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): April 30, 2008

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

Florida	**1-13165**	**59-2417093**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(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 2 Financial Information

Item 2.02 Results of Operations and Financial Condition.

On April 30, 2008, CryoLife, Inc. ("CryoLife" or the "Company") issued a press release announcing its financial results for the first quarter ended March 31, 2008. CryoLife hereby incorporates by reference herein the information set forth in its Press Release dated April 30, 2008, a copy of which is attached hereto as Exhibit 99.1. 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.

The press release includes a supplemental non-GAAP financial measure, non-GAAP revenues, which have been adjusted from the comparable GAAP revenue numbers to exclude revenues related to orthopedic tissue preservation services. The additional non-GAAP financial information is not meant to be considered in isolation or as a substitute for total revenues prepared in accordance with GAAP. Combined cardiac and vascular preservation services revenues have been adjusted from the comparable segment revenue numbers to exclude revenues related to orthopedic tissue preservation services.

Non-GAAP revenues have been adjusted to exclude revenues from orthopedic tissue processing because the Company discontinued procuring and processing such tissue as of January 1, 2007 and is currently only distributing those tissues that were processed prior to that time. Because the Company's revenues from these tissues will be reduced to zero in the near future, the Company believes that the non-GAAP revenue numbers presented provide investors with a more accurate measure of the relative revenue performance of the Company's continuing tissue preservation business. Accordingly, CryoLife believes that this non-GAAP measure, when read in conjunction with the Company's GAAP financials, provides useful information to investors by offering:

- the ability to make more meaningful period-to-period comparisons of the Company's on-going operating results;
- the ability to better identify trends in the Company's underlying business and perform related trend analyses; and
- a better understanding of how management plans and measures the Company's underlying business.

The information provided pursuant to this Item 2.02 is to be considered "furnished" pursuant to Item 2.02 of Form 8-K and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended, nor shall it be deemed incorporated by reference into any of CryoLife's reports or filings with the Securities and Exchange Commission ("SEC"), whether made before or after the date hereof, except as expressly set forth by specific reference in such report or filing.

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 release. Please refer to the last paragraph of the press release for further discussion about forward-looking statements. For further information on risk factors, please refer to "Risk Factors" contained in CryoLife's Form 10-K for the year ended December 31, 2007, as filed with the 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(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 April 30, 2008

* This exhibit is furnished, not filed.

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 30, 2008

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

Exhibit 99.1

CryoLife®, Inc.
Biotechnologies for Medicine℠

NEWS RELEASE

FOR IMMEDIATE RELEASE

Media Contacts:

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Chief Operating Officer
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CryoLife's Earnings Per Share Increases 150 Percent to $0.10 in First Quarter of 2008 from $0.04 in First Quarter of 2007

Company raises revenue guidance

ATLANTA, GA…(April 30, 2008)…CryoLife, Inc. (NYSE: CRY), a biomaterials, medical device and tissue processing company, announced today that revenues for the first quarter of 2008 increased 4 percent to $25.6 million compared to $24.5 million in the first quarter of 2007. Excluding orthopaedic tissue processing revenues of $327,000 and $1.8 million in first quarters of 2008 and 2007, respectively, total revenues increased 11 percent for the first quarter of 2008.

Net income in the first quarter of 2008 was $2.8 million, or $0.10 per basic and fully diluted common share, compared to $1.4 million, or $0.04 per basic and fully diluted common share in the first quarter of 2007.

Tissue processing revenues in the first quarter of 2008 increased 4 percent to $13.4 million compared to $13.0 million in the first quarter of 2007. Tissue processing revenues increased primarily due to increased demand for the Company's cardiac and vascular processed tissues, and, to a lesser extent, price increases, partially offset by a decline in orthopaedic tissue processing revenues.

Combined cardiac and vascular tissue processing revenues in the first quarter of 2008 increased 18 percent to $13.1 million compared to $11.1 million in the first quarter of 2007. Combined cardiac and vascular tissue processing revenues increased primarily due to increased demand for the Company's processed tissues and, to a lesser extent, price increases.

—more—

Orthopaedic tissue processing revenues in the first quarter of 2008 decreased 82 percent to $327,000 compared to $1.8 million in the first quarter of 2007. These revenues declined because the Company discontinued procuring and processing orthopaedic tissue in the first quarter of 2007 pursuant to the exchange and service agreement signed with a competitor in December of 2006.

BioGlue® revenues were $11.9 million for the first quarter of 2008 compared to $11.2 million in the first quarter of 2007, an increase of 6 percent. U.S. BioGlue revenues were $8.6 million and $8.3 million in the first quarter of 2008 and 2007, respectively. International BioGlue revenues were $3.3 million and $2.9 million in the first quarter of 2008 and 2007, respectively.

Total product and tissue processing gross margins were 63 percent in the first quarter of 2008 compared to 61 percent in the first quarter of 2007. Tissue processing gross margins in the first quarter of 2008 were 45 percent compared to 41 percent in the first quarter of 2007. Tissue processing gross margins improved in 2008 compared to 2007 primarily as a result of fee increases and a favorable product mix in 2008.

General, administrative, and marketing expenses in the first quarter of 2008 were $12.1 million compared to $12.3 million in the first quarter of 2007.

Research and development expenses were $1.4 million and $1.1 million in the first quarters of 2008 and 2007, respectively. Research and development spending in 2008 primarily focused on the Company's SynerGraft products and tissues, protein hydrogel technologies, and research on cold storage and preservation of internal organs.

As of March 31, 2008, the Company had $12.9 million in cash, cash equivalents and marketable securities (at market), of which $946,000 was received from the U.S. Department of Defense as advance funding for the development of protein hydrogel technology for use on the battlefield. The $12.9 million of cash excludes $4.5 million of cash the Company used to pay off its prior credit facility, which expired on February 8, 2008.

"We believe that the continued improvement in our core business, along with the recent FDA clearance of the SynerGraft pulmonary heart valve and the private label agreement with Medaphor, Inc. for Hemostase MPH, positions us for a very strong performance in 2008," stated Steven G. Anderson, president and chief executive officer. "We will continue to focus on our R&D pipeline as well as look for other opportunities to further strengthen our position in the cardiac and vascular surgery markets."

Financial Guidance

The Company's GAAP revenues are composed of product and tissue processing revenues plus other revenues. With the recent clearance of CryoValve® SG pulmonary heart valve and the private label agreement for Hemostase MPH, the Company now expects product and tissue processing revenues for the full year of 2008 to be between $102.0 million and $107.0 million, up from its previous range of between $101.0 million and 106.0 million. Other revenues for 2008 may reach between $1.5 million and $2.0 million, primarily related to funding received from the Department of Defense in connection with the development of BioFoam®. The actual amount of other revenues is largely dependent upon actual expenses incurred related to the development of BioFoam.

The Company expects tissue processing revenues to be between $53.0 million and $56.0 million and BioGlue revenues to be between $47.0 million and $49.0 million for the full year of 2008. Other implantable medical device revenues are now expected to be approximately $2.0 million in 2008, which includes an estimated $1.0 million in revenues from the distribution of Hemostase MPH.

The Company expects general, administrative, and marketing expenses of between $48.0 million and $51.0 million, and research and development expenses of between $6.5 million and $8.5 million for the full year of 2008. The research and development expectations include an estimated range of between $1.5 million and $2.0 million to be funded by the Department of Defense in connection with the development of BioFoam.

Webcast and Conference Call Information

The Company will hold a teleconference call and live webcast today at 10:00 a.m. Eastern Time to discuss the results 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 10:00 a.m. A replay of the teleconference will be available April 30 through May 7 and can be accessed by calling 877-660-6853 (toll free) or 201-612-7415. The account number for the replay is 244 and the conference number is 281786.

The live webcast and replay 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 cardiac and vascular surgeries throughout the United States and Canada. The Company recently received FDA clearance for the CryoValve® SG pulmonary human heart valve, processed using CryoLife's proprietary SynerGraft® Technology. 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. Beginning May 1, 2008 CryoLife will distribute Hemostase MPH, a hemostatic agent, in much of the U.S. for use in cardiac and vascular surgery and in the United Kingdom and Germany for cardiac, vascular, and general surgery, subject to certain exclusions. 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 2008 performance. 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 the Company may be unable to effectively leverage its existing sales force to sell Hemostase MPH, that surgeons may not choose to utilize Hemostase MPH, that Hemostase MPH may not perform as expected or provide all expected benefits, the Company is dependent on revenues from BioGlue, the Company's strategic directives may not generate anticipated revenue and earnings growth, competitive pressures and tissue availability may adversely affect the

Company's ability to grow revenues, the Company's efforts to develop and introduce new products outside the U.S. may be unsuccessful, the Company'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 the Company's operations, require a recall, or prevent the Company from processing and distributing tissues or manufacturing and distributing other products, FDA and other approvals for products in development may not be obtained, and if obtained, may be costly and require lengthy review periods, products and services under development may not be commercially feasible, CryoValve SG may not perform as well as expected or provide all the benefits anticipated, demand for CryoValve SG may not reach anticipated levels, and accordingly, the Company may choose not to process the majority of its pulmonary valves with the Company's SynerGraft technology, the SynerGraft post-clearance study requested by the FDA may not provide the expected positive results, pending or future litigation cannot be settled on terms acceptable to the Company, 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 Company may be unable to obtain sufficient financing to fully pursue its strategic plan and future healthcare policies, healthcare reimbursement methods, and healthcare reimbursement policies may affect the availability, amount, and timing of the Company's revenues. These risks and uncertainties include the risk factors detailed in CryoLife's Securities and Exchange Commission filings, including CryoLife's Form 10-K filing for the year ended December 31, 2007, its most recent Form 10-Q, and the Company's other SEC filings. The Company does not undertake to update its forward-looking statements.

CRYOLIFE, INC.
Financial Highlights
(In thousands, except share data)

	Three Months Ended March 31,	
	2008	2007
	(Unaudited)	
Revenues:		
Preservation services	$13,424	$12,961
Products	11,980	11,395
Other	164	168
Total revenues	25,568	24,524
Costs and expenses:		
Preservation services (including write-downs of $146 in 2007)	7,318	7,632
Products	1,992	1,948
General, administrative, and marketing	12,067	12,335
Research and development	1,445	1,058
Interest expense	70	153
Interest income	(122)	(97)
Change in valuation of derivative	—	(45)
Other (income) expense, net	(82)	89
Total costs and expenses	22,688	23,073
Income before income taxes	2,880	1,451
Income tax expense	115	97
Net income	$ 2,765	$ 1,354
Effect of preferred stock dividends	—	(243)
Net income applicable to common shares	$ 2,765	$ 1,111
Income per common share:		
Basic	$ 0.10	$ 0.04
Diluted	$ 0.10	$ 0.04
Weighted average common shares outstanding:		
Basic	27,566	24,987
Diluted	28,002	25,519
Revenues from:		
Cardiac tissue	$ 6,238	$ 4,973
Vascular tissue	6,859	6,139
Orthopaedic tissue	327	1,849
Total preservation services	13,424	12,961
BioGlue	11,887	11,163
Other implantable medical devices	93	232
Total products	11,980	11,395
Other	164	168
Total revenues	$25,568	$24,524
Domestic revenues	$22,000	$21,402
International revenues	3,568	3,122
Total revenues	$25,568	$24,524

CRYOLIFE, INC.
Financial Highlights
(In thousands)

	March 31, 2008 (Unaudited)	December 31, 2007
Cash and cash equivalents, marketable securities, at market, and restricted securities	$ 12,885	$ 17,447
Trade receivables, net	13,540	12,311
Other receivables	1,423	1,373
Deferred preservation costs, net	28,800	26,903
Inventories	5,679	5,607
Total assets	90,879	92,684
Shareholders' equity	66,222	62,627

For additional information about the company, visit CryoLife's Web site: www.cryolife.com.

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