
**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): December 15, 2006

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))
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Section 1 Registrant's Business and Operations

Item 1.01 Entry into a Material Definitive agreement.

On December 15, 2006, CryoLife, Inc. ("CryoLife") entered into an exchange and service agreement with Regeneration Technologies, Inc., a Delaware corporation, RTI Donor Services, Inc., f/k/a U.S. Allograft Network, Inc., a Delaware not-for-profit corporation, and Regeneration Technologies, Inc. - Cardiovascular, an Alabama corporation (collectively, "RTI"), respecting procurement, processing, and distribution activities for cardiovascular and vascular tissue processed and distributed by RTI and orthopedic tissue for the knee processed and distributed by CryoLife. A copy of the press release announcing the agreement dated December 19, 2006 is attached as Exhibit 99.1 hereto.

According to the exchange and service agreement, CryoLife will cease accepting for processing donated human orthopedic tissue for the knee on January 1, 2007 and will work to transition existing arrangements for recovery of human orthopedic tissue for the knee to RTI. Likewise on January 1, 2007, RTI will cease accepting donated human cardiovascular and vascular tissues for processing and will work to transition its arrangements for recovery of these tissues to CryoLife. Certain physical assets relating to the tissues that are the subject of the agreement will also be transferred between the parties. No cash was exchanged in the transaction.

CryoLife will continue to distribute its existing orthopedic tissue for the knee inventory, and RTI will continue to distribute its existing cardiovascular and vascular tissue inventory, through June 30, 2008. After that date, CryoLife will become entitled to distribute RTI's remaining cardiovascular and vascular tissue inventory, and RTI will become entitled to distribute CryoLife's remaining orthopedic tissue for the knee inventory, for a fee. Under the Exchange and Service Agreement, from July 1, 2008 through December 31, 2016, except as set forth above, CryoLife has agreed not to market or solicit orders for certain human orthopedic tissues for the knee and RTI has agreed not to market or solicit orders for human cardiac and vascular tissues.

The agreement also provides for a non-exclusive license of technology from CryoLife to RTI, and contains customary provisions regarding indemnification and confidentiality.

Section 8 Other Events

Item 8.01 Other Events.

On December 20, 2006, CryoLife issued a press release announcing that it expects, as a result of the exchange and service agreement, an economic benefit of up to \$2 million on an annual basis, beginning in calendar year 2007. CryoLife hereby incorporates by reference herein the information set forth in its Press Release dated December 20, 2006, a copy of which is attached hereto as Exhibit 99.2. Except as otherwise provided in the press release, the press release speaks only as of the date of such press release and it shall not create any implication that the affairs of CryoLife have continued unchanged since such date.

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. CryoLife's future financial performance could differ significantly from the expectations of management and from results expressed or implied in the press releases filed as exhibits hereto. Please refer to the last paragraph of the press releases for further discussion about forward-looking statements. For further information on risk factors, please refer to the "Risk Factors" contained in CryoLife's Form 10-K for the year ended December 31, 2005, as filed with the Securities and Exchange Commission ("SEC") and any subsequent SEC filings. CryoLife disclaims any obligation or duty to update or modify these forward-looking statements.

Section 9 Financial Statements and Exhibits

Item 9.01(d) Exhibits.

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

<u>Exhibit Number</u>	<u>Description</u>
99.1	Press release dated December 19, 2006
99.2	Press release dated December 20, 2006

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: December 20, 2006

By: /s/ D. Ashley Lee

Name: D. Ashley Lee

Title: Executive Vice President, Chief
Operating Officer and Chief Financial Officer

FOR IMMEDIATE RELEASE**Media Contacts:**

D. Ashley Lee
 Executive Vice President, Chief Financial
 Officer and Chief Operating Officer
 Phone: 770-419-3355

Katie Brazel
 Fleishman Hillard
 Phone: 404-739-0150

CryoLife and Regeneration Technologies Enter Into Exchange and Service Agreement

CryoLife to sharpen focus on core cardiovascular business

ATLANTA...(December 19, 2006)...CryoLife, Inc., (NYSE: CRY), a biomaterials and biosurgical device company, and Regeneration Technologies Inc., (RTI) (Nasdaq: RTIX), a Florida-based processor of biologic implants, today announced that they have entered into an exchange and service agreement respecting their orthopedic and cardiovascular activities.

According to the agreement, CryoLife will cease accepting donated human orthopedic tissues for processing on January 1, 2007 and will work to transition existing arrangements for recovery of human orthopedic tissue to RTI. Likewise on January 1, 2007, RTI will cease accepting donated human cardiovascular tissues for processing and will work to transition its arrangements for recovery of human cardiovascular tissue to CryoLife. Certain physical assets will also be transferred between the parties. No cash was exchanged in the transaction.

“This agreement will allow each gift of donated cardiac, vascular and orthopedic tissue to be processed by an organization that has a greater focus on surgeries utilizing that specific type of donated tissue, thereby improving how these gifts are processed for their intended purpose,” said Steven G. Anderson, president and chief executive officer, CryoLife, Inc. Mr. Anderson added, “CryoLife will now sharpen its corporate focus on its core business of developing and providing innovative products and preserved tissues to cardiac and vascular surgeons and their patients.”

“We are very enthusiastic about this agreement and the benefits it will bring to our recovery agencies, surgeons and patients,” said Brian K. Hutchison, RTI chairman, president and chief executive officer. “These gifts of donated tissue will be prepared for transplantation with best-in-class technologies and maximized to help as many patients as possible. RTI will now be better able to meet the demand for our sports medicine implants, sterilized through our proprietary BioCleanse® process. In turn, CryoLife will be better able to meet the demand for their cardiac and vascular implants.”

RTI will continue to distribute its existing cardiovascular tissue inventory and CryoLife will continue to distribute its existing orthopedic tissue inventory through June 30, 2008. After that date, CryoLife will become entitled to distribute RTI’s remaining cardiovascular tissue inventory and RTI will become entitled to distribute CryoLife’s remaining orthopedic tissue inventory through December 31, 2008. Under the agreement, from July 1, 2008 through December 31, 2016, CryoLife has agreed not to market or solicit orders for certain human orthopedic tissues for sports injuries and RTI has agreed not to market or solicit orders for human cardiac and vascular tissues.

CryoLife Investor Conference Call

CryoLife will hold a teleconference call and live webcast on Wednesday, December 20, 2006, at 11:00 a.m. Eastern Time to discuss this transaction, followed by a question and answer session hosted by Mr. Anderson.

To listen to the live teleconference please dial 201-689-8261 a few minutes prior to 11:00 a.m. A replay of the teleconference will be available December 20 - 27, 2006 and can be accessed by calling (toll free) 877-660-6853 or 201-612-7415. The account number for the replay is 244 and the conference number is 224239.

The live webcast and replay, as well as a copy of this press release, can be accessed by going to the Investor Relations section of the CryoLife web site at www.cryolife.com and selecting the heading Webcasts & Presentations.

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® 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 and the SG Model 100 vascular graft, which are CE marked for distribution within the European Community. For additional information about the company, visit CryoLife’s Web site: <http://www.cryolife.com>.

About Regeneration Technologies, Inc.

RTI processes allograft and xenograft tissue into shaped implants for use in orthopedic and other surgeries with a commitment to science, safety and innovation.

RTI also holds the patents on BioCleanse, the only proven tissue sterilization process validated to eliminate viruses, bacteria, fungi and spores from tissue without impacting the structural or biomechanical integrity of the tissue. The company has distributed more than half a million allograft implants sterilized with the BioCleanse process with zero incidence of infection. RTI is accredited by the American Association of Tissue Banks and was named a 2004 Technology Pioneer by the World Economic Forum. For more information about RTI, visit the company’s Web site at www.rtix.com.

Statements made in this press release regarding CryoLife that look forward in time or that express beliefs, expectations or hopes, including statements regarding the expected impact of the exchange and service agreement, 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 CryoLife's business, are subject to various risks and uncertainties. These risks and uncertainties include that the impact of the exchange and service agreement may not have some or all of the positive benefits anticipated, that sources of cardiovascular and vascular tissue procurement for RTI may choose not to make that tissue available to CryoLife or may not be able to meet CryoLife's tissue processing standards, that expected cost savings and synergies may not occur when and as anticipated, that CryoLife's recently announced strategic directives may not generate anticipated revenue and earnings growth, CryoLife's efforts to continue to increase revenue may not be effective, since their effectiveness is subject to such factors as competitive pressures and tissue availability, that CryoLife's efforts to develop and introduce new products outside the U.S. may be unsuccessful, that CryoLife's efforts to improve procurement and tissue processing yields may not continue to prove effective, the possibility that the FDA could impose additional restrictions on CryoLife's operations, require a recall, or prevent CryoLife from processing and distributing tissues or manufacturing and distributing other products, that products and services under development, including BioDisc, may not be commercially feasible, CryoLife's SynerGraft products may not receive FDA approval when anticipated or at all, that CryoLife may not have sufficient borrowing or other capital availability to fund its business, that pending litigation cannot be settled on terms acceptable to CryoLife, that CryoLife 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 decreases in CryoLife's working capital if cash flow does not improve, that to the extent CryoLife 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, efforts by existing stockholders or others to gain influence or control over CryoLife may divert management's attention from CryoLife's operational recovery or otherwise be detrimental to the interests of the other stockholders, existing or other potential litigation initiated by stockholders or others; possible litigation by CryoLife if stockholders or others make proposals or statements which CryoLife does not believe to be fair or accurate or in the best interests of its other shareholders 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, 2005, its most recent Form 10-Q, and CryoLife's other SEC filings. CryoLife does not undertake to update any forward-looking statements contained in this press release.

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CryoLife Provides Additional Comments on Exchange and Service Agreement with Regeneration Technologies*CryoLife expects transaction to be accretive to 2007 earnings*

ATLANTA...(December 20, 2006)...CryoLife, Inc., (NYSE: CRY), a biomaterials and biosurgical device company, is providing additional information regarding the exchange and service agreement with Regeneration Technologies (RTI) (Nasdaq: RTIX) announced yesterday.

As a result of this transaction, the Company expects an initial economic benefit of up to \$2 million on an annual basis, a portion of which will be reinvested into the execution of its recently announced strategy. Management expects higher gross margins and an accretive impact on 2007 earnings resulting from more efficient tissue recovery and processing, and from a sharpened focus on its cardiovascular business, including the leveraging of the Company's direct cardiovascular distribution network.

"This agreement is another step in the implementation of our recently completed strategic review and further strengthens our financial position as we head into 2007," said Steven G. Anderson, president and chief executive officer, CryoLife, Inc. Mr. Anderson added, "We will continue to execute on our strategic plan and look for opportunities to create value for our shareholders."

The Company expects to record non-recurring, non-cash charges and benefits during the fourth quarter of 2006 related to inventory impairments and the exchange of intangible assets, including non-competition agreements and customer lists. These charges and benefits may be significant. The Company is in the process of finalizing the accounting for the transaction. The Company currently plans to release its 2006 fourth quarter and year-end financial results in late-February of 2007, and expects to provide more financial guidance regarding this agreement at that time.

Webcast and Conference Call Information

The Company will hold a teleconference call and live webcast today at 11:00 a.m. Eastern Time, December 20, 2006, to discuss this transaction, followed by a question and answer session hosted by Mr. Anderson.

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ended December 31, 2005, its most recent Form 10-Q, and the Company's other SEC filings. The Company does not undertake to update its forward-looking statements.

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