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

FORM 8-K

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

Date of Report (Date of earliest event reported): MAY 26, 2005

CRYOLIFE, INC. (Exact name of registrant as specified in its charter)

FLORIDA1-1316559-2417093(State or Other Jurisdiction
of Incorporation)(Commission File Number)(IRS Employer
Identification No.)

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

Registrant's telephone number, including area code: (770) 419-3355

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

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)
- |X| 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))

SECTION 3 SECURITIES AND TRADING MARKETS ITEM 3.01 NOTICE OF FAILURE TO SATISFY A CONTINUED LISTING RULE OR STANDARD.

(b) On May 26, 2005, CryoLife, Inc. ("CryoLife") sent notice to the New York Stock Exchange (the "NYSE") that it had inadvertently omitted to state in the proxy statement for the 2005 Annual Meeting of Shareholders that its Corporate Governance Guidelines are available on its web site, and that those guidelines, together with its committee charters are available in print form to stockholders on request. Section 303A.09 of the listing standards of the NYSE requires that these statements be included in the annual proxy statement.

CryoLife addressed this by including the omitted information in its press release dated May 26, 2005, and by filing it with the Securities Exchange Commission on this Form 8-K, indicating that the filing was also soliciting material under Rule 14a-12 under the Securities Exchange Act of 1934. The information has been and continues to be available on CryoLife's web site and in print form to stockholders upon request, and will be included in next year's proxy statement. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The NYSE has assured CryoLife that this noncompliance will not result in a delisting of CryoLife shares on the NYSE.

SECTION 8 OTHER EVENTS ITEM 8.01 OTHER EVENTS.

On May 26, 2005, CryoLife issued a press release announcing the results of a study of its SynerGraft(R) Model #100, a bovine ureter used for arteriovenous (AV) access in dialysis patients, which was presented at the Fourth International Congress of the Vascular Access Society in Berlin, Germany.

SECTION 9 FINANCIAL STATEMENTS AND EXHIBITS ITEM 9.01 EXHIBITS.

- (a) Financial Statements
- (b) Pro Forma Financial Information

(c) Exhibits

Exhibit Number

99.1

Press Release dated May 26, 2005

-2-

Description

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: May 26, 2005 By: /s/ D.A. Lee D. Ashley Lee, Executive Vice President, Chief Operating Officer and Chief Financial Officer

-3-

EXHIBIT INDEX

Exhibit Number

Description

99.1

Press Release dated May 26, 2005

POSITIVE RESULTS OF CRYOLIFE'S SYNERGRAFT MODEL #100 ARTERIOVENOUS (AV) ACCESS DEVICE PRESENTED AT INTERNATIONAL MEDICAL CONGRESS

ATLANTA, May 26 /PRNewswire-FirstCall/ -- CryoLife, Inc. (NYSE: CRY), a biomaterials and biosurgical device company, announced today that positive results of its SynerGraft(R) Model #100, a bovine ureter used for arteriovenous (AV) access in dialysis patients, were presented at the Fourth International Congress of the Vascular Access Society in Berlin, Germany. The data showed freedom from infection of 94% and secondary patency of 79% at one year. The objective of the study, conducted at the Oxford Transplant Center, Churchill Hospital, in Oxford, UK, was to evaluate patency and durability of the SynerGraft Model #100 AV access device in dialysis patients where access from their own vein was not possible. Additionally, the transplanted tissue that was analyzed in the study confirmed the recellularization of the SynerGraft Model #100 AV access device with the patient's own cells. The study included 21 patients.

The SynerGraft Model #100 AV access device incorporates the Company's SynerGraft antigen reduction technology (ART). This patented technology depopulates allografts and xenografts, removing antigens, leaving a collagen matrix, which allows for the potential recellularization of the graft by the patient's own cells. Removing antigens from the tissues appears to allow the patient to receive the implant without the need for immunosuppressant therapy.

"We believe CryoLife is the only company that offers a depopulated, nonchemically fixed xenograft, and the SynerGraft Model #100AV access device provides an alternative for dialysis patients when an autologous vein is not available. More than 300 patients have been implanted with the SynerGraft Model #100 for AV access in the EU," stated Steven G. Anderson, President and CEO, CryoLife, Inc.

Annual Meeting Update

CryoLife's Annual Meeting will be held June 2, 2005, at 11:00 a.m., at the Company's headquarters. Stockholders are urged to attend. If you are unable to attend the meeting, please try to return your completed proxy on a timely basis.

CryoLife stockholders are reminded that its 2004 Annual Report, committee charters, Code of Business Conduct and Ethics, and Corporate Governance Guidelines are available on its web site at http://www.cryolife.com/investornew.htm. You may click on any of those items at that page. Copies of these materials will be provided in print form to stockholders upon request.

About CryoLife, Inc.

Founded in 1984, CryoLife, Inc. is a leader in the processing and distribution of implantable living human tissues for use in cardiovascular and vascular surgeries throughout the United States and Canada. The Company's BioGlue(R) Surgical Adhesive is FDA approved as an adjunct to sutures and staples for use

-5-

in adult patients in open surgical repair of large vessels and is CE marked in the European Community, and much of Latin America, and in Canada for use in soft tissue repair and approved in Australia for use in vascular and pulmonary sealing and repair.

Statements made in this press release that look forward in time or that express management's beliefs, expectations or hopes are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These future events may not occur as and when expected, if at all, and, together with the Company's business, are subject to various risks and uncertainties. These risks and uncertainties include that future studies will not prove as promising with regard to the performance of the Syner Grat Model #100, that the SynerGraft Model #100 may not prove commercially feasible over the long term, that the Company's 2005 revenues and expenses may not meet its expectations, the possibility that the FDA or other regulatory authorities could impose additional restrictions on the Company's operations, require a recall, or prevent the Company from processing and distributing tissues or manufacturing and distributing other products, that the protein hydrogel products under

development may not be commercially feasible, that the Company may not have sufficient capital availability to fund its business, that pending litigation cannot be settled on terms acceptable to the Company, that the Company may not have sufficient resources to pay punitive damages (which are not covered by insurance) or other liabilities in excess of available insurance, the possibility of severe decreases in the Company's revenues and working capital, that to the extent the Company does not have sufficient resources to pay the claims against it, it may be forced to cease operations or seek protection under applicable bankruptcy laws, changes in laws and regulations applicable to CryoLife and other risk factors detailed in CryoLife's Securities and Exchange Commission filings, including CryoLife's Form 10-K filing for the year ended December 31, 2004, its registration statement on Form S-3 (Reg. No. 333-121406), and the Company's other SEC filings. The Company does not undertake to update its forward-looking statements.

For additional information about the company, visit CryoLife's website: $\ensuremath{\mathsf{http://www.cryolife.com}}$.

Contact: Joseph T. Schepers Vice President, Corporate Communications (770) 419-3355

SOURCE CryoLife, Inc.

-6-