatory Affairs and Quality Assurance. Mr. Fronk was formerly the Vice President of Clinical Research, a position he had held since 1998.

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## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, CryoLife, Inc. has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CRYOLIFE, INC.

Date: April 14, 2005 By: /s/ D. Ashley Lee

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Name: D. Ashley Lee

Title: Executive Vice President, Chief Operating Officer and Chief

Financial Officer