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): August 5, 2004

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida

(State or other jurisdiction of incorporation)

1-13165

59-2417093

(Commission File Number)

(IRS Employer Identification No.)

(770) 419-3355

(Registrant's telephone number, including area code)

N/A

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

ITEM 7. FINANCIAL STATEMENTS AND EXHIBITS.

(a) Financial Statements.

Not applicable.

(b) Pro Forma Financial Information.

Not applicable.

(c) Exhibits.

Exhibit Number

Description

99.1

Press Release dated August 5, 2004

ITEM 12. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

The information provided pursuant to this Item 12 is to be considered "filed" under the Securities Exchange Act of 1934 ("Exchange Act") and incorporated by reference into those filings of CryoLife, Inc. ("CryoLife") that provide for the incorporation of all reports and documents filed by CryoLife under the Exchange

On August 5, 2004, CryoLife issued a press release announcing its results for the quarter ended June 30, 2004. CryoLife hereby incorporates by reference herein the information set forth in its Press Release dated August 5, 2004, 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 such press release 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. For further information on other risk factors, please refer to the "Risk Factors" contained in CryoLife's Form 10-K for the year ended December 31, 2003, CryoLife's Form S-3 (Registration No. 333-112673), 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.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, CryoLife has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CRYOLIFE, INC.

Date: August 5, 2004 By: /s/ D. Ashley Lee

Name: D. Ashley Lee

Title: Vice President, Chief Financial

Officer and Treasurer

EXHIBIT INDEX

Exhibit Number Description Page

99.1 Press Release dated August 5, 2004

[COMPANY LOGO]

FOR IMMEDIATE RELEASE

CONTACT: JOSEPH T. SCHEPERS

VICE PRESIDENT, CORPORATE COMMUNICATIONS

(770) 419-3355

CRYOLIFE REPORTS SECOND QUARTER 2004 FINANCIAL RESULTS BIOGLUE(R) SALES INCREASED 31% OVER SECOND QUARTER 2003 BIOGLUE SYRINGE DELIVERY SYSTEM LAUNCHED IN THE SECOND QUARTER ORTHOPAEDIC TISSUE REVENUES INCREASING

ATLANTA...(August 5, 2004)...CryoLife, Inc. (NYSE: CRY), a biomaterials and biosurgical device company, today reported financial results for the second quarter and first six months of 2004.

Revenues for the second quarter 2004 were \$15.3 million compared to \$15.7 million in the second quarter of 2003. Revenues were \$15.1 million in the first quarter of 2004. Net loss in the second quarter of 2004 was \$3.4 million compared to \$19.9 million in the second quarter of 2003. On a fully diluted basis, loss per common share for the second quarter 2004 was \$.14 compared to a loss of \$1.01 for the same period in 2003.

Revenues for the first half of 2004 were \$30.4 million compared to \$31.6 million in the first half of 2003. The net loss in the first six months of the year was \$10.4 million compared to a net loss of \$20.4 million in the same period last year. On a fully diluted basis, the loss per share was \$.46 in the first half of 2004 compared to a \$1.04 loss per share in the first half of 2003.

In the second quarter of 2004, BioGlue(R) sales increased 31% to \$9.0 million compared to \$6.8 million in the second guarter of 2003. BioGlue revenues were \$8.6 million in the first quarter of 2004. U.S. BioGlue sales increased 32% to \$7.0 million in the second quarter of 2004 compared to \$5.3 million for the same period in 2003. International BioGlue sales increased 28% to \$2.0 million in the second quarter of 2004 compared to \$1.5 million for the same period in 2003. BioGlue revenues are expected to be between \$8.6 million and \$9.0 million in the third quarter of 2004.

"BioGlue is achieving strong growth because it has become an important product for surgeons in effectively controlling bleeding in certain surgical procedures. The BioGlue syringe delivery system was approved by the FDA and received CE mark approval for distribution in the EU in May 2004. This innovative, easy-to-use, disposable delivery device should encourage increased use of BioGlue and further its revenue growth," said Steven G. Anderson, CryoLife President and Chief Executive Officer. BioGlue revenues are expected to increase 22%-29% to \$34-\$36 million in 2004 from \$27.8 million in 2003.

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Tissue processing revenues, which include cardiac, vascular, orthopaedic tissues, were \$6.1 million in the second quarter of 2004 compared to \$8.6 million in the second quarter of 2003. In the first quarter of 2004, tissue processing revenues were \$6.2 million. Total tissue processing revenues are expected to be between \$28 and \$30 million in 2004 compared to \$30.8 million in 2003. Projected tissue processing revenue for the third quarter is \$7.0-\$8.5 million.

Cardiac tissue processing revenues were \$2.8 million in the second quarter of 2004 compared to \$5.0 million in the second guarter of 2003 and \$3.4 million in the first quarter of 2004. Vascular tissue processing revenues were \$2.6 million in the second quarter of 2004 compared to \$3.3 million in the second quarter of 2003 and \$2.5 million in the first quarter of 2004. Orthopaedic revenues were \$574,000 in the second quarter of 2004 compared to \$280,000 in the second quarter of 2003 and \$309,000 the first quarter of 2004. The Company initiated fee increases for processing its cardiac and vascular tissues in July Steven Anderson stated, "The tissue processing gross margin improved to -25% in the second quarter of 2004 from -46% in the first quarter of 2004. This increase in the tissue processing gross margin was the result of recently implemented initiatives with tissue procurement organizations and several tissue processing improvements. The tissue processing gross margin is expected to continue to improve in the second half of the year and is expected to break even by the end of the fourth quarter 2004 and be positive in 2005."

Total tissue processing and product revenues are projected to be between \$16 and \$18 million in the third quarter of 2004, up from \$15.3 million in the second quarter of 2004. Total tissue processing and product revenues are expected to increase 8%-13% to \$64-\$67 million for the full year 2004.

In the second quarter 2004, general, administrative, and marketing expenses were favorably affected by a reduction in product liability accruals of \$800,000. The net loss in the second quarter of 2004 was favorably impacted by a \$1.4 million tax refund. General, administrative, and marketing expenses are expected to be approximately \$40-42 million in 2004, while research and development expenses are expected to be approximately \$4 million in 2004. For the third quarter of 2004, the Company expects general, administrative, and marketing expenses of approximately \$10-11 million and expects research and development expenses of approximately \$1 million. As of June 30, 2004, the Company had approximately \$23.7 million in aggregate cash, cash equivalents, and marketable securities.

The Company will hold a teleconference call and live web cast at 11:15 a.m. Eastern Standard Time, August 5, 2004, to discuss second quarter 2004 results, followed by a question and answer session hosted by Steven G. Anderson, CryoLife President and Chief Executive Officer.

To listen to the live teleconference, please dial 973-582-2749 a few minutes prior to 11:15 a.m. No identification number is required. A replay of the teleconference will be available August 5 through August 10 and can be accessed by calling (toll free) 877-519-4471 or 973-341-3080. The identification number for the replay is 4973918. The live webcast can be accessed by going to the Investor Relations section of the CryoLife website at WWW.CRYOLIFE.COM.

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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 the Company's 2004 revenues and expenses may not meet its expectations, that the Company's 2004 BioGlue revenues may not meet its expectations, that the demand for CryoLife preserved tissues may not return to prior levels, that the new BioGlue syringe delivery system may not encourage increased use of BioGlue, that the Company's general administrative and marketing expenses may not meet expectations due to higher than expected costs of resolving existing and future litigation, 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, that FDA regulation of the Company's CryoValve SG and CryoVein SG may require significant time and expense, that the protein hydrogel products under development may not be commercially feasible, that the Company may not have sufficient borrowing or other 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, 2003, 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: ${\tt http://www.cryolife.com}$

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

	Three Months Ended June 30,			Six Months Ended June 30,				
		2004		2003		2004		2003
Revenues:								
Products	\$	9,203	\$	6,932	\$	18,062	\$	13,531
Human tissue preservation services		6,054		8,615		12,279		17,745
Distribution and grant		57		6,932 8,615 166		12 , 279 59		17,745 357
Total revenues				15,713		30,400		31,633
Costs and expenses:								
Products		1,894		2,006 5,160 23,539 1,088		3,841		3,647 7,603
Human tissue preservation services		7,543		5,160		3,841 16,646 19,841 1,812		7,603
General, administrative, and marketing		9,693		23,539		19,841		35,131
Research and development		891		1,088		1,812		2,005
Interest expense		59		147 (116)		102 (130)		279
Interest income		(64)		(116)				(247)
Other expense, net		21		166		37		140
Total costs and expenses		20,037		31,990		42,149		48,558
Loss before income taxes		(4,723)		(16,277)		(11,749)		(16,925)
Income tax (benefit) expense		(1,371)		3,644		(1,371)		3,430
Net loss		(3,352)		(19,921)		(10,378)		(20,355)
	===		===		===		===	
Net loss per share:								
Basic		(0.14)		(1.01)		(0.46)		(1.04)
Diluted	\$	(0.14)	\$	(1.01)	\$	(0.46)		(1.04)
	===		==-		==-		==-	
Weighted average shares outstanding:								
Basic		23,252		19,675		22,747		19,654
Diluted	===	23,252		19,675		22,747		19,654
	===							
Revenues from:								
Cardiovascular	\$	2,831	\$	5,036 3,299	\$	6,261	\$	9,761
Vascular		2,649		3,299		5,135		7,554
Orthopaedic		574		3,299 280		883		430
Total cryopreservation		6,054		8,615		12,279		17,745
BioGlue		8,962		6,839		17,605		13,333
Implantable medical devices		241		93		457		198
Distribution and grant		57		166		59		357
Total revenues		15,314		15,713		30,400		31,633
International revenues	s	2,327	s	1,845	s	4,419	s	3,556
Domestic revenues				13,868				
Total revenues				15,713		30,400		31,633
	===				===		===	

CRYOLIFE, INC. Financial Highlights (In thousands)

	Unaudited June 30, 2004			Audited Dec. 31, 2003	
Cash and cash equivalents	\$	23,741	\$	11,916	
and marketable securities, at market		7 (25		6 277	
Trade receivables, net		7,625		6,377	
Other receivables, net		2,231		1,865	
Deferred preservation costs, net		7,382		8,811	
Inventories		4,572		4,450	
Total assets		87,751		75,027	
Shareholders' equity		57,500		48,338	

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