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, 2009

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, 2009, CryoLife, Inc. ("CryoLife" or the "Company") issued a press release announcing its financial results for the first quarter ended March 31, 2009. CryoLife hereby incorporates by reference herein the information set forth in its Press Release dated April 30, 2009, 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 certain supplemental non-GAAP financial measures:

- non-GAAP tissue processing revenue growth, which has been obtained by adjusting the comparable tissue processing GAAP revenue growth number to exclude revenues related to orthopedic tissue processing services;
- non-GAAP tissue processing revenues, which have been obtained by adjusting the comparable tissue processing segment revenue numbers to exclude revenues related to orthopedic tissue processing services;
- non-GAAP BioGlue Surgical Adhesive ("BioGlue") revenue growth, which has been obtained by excluding the effects of changes in foreign currency exchange rates; and
- non-GAAP BioGlue revenues, which have been obtained by excluding the effects of changes in foreign currency exchange rates.

Tissue processing revenue growth has been adjusted to obtain non-GAAP tissue processing revenue growth, and tissue processing segment revenues have been adjusted to obtain non-GAAP tissue processing revenues, by excluding revenues from orthopedic tissue processing, because the Company discontinued procuring and processing such tissue as of January 1, 2007 and ceased distributing its remaining orthopedic tissue as of June 30, 2008. Because the Company's revenues from orthopedic tissue have been effectively reduced to zero and should remain at that level for the foreseeable future, the Company believes that the non-GAAP revenue growth numbers presented, as well as the non-GAAP tissue processing revenues presented, provide investors with a more accurate measure of the relative revenue performance of the Company's continuing tissue processing business.

BioGlue revenues and revenue growth have been adjusted to obtain non-GAAP revenues and revenue growth by excluding the effects of changes in foreign currency exchange rates in order to show the underlying trend in demand for the product and the impact of that demand on revenues, as fluctuations in foreign exchange rates may tend to obscure the trend in overall demand.

Accordingly, CryoLife believes that these non-GAAP measures, when read in conjunction with the Company's GAAP financials, provide 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 additional non-GAAP financial information is not meant to be considered in isolation or as a substitute for measures calculated in accordance with GAAP. With respect to the BioGlue financial information, investors are cautioned to avoid overreliance on the non-GAAP financial measures, as a substantial portion of BioGlue sales occur in European denominated currency and foreign currency exchange rates have, and will continue to have, a material impact on CryoLife dollar-denominated revenues. Management considers both the GAAP and non-GAAP BioGlue financial measures when evaluating the Company's business prospects and overall health and continues to evaluate alternatives to ameliorate the impact of foreign exchange rate fluctuations on the Company's revenues.

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, 2008, 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(d) 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, 2009

* 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, 2009

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

EXHIBIT 99.1

N E W S R E L E A S E

FOR IMMEDIATE RELEASE

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CryoLife Reports Record First Quarter Revenues of $26.7 Million

Operating income increases 26 percent in first quarter of 2009 compared to 2008

ATLANTA, GA…(April 30, 2009)…CryoLife, Inc. (NYSE: CRY), an implantable biological medical device and cardiovascular tissue processing company, announced today that revenues for the first quarter of 2009 increased 4 percent to a first quarter record of $26.7 million compared to $25.6 million for the first quarter of 2008.

Operating income for the first quarter of 2009 increased 26 percent to $3.5 million compared to $2.7 million for the first quarter of 2008. Operating margin increased to 13 percent in the first quarter of 2009 compared to 11 percent in 2008.

The Company's net income for 2009 was adversely affected by a normalized effective income tax rate of 41 percent for the first quarter of 2009, compared to 4 percent in the first quarter of 2008. The Company did not record income tax expense at a normalized rate in 2008 due to the valuation allowance on the Company's deferred tax assets during 2008. As a result, net income for the first quarter of 2009 was $1.9 million, or $0.07 per basic and fully diluted common share, compared to $2.8 million, or $0.10 per basic and fully diluted common share for the first quarter of 2008. The Company has net operating loss carryforwards that will largely reduce required cash payments for federal and state income taxes for the 2009 tax year.

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Tissue processing revenues for the first quarter of 2009 increased 1 percent to $13.5 million compared to $13.4 million for the first quarter of 2008. Excluding orthopaedic tissue processing revenues of $85,000 and $327,000 in the first quarter of 2009 and 2008, respectively, tissue processing revenues increased 3 percent to $13.5 million for the first quarter of 2009 compared to $13.1 million in the first quarter of 2008. The increase in cardiac and vascular tissue processing revenues was primarily due to increased revenues from vascular tissue in the first quarter of 2009 of $7.9 million as compared to $6.9 million in the first quarter of 2008. This increase was partially offset by reduced revenues from cardiac tissues primarily from the Company's standard processed pulmonary valves. Revenues from the distribution of CryoValve® SG pulmonary heart valves increased to $1.2 million in the first quarter of 2009 from $218,000 in the first quarter of 2008, representing 21 percent of the Company's cardiac tissue processing revenues in the first quarter of 2009.

BioGlue® Surgical Adhesive revenues were $11.8 million for the first quarter of 2009 compared to $11.9 million for the first quarter of 2008. Although there was a 2 percent increase in the milliliters of BioGlue shipped, revenues decreased 1 percent. Excluding the effects of changes in foreign currency exchange rates quarter over quarter, which reduced BioGlue revenues by $306,000 in the first quarter of 2009, BioGlue revenues would have been $12.1 million, or a 2 percent increase in revenues for the first quarter of 2009 compared to the first quarter of 2008.

U.S. BioGlue revenues were $8.4 million and $8.6 million for the first quarters of 2009 and 2008, respectively. International BioGlue revenues were $3.3 million for each of the first quarters of 2009 and 2008.

Other medical device revenues for the first quarter of 2009 were $1.2 million compared to $93,000 for the first quarter of 2008. Included in this revenue category for the first quarter of 2009 was $1.1 million in sales of HemoStase™.

Total tissue processing and product gross margins were 64 percent and 63 percent for the first quarters of 2009 and 2008, respectively. Tissue processing gross margins for each of the first quarters of 2009 and 2008 were 45 percent.

General, administrative, and marketing expenses for the first quarter of 2009 were $12.7 million compared to $12.1 million for the first quarter of 2008. The increase in these 2009 first quarter expenses was primarily due to increased marketing expenses. These expenses included personnel costs, advertising, physician education and training, and promotional materials to support the Company's expanding tissue processing service and product offerings, and revenue growth.

Research and development expenses were $1.0 million for the first quarter of 2009 compared to $1.4 million for the first quarter of 2008. Research and development spending in 2009 is primarily focused on the Company's protein hydrogel technologies and SynerGraft® tissues and products.

As of March 31, 2009, the Company had $23.7 million in cash, cash equivalents, and marketable securities, compared to $12.9 million at March 31, 2008. Of this $23.7 million, $2.0 million was received from the U.S. Department of Defense as advance funding for the development of BioFoam® protein hydrogel technology, and $5.0 million was designated as long-term restricted money market funds due to a financial covenant requirement under the Company's credit agreement.

"The Company continues to thrive and expand even in a very adverse world economy, as witnessed by the Company's record revenues and operating income in the first quarter of 2009," stated Steven G. Anderson, president and chief executive officer. "We are very encouraged by our continued growth and the trend we are establishing for 2009 and we will continue to look for opportunities to expand our cardiac and vascular surgery portfolios."

2009 Financial Guidance

The Company is reiterating its guidance for the full year of 2009. The Company's GAAP revenues are composed of tissue processing and product revenues plus other revenues. The Company expects total revenues for the full year of 2009 to be between $113.0 million and $119.0 million. The Company expects tissue processing revenues to be between $58.0 million and $60.5 million and BioGlue revenues to be between $50.0 million and $52.0 million for the full year of 2009. Other medical device revenues, which consist primarily of sales of HemoStase, are expected to be between $4.5 million and $5.5 million in 2009. Tissue processing and product revenues could be affected by several factors, including but not limited to, the general economic environment and its effect on demand for the Company's tissues and products and changes in foreign currency exchange rates and their effects on revenues generated in international markets.

Other revenues for 2009 may reach between $500,000 and $1.0 million, related to funding received from the Department of Defense in connection with the development of BioFoam. The amount of other revenues is largely dependent upon actual expenses incurred related to the development of BioFoam.

The Company expects general, administrative, and marketing expenses of between $52.0 million and $54.0 million and research and development expenses of between $5.0 million and $6.0 million for the full year of 2009. The research and development expectations include an estimated $500,000 to $1.0 million to be funded by the Department of Defense in connection with the development of BioFoam.

The Company expects operating income to increase for the full year of 2009 compared to 2008. However, the Company expects its effective income tax rate to be approximately 41 percent in 2009 compared to a tax benefit in 2008. As a result, earnings per share in 2009 will be lower than in 2008, when the Company reversed a significant portion of the valuation allowance on its deferred tax assets, which resulted in the recognition of significant income tax benefits.

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 from 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 319410.

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 U.S. and Canada. The Company received FDA clearance for the CryoValve® SG pulmonary 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. CryoLife distributes HemoStase™, a hemostatic agent, in much of the U.S. for use in cardiac and vascular surgery and in the European Community and Canada for cardiac, vascular, and general surgery, subject to certain exclusions.

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 2009 performance and our growth prospects. These future events may not occur as and when expected, if at all, and, together with our business, are subject to various risks and uncertainties. These risks and uncertainties include that we are significantly dependent on revenues from BioGlue and there are a variety of risks affecting BioGlue, CryoValve SG pulmonary heart valves and other SynerGraft processed tissues and products may not be accepted by the marketplace, the CryoValve SG pulmonary heart valve has a one year shelf life, we are dependent on the availability of sufficient quantities of tissue from human donors, the CryoValve SG pulmonary heart valve post-clearance study requested by the FDA may not provide the expected positive results, our products and tissues we process and preserve have allegedly caused and may in the future cause injury to patients, and we have been and may be exposed to tissue processing and product liability claims and additional regulatory scrutiny as a result, the possibility that the FDA could impose additional restrictions on the Company's operations, issue a 483, or warning letter, or require a recall, or prevent the Company from processing and distributing tissues or manufacturing and distributing other products, our failure to adequately comply with government regulations could result in loss of revenues and customers as well as additional compliance expense, our ability to borrow under our credit facility may be limited, the credit facility limits our ability to pursue significant acquisitions, the financial and credit liquidity crisis may adversely affect our ability to borrow money or raise capital, there are limitations on our use of net operating loss carry-forwards, adverse regulatory action outside of the U.S. could affect our business, physicians have been and may be reluctant to implant or use our preserved tissues or products, our existing insurance policies may not be sufficient to cover our actual claims liability, current economic conditions may impact demand for our tissues and products, intense competition may affect our ability to operate profitably, we may be unable to obtain adequate insurance at a reasonable cost or at all, uncertainties related to patents and protection of proprietary technology may adversely affect the value of our intellectual property, uncertainties related to patents and protection of proprietary technology for products distributed by us may adversely affect our ability to distribute those products, we are dependent on key personnel, we may not be successful in obtaining necessary clinical results and regulatory approvals for products and services in development, and our new products and services may not achieve market acceptance, we may be unable to effectively leverage our existing sales force to sell HemoStase, the lawsuit we filed against Medafor regarding our distribution agreement with Medafor may adversely impact our relationship with Medafor and could hamper or prevent us from distributing HemoStase, rapid technological change could cause our services and products to become obsolete, extensive government regulation may adversely affect our ability to develop and sell products and services, we have experienced operating losses and negative cash flows in the past, and we must continue to address the underlying causes in order to continue to operate profitably and generate positive cash flows, investments in new technologies and acquisitions of products or distribution rights may not be successful, if we are not successful in expanding our business activities in international markets, we will be unable to pursue one of our strategies for increasing our revenues, continued deflation of foreign currencies relative to the U.S. dollar could materially and adversely impact our business, and future healthcare policies, healthcare reimbursement methods, and healthcare reimbursement policies may affect the availability, amount, and timing of our revenues. These risks and uncertainties include the risk factors detailed in our Securities and Exchange Commission filings, including our Form 10-K filing for the year ended December 31, 2008, our 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. AND SUBSIDIARIES
Financial Highlights
(In thousands, except per share data)

	Three Months Ended March 31,	
	2009	2008
	(Unaudited)	
Revenues:		
Preservation services	$ 13,548	$ 13,424
Products	12,945	11,980
Other	195	164
Total revenues	26,688	25,568
Cost of preservation services and products:		
Preservation services	7,491	7,318
Products	1,962	1,992
Total cost of preservation services and products	9,453	9,310
Gross margin	17,235	16,258
Operating expenses:		
General, administrative, and marketing	12,748	12,067
Research and development	1,026	1,445
Total operating expenses	13,774	13,512
Operating income	3,461	2,746
Interest expense	49	70
Interest income	(43)	(122)
Other expense (income), net	152	(82)
Income before income taxes	3,303	2,880
Income tax expense	1,354	115
Net income	$ 1,949	$ 2,765
Income per common share:		
Basic	$ 0.07	$ 0.10
Diluted	$ 0.07	$ 0.10
Weighted average common shares outstanding:		
Basic	28,009	27,566
Diluted	28,230	28,002

CRYOLIFE, INC. AND SUBSIDIARIES
Financial Highlights
(In thousands)

	Three Months Ended March 31,	
	2009	2008
	(Unaudited)	
Revenues from:		
Cardiac tissue	$ 5,592	$ 6,238
Vascular tissue	7,871	6,859
Orthopaedic tissue	85	327
Total preservation services	13,548	13,424
BioGlue	11,764	11,887
HemoStase	1,110	--
Other medical devices	71	93
Total products	12,945	11,980
Other	195	164
Total revenues	$ 26,688	$ 25,568
Revenues:		
U.S.	$ 22,744	$ 22,000
International	3,944	3,568
Total revenues	$ 26,688	$ 25,568

	March 31, 2009	December 31, 2009
	(Unaudited)	(Audited)
Cash and cash equivalents, marketable securities, at market, and restricted marketable securities	$ 18,747	$ 17,763
Receivables, net	15,166	13,999
Deferred preservation costs	35,769	34,913
Inventories	7,306	7,077
Restricted money market funds, long-term	5,000	5,000
Total assets	127,394	125,995
Shareholders' equity	102,209	99,326

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

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