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): July 25, 2016

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 2 Financial Information

Item 2.02 Results of Operations and Financial Condition.

On July 25, 2016, CryoLife, Inc. ("CryoLife" or the "Company") issued a press release announcing its financial results for the quarter ended June 30, 2016. CryoLife hereby incorporates by reference herein the information set forth in its press release dated July 25, 2016, 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 the Company have continued unchanged since such date.

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, 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 text portion 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 filed for the year ended December 31, 2015 and its subsequent filings with the Securities and Exchange Commission, as well as in the press release furnished with this Form 8-K as Exhibit 99.1. CryoLife disclaims any obligation or duty to update or modify these forward-looking statements.

Section 5 Corporate Governance and Management

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

In connection with a review of all of the Company's employment agreements with its employees, on Friday, July 22, 2016 the Company terminated the Employment Agreement dated December 9, 2013 with Scott B. Capps, the Employment Agreement dated December 10, 2013 with D. Ashley Lee, the Employment Agreement dated December 12, 2013 with David Gale, and the Employment Agreement dated April 1, 2015 with Jean F. Holloway (collectively, the "Terminated Agreements"). These agreements imposed no material obligations on the executives and the Company and conferred no material benefits on the executives. Each of Messrs. Capps, Lee, and Gale and Ms. Holloway will continue employment with the Company in his or her current positions and no material terms and conditions of their employment have changed as a result of the termination of these agreements.

Section 9 Financial Statements and Exhibits.

Item 9.01(d) Exhibits

(d) Exhibits.

Exhibit Number	Description
99.1*	Press release dated July 25, 2016

*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: July 26, 2016

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

FOR IMMEDIATE RELEASE

Contacts:

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

Nick Laudico / Zack Kubow 646-536-7030 / 7020 nlaudico@theruthgroup.com zkubow@theruthgroup.com

CryoLife Reports Second Quarter 2016 Financial Results

Increases 2016 Revenue and Earnings Guidance

Second Quarter Highlights:

- Revenue Increased 33 Percent Year-over-Year to \$47.1 Million; Non-GAAP Revenues Increased Nine Percent Year-over-Year
- Gross Margins Increased to 64 Percent; Non-GAAP Gross Margins Increased to 66 Percent
- GAAP Net Income was \$2.3 Million, or \$0.07 Per Fully Diluted Common Share; Non-GAAP Net Income was \$4.3 Million, or \$0.13 Per Fully Diluted Common share

ATLANTA, GA – (July 25, 2016) – CryoLife, Inc. (NYSE: CRY), a leading medical device and tissue processing company focused on cardiac surgery, announced today its results for the second quarter and first half of 2016.

J. Patrick Mackin, Chairman, President and Chief Executive Officer, said, "I'm pleased to report the second quarter was a success on several fronts. The company posted strong financial results and is tracking ahead of schedule on several key operational initiatives. Our expanded U.S. cardiac surgery sales force is increasing the awareness and availability of the On-X product portfolio to a broader customer base while also driving sales of BioGlue[®] and our tissue preservation services. Outside of the U.S., we are now selling On-X in all of our direct markets. Our decision to streamline our focus and product portfolio on the cardiac surgery market, combined with selling direct in more markets than ever before, is driving positive performance and strengthening our competitive position globally. We also continue to benefit from the enhancements to our tissue processing operations, which along with the revenue performance, contributed to strong gross margin and profitability in the quarter. On the clinical front, we recently received FDA approval for the updated protocol for our PerClot[®] IDE trial and expect to restart patient enrollment later this year, keeping us on track for potential FDA approval in the first half of 2019. Given our strong overall performance and momentum through the first half of the year, we are increasing our 2016 revenue, gross margin, and EPS guidance and remain very confident in our ability to capitalize on the large opportunity our markets offer."

Revenues for the second quarter of 2016 increased 33 percent to \$47.1 million, compared to \$35.5 million for the second quarter of 2015. The increase was primarily driven by the acquisition of On-X Life Technologies (On-X) in January 2016, along with revenue increases in cardiac and vascular tissues and BioGlue. Non-GAAP revenues for the second quarter of 2016 increased nine percent compared to the second quarter of 2015.

Revenues for the first half of 2016 increased 30 percent to \$90.1 million, compared to \$69.4 million for the first half of 2015. The increase was primarily driven by the acquisition of On-X, along with revenue increases in vascular tissues and BioGlue. Non-GAAP revenues for the first half of 2016 increased nine percent compared to the first half of 2015. A reconciliation of GAAP revenues to non-GAAP revenues is included as part of this press release.

GAAP net income for the second quarter of 2016 was \$2.3 million, or \$0.07 per basic and fully diluted common share, compared to net loss of (\$502,000), or (\$0.02) per basic and fully diluted common share, for the second quarter of 2015. Non-GAAP net income for the second quarter of 2016 was \$4.3 million, or \$0.13 per fully diluted common share, compared to non-GAAP net income of \$1.3 million, or \$0.04 per fully diluted common share for the second quarter of 2015.

GAAP net income for the first half of 2016 was \$4.9 million, or \$0.15 per basic and fully diluted common share, compared to net loss of (\$776,000), or (\$0.03) per basic and fully diluted common share, for the first half of 2015. Non-GAAP net income for the first half of 2016 was \$7.6 million, or \$0.23 per fully diluted common share, compared to non-GAAP net income of \$1.5 million, or \$0.05 per fully diluted common share for the first half of 2015. A reconciliation of GAAP to non-GAAP earnings is included as part of this press release.

2016 Financial Guidance Summary								
	Previous	Revised						
Total revenues	\$178 million - \$180 million Year-over-year mid-single digit % non-GAAP revenue increase	\$180 million - \$182 million Year-over-year mid to upper single digit % non-GAAP revenue increase						
Product revenues	Year-over-year mid-single digit % non-GAAP revenue increase	Year-over-year mid to upper single digit % non-GAAP revenue increase						
Tissue processing revenues	Year-over-year mid-single digit % revenue increase	Year-over-year mid-single digit % revenue increase						
Gross margins	Approximately 63%	Approximately 64%						
R&D expenses	\$13.0 million - \$15.0 million	\$13.0 million - \$15.0 million						
Non-GAAP income per common share	\$0.29 - \$0.32	\$0.32 - \$0.34						

Based on its financial results through the first half of 2016 and the current business outlook, the Company is raising its 2016 financial guidance as summarized below.

All numbers are GAAP except where expressly referenced as non-GAAP. The Company does not provide GAAP income per common share on a forward-looking basis because the company is unable to predict with reasonable certainty business development and acquisition-related expenses, purchase accounting fair value adjustments, and any unusual gains and losses without unreasonable

effort. These items are uncertain, depend on various factors, and could be material to results computed in accordance with GAAP.

The Company's financial guidance for the full year of 2016 is subject to the risks identified below in the last paragraph of this press release before the financial tables. The guidance does not include any effect related to future business development activities and other unusual charges.

Non-GAAP Financial Measures

This press release contains non-GAAP financial measures. Investors should consider this non-GAAP information in addition to, and not as a substitute for, financial measures prepared in accordance with U.S. In addition, this non-GAAP financial information may not be the same as similar measures GAAP. presented by other companies. The Company's non-GAAP revenues include On-X revenues for the period in 2016 prior to the closing of the acquisition and On-X revenues for the comparable periods of 2015 and excludes revenues for the HeRO Graft and ProCol product lines for 2016 and 2015. The Company's other non-GAAP results exclude (as applicable) business development expenses, including the acquired inventory basis step-up expense; gain on sale of business components; amortization expenses; severance expenses associated with certain employee departures; the write-off of PerClot Topical inventory; and intangible impairment. The Company believes that these non-GAAP presentations provide useful information to investors regarding unusual non-operating transactions and the operating expense structure of the Company's existing and recently acquired operations, without regard to its on-going efforts to acquire additional complementary products and businesses and the transaction and integration expenses incurred in connection with recently acquired and divested product lines. The Company believes it is useful to exclude certain expenses because such amounts in any specific period may not directly correlate to the underlying performance of its business operations and can vary significantly between periods as a result of factors such as new acquisitions, amortization of previously acquired tangible and intangible assets, or unusual compensation expenses. The Company does, however, expect to incur similar types of expenses in the future, and this non-GAAP financial information should not be viewed as a statement or indication that these types of expenses will not recur.

Webcast and Conference Call Information

The Company will hold a teleconference call and live webcast tomorrow at 8:00 a.m. Eastern Time to discuss the results followed by a question and answer session hosted by Mr. Mackin.

To listen to the live teleconference, please dial 201-689-8261 a few minutes prior to 8:00 a.m. A replay of the teleconference will be available July 26 through August 2 and can be accessed by calling (toll free) 877-660-6853 or 201-612-7415. The conference number for the replay is 13641393.

The live webcast and replay can be accessed by going to the Investor Relations section of the CryoLife website at www.cryolife.com and selecting the heading Webcasts & Presentations.

About CryoLife, Inc.

Headquartered in suburban Atlanta, Georgia, CryoLife is a leader in the manufacturing, processing, and distribution of medical devices a n d implantable living tissues used in cardiac surgical procedures. CryoLife markets and sells products in more than 80 countries worldwide. For additional information about CryoLife, visit our website, www.cryolife.com.

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. Such forward-looking statements reflect the views of management at the time such statements are made. These statements include those regarding tracking ahead of schedule on several key operational initiatives, increasing the awareness and availability of the On-X product portfolio to a broader customer base while also driving sales of BioGlue and our tissue products; our ability to sell the On-X mechanical heart valve outside of the U.S. in all of our direct markets; our decision to streamline our focus and product portfolio on the cardiac surgery market and sell direct in more markets to drive positive performance and strengthen our competitive position; the continued benefit from enhancements to our tissue processing operations; our expectation that we will be able to resume enrollment in the PerClot IDE later this year and stay on track for FDA approval in the first half of 2019; our confidence in our ability to capitalize on the large opportunity our markets offer and our updated guidance for revenues, gross margins, R&D expenses, and non-GAAP income per common share. These forward-looking statements are subject to a number of risks, uncertainties, estimates, and assumptions that may cause actual results to differ materially from current expectations. These risks and uncertainties include that the expected market opportunities for mechanical heart valves may be incorrect and/or may diminish due to factors beyond our control; the expected benefits of a larger sales force or our market opportunities due to our focus on the cardiac surgery market may be incorrect or may not be achieved; and the expected adoption rate for our products currently in clinical trials or marketed through expanded indications may be incorrect or may not be achieved. These risks and uncertainties include the risk factors detailed in our Securities and Exchange Commission filings, including our Form 10-K for the year ended December 31, 2015, and our subsequent filings with the SEC. CryoLife does not undertake to update its forward-looking statements.

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

		Three Moi June		nded	Six Months Ended June 30,				
		2016	,	2015		2016		2015	
Revenues:	¢		<u>_</u>	10.010	^		¢		
Products Preservation services	\$	30,045	\$	19,918	\$	57,063	\$	39,309	
Total revenues		17,038 47,083		15,608 35,526		33,036 90.099		30,048	
Total revenues		4/,083		35,520		90,099		69,357	
Cost of products and preservation services:									
Products		7,698		4,244		14,701		9,277	
Preservation services		9,084		9,728		17,476		18,859	
Total cost of products and									
preservation services		16,782		13,972		32,177		28,136	
Gross margin		30,301		21,554		57,922		41,221	
Operating expenses:									
General, administrative, and marketing		22,436		19,327		48,710		38,296	
Research and development		3,279		2,684		5,888		4,936	
Total operating expenses		25,715		22,011		54,598		43,232	
Gain from sale of business components						(7,915)			
Operating income (loss)		4,586		(457)		11,239		(2,011)	
Interest expense		797		30		1,514		60	
Interest income		(18)		(12)		(30)		(15)	
Gain on sale of Medafor investment				(891)				(891)	
Other (income) expense, net		(58)		250		(167)		442	
Income (loss) before income taxes		3,865		166		9,922		(1,607)	
Income tax expense (benefit)		1,518		668		5,034		(831)	
Net income (loss)	\$	2,347	\$	(502)	\$	4,888	\$	(776)	
Income (loss) per common share:									
Basic	\$	0.07	\$	(0.02)	\$	0.15	\$	(0.03)	
Diluted	\$	0.07	\$	(0.02)	\$	0.15	\$	(0.03)	
Dividends declared per common share	\$		\$	0.03	\$		\$	0.06	
Weighted-average common shares outstanding:									
Basic		32,010		27,713		31,519		27,619	
Diluted		32,764		27,713		32,270		27,619	
								Page 5	

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

		Three Mont June		ed	Six Months Ended June 30,				
		2016		2015		2016	2015		
Products:									
BioGlue and BioFoam	\$	16,1879,554	\$	14,519	\$ 31	,50316,269	\$	28,561	
On-X									
CardioGenesis cardiac laser		1,860		1,943		3,844		4,080	
therapy									
PerClot		1,042490		1,036343		2,033871		2,012515	
PhotoFix									
HeRO Graft		912		1,744		2,325		3,604	
ProCol				333		218		537	
Total products		30,045		19,918		57,063		39,309	
Preservation services:									
Cardiac tissue		7,548		6,889		13,976		13,552	
Vascular tissue		9,490		8,719		19,060		16,496	
Total preservation services		17,038		15,608		33,036		30,048	
Total revenues		47,083	\$	35,526	\$	90,099	\$	69,357	
Total revenues	¢	47,005	¢	33,320	φ	90,099	φ	09,557	
Revenues:									
U.S.	\$	34,198	\$	27,777	\$	66,436	\$	54,811	
International		12,885		7,749		23,663		14,546	
Total revenues	\$	47,083	\$	35,526	\$	90,099	\$	69,357	

	ıne 30, 2016	December 31, 2015		
Cash, cash equivalents, and restricted cash and	47,688		43,418	
securities	\$	\$		
Total current assets	135,781		109,663	
Total assets	303,036		181,179	
Total current liabilities	24,738		19,605	
Total liabilities	104,932		25,928	
Shareholders' equity	198,104		155,251	

CRYOLIFE, INC. AND SUBSIDIARIES Reconciliation of GAAP to Non-GAAP Net Income and Diluted Income per Common Share (In thousands, except per share data)

	Three Mont		d	Six Month				
	 June 2016	/	2015	 June 2016	,	2015		
GAAP:	 2010			 010	-			
Income (loss) before income taxes	\$ 3,865	\$	166	\$ 9,922	\$	(1,607)		
Income tax expense (benefit)	 1,518		668	 5,034		(831)		
Net income (loss)	\$ 2,347	\$	(502)	\$ 4,888	\$	(776)		
Diluted income (loss) per common								
share:	\$ 0.07	\$	(0.02)	\$ 0.15	\$	(0.03)		
Diluted weighted-average common shares outstanding	32,764		27,713	32,270		27,619		
Reconciliation of income (loss) before income taxes, GAAP to net income, non- GAAP:								
Income (loss) before income taxes, GAAP	\$ 3,865	\$	166	\$ 9,922	\$	(1,607)		
Adjustments:	,			,		())		
Business development expenses	1,067		857	6,635		1,063		
Gain on sale of business components				(7,915)				
Amortization expense Acquisition inventory basis step-up	1,156		502	2,118		1,017		
expense	902			1,467				
Severance expenses			1,389			1,857		
Gain on sale of Medafor investment			(891)			(891)		
Write-off of PerClot Topical inventory						498		
Intangible impairment Income before income taxes,	 			 		457		
non-GAAP	6,990		2,023	12,227		2,394		
Income tax expense calculated at 38% normalized								
tax rate	 2,656		769	 4,646		910		
Net income, non-GAAP	\$ 4,334	\$	1,254	\$ 7,581	\$	1,484		
Reconciliation of diluted income (loss) per								
common share, GAAP to diluted income per common share, non- GAAP:								
Diluted income (loss) per common								
share, GAAP: Adjustments:	\$ 0.07	\$	(0.02)	\$ 0.15	\$	(0.03)		
Business development expenses	0.03		0.03	0.13		0.02		
Gain on sale of business components				(0.15)				
Amortization expense Acquisition inventory basis step-up	0.03		0.02	0.04		0.02		
expense	0.03			0.03				
Severance expenses			0.05			0.04		
Gain on sale of Medafor investment			(0.03)			(0.02)		
Write-off of PerClot Topical inventory						0.01		
Intangible impairment Tax effect of non-GAAP adjustments	(0.03)		(0.03)	(0.01)		0.01		
Effect of 38% normalized tax rate	(0.03)		0.02	0.04				
Diluted income per common share,				 				
non-GAAP:	\$ 0.13	\$	0.04	\$ 0.23	\$	0.05		
Diluted weighted-average common								
shares outstanding	32,764		28,393	32,270		28,335		

CRYOLIFE, INC. AND SUBSIDIARIES Reconciliation of GAAP to Non-GAAP Revenues; Gross Margin; General, Administrative, and Marketing Expense (In thousands, except per share data)

	Three	e Montl June 3	ns Ended 30,						
	 			Growth					Growth
	 2016		2015	Rate		2016	2	2015	Rate
Reconciliation of total revenues, GAAP to total revenues, non- GAAP:									
Total revenues, GAAP Plus: On-X pre acquisition	\$ 47,083	\$	35,526	33%	\$	90,099	\$	69,357	30%
revenues			8,918			1,627		16,699	
Less: HeRO revenues	(912)		(1,744)			(2,325)		(3,604)	
Less: ProCol revenues			(333)			(218)		(537)	
Total revenues, non-GAAP	\$ 46,171	\$	42,367	9%	\$	89,183	\$	81,915	9%

		Three Mon June		ed		Six Month June		ł
		2016		2015		2016		2015
Reconciliation of gross margin %, GAAP to gross margin %, non-GAAP:								
Total revenues, GAAP	\$	47,083	\$	35,526	\$	90,099	\$	69,357
Gross margin, GAAP	\$	30,301	\$	21,554	\$	57,922	\$	41,221
Gross margin %, GAAP	Ψ	64%	Ψ	61%	Ψ	64%	Ψ	59%
Gross margin, GAAP Plus: Acquisition inventory basis step-	\$	30,301	\$	21,554	\$	57,922	\$	41,221
up expense		902				1,467		
Gross margin, non- GAAP	\$	31,203	\$	21,554	\$	59,389	\$	41,221
Gross margin %, non-GAAP		66%		61%		66%		59%
		Three Mon June		ed	Six Months Ended June 30,			
		2016		2015		2016		2015
Reconciliation of general, administrative, and marketing expense, GAAP to general, administrative, and marketing expense, non-GAAP: General, administrative, and marketing expense, GAAP Less: Business development	\$	22,436	\$	19,327	\$	48,710	\$	38,296
expenses General, administrative, and Marketing expense,		(1,067)		(857)		(6,635)		(1,063)
non-GAAP	\$	21,369	\$	18,470	\$	42,075	\$	37,233

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