UNITED STATES SECURITIES AND EXCHANGE COMMISSION washington, d.c. 20549

washington, a.e. 20019

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): February 7,2008

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

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)

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))

Section 8 Other Events

Item 8.01 Other Events.

On February 7, 2008, CryoLife, Inc. ("CryoLife" or the "Company") issued a press release announcing that the Food and Drug Administration ("FDA") notified CryoLife that it has received 510(k) clearance from the FDA for its CryoValve SG pulmonary heart valve processed with the Company's proprietary SynerGraft technology. CryoLife hereby incorporates by reference herein the information set forth in its Press Release dated February 7, 2008, a copy of which is attached hereto as Exhibit 99.1

Except for the historical information contained in this report, the statements made by CryoLife are forward-looking statements that involve risks and uncertainties. All such statements are subject to the safe harbor created by the Private Securities Litigation Reform Act of 1995. These statements include those regarding anticipated effectiveness, benefits and indications for use of CryoValve SG as well as the timing of use of the SynerGraft technology. 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 CryoValve SG may not perform as well as expected or provide all of the benefits anticipated, the Company may not be able to begin processing the majority of its pulmonary valves by the anticipated time, nor may the first shipments of CryoValve SG occur as expected, 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, 2006, its most recent Form 10-Q, and the Company's other SEC filings. The Company does not undertake to update its forward-looking statements.

Section 9 Financial Statements and Exhibits

Item 9.01(c) Exhibits.

- (a) Financial Statements. Not applicable.
- (b) Pro Forma Financial Information. Not applicable.
- (c) Shell Company Transactions. Not applicable.
- (d) Exhibits.

Exhibit Number Description

99.1 Press release dated February 7, 2008

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.

By: /s/ D. A. Lee Date: February 11, 2008

Name: D. Ashley Lee
Title: Executive Vice President, Chief
Operating Officer and Chief
Financial Officer



FOR IMMEDIATE RELEASE

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CryoLife Receives FDA 510(k) Clearance for SynerGraft® Processed Human Pulmonary Heart Valves

ATLANTA...(February 7, 2008)...CryoLife, Inc., (NYSE: CRY) a biomaterials, medical device and tissue processing company, today announced that it has received 510(k) clearance from the Food and Drug Administration (FDA) for its CryoValve® SG pulmonary human heart valve processed with the Company's proprietary SynerGraft technology. CryoLife's proprietary SynerGraft technology is designed to remove allogeneic donor cells and cellular remnants from the valve without compromising the integrity of the underlying collagen matrix.

The CryoValve SG pulmonary human heart valve is indicated for the replacement of diseased, damaged, malformed or malfunctioning native pulmonary valves. The valve can be used in conjunction with right ventricular outflow tract reconstruction procedures (RVOT), commonly performed in children with congenital heart defects. In addition, the valve can be used for pulmonary valve replacement during the Ross Procedure, an operation in which a patient's defective aortic valve is removed and replaced with his own pulmonary valve. The CryoValve SG is then surgically implanted in place of the removed native pulmonary valve.

"CryoValve SG may offer an attractive valve replacement option for many children born with heart defects," said Steven G. Anderson, CryoLife's president and chief executive officer. "CryoValve SG may also be a good option for patients who have undergone valve replacement surgery as young children, but may require another valve replacement as they've grown into adulthood."

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1655 Roberts Boulevard, NW • Kennesaw, Georgia 30144 (770) 419-3355 Phone • (770) 426-0031 Fax • e-mail: info@cryolife.com http://www.cryolife.com "Children born with heart defects often face frequent and challenging surgeries," stated John W. Brown, M.D., professor of Cardiothoracic Surgery, Indiana University School of Medicine, Indianapolis, Ind. "For certain heart defects, CryoValve SG may give these kids a great opportunity to live active, normal lives. As a surgeon, I'm very excited to be able to offer them and their families this treatment option."

At FDA's request, CryoLife is planning a post-clearance study to seek evidence for the potential and implied long-term benefits of the SynerGraft process. Data to be collected is expected to include long-term safety and hemodynamic function, immune response, and explant analysis. CryoLife believes that this information may help it ascertain whether the SynerGraft process reduces the immunogenicity of the transplanted heart valve and recellularizes with the recipients own cells.

CryoLife will be using the SynerGraft technology for the majority of its pulmonary valve processing and anticipates that the first CryoValve SG may be available for shipment late in the first quarter of 2008.

About CryoLife, Inc.

Founded in 1984, CryoLife, Inc. is a leader in the processing and distribution of implantable living human tissues for use in cardiac and vascular surgeries throughout the United States and Canada. The Company's BioGlue® Surgical Adhesive is FDA approved as an adjunct to sutures and staples for use in adult patients in open surgical repair of large vessels. BioGlue is also CE marked in the European Community and approved in Canada and Australia for use in soft tissue repair. The Company also distributes the CryoLife-O'Brien® stentless porcine heart valve, which is CE marked for distribution within the European Community.

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 statements include those regarding anticipated effectiveness, benefits and indications for use of CryoValve SG as well as the timing of use of the SynerGraft technology. 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 CryoValve SG may not perform as well as expected or provide all of the benefits anticipated, the Company may not be able to begin processing the majority of its pulmonary valves by the anticipated time, nor may the first shipments of CryoValve SG occur as expected, 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, 2006, its most recent Form 10-Q, 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 Web site: http://www.cryolife.com

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