

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **June 30, 2010**

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: **1-13165**

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida
(State or other jurisdiction of
incorporation or organization)

1655 Roberts Boulevard, NW, Kennesaw, Georgia
(Address of principal executive offices)

59-2417093
(I.R.S. Employer
Identification No.)

30144
(Zip Code)

(770) 419-3355
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer
Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at July 23, 2010
Common Stock, \$0.01 par value per share	28,235,130 shares

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010 (Unaudited)	2009 (Unaudited)	2010 (Unaudited)	2009 (Unaudited)
Revenues:				
Preservation services	\$15,005	\$14,091	\$30,588	\$27,639
Products	14,146	13,918	28,101	26,863
Other	112	154	291	349
Total revenues	29,263	28,163	58,980	54,851
Cost of preservation services and products:				
Preservation services	9,013	8,027	18,411	15,518
Products	2,481	2,241	5,008	4,203
Total cost of preservation services and products	11,494	10,268	23,419	19,721
Gross margin	17,769	17,895	35,561	35,130
Operating expenses:				
General, administrative, and marketing	11,670	12,306	25,487	25,054
Research and development	1,240	1,367	2,532	2,393
Total operating expenses	12,910	13,673	28,019	27,447
Operating income	4,859	4,222	7,542	7,683
Interest expense	65	61	116	110
Interest income	(6)	(20)	(10)	(63)
Gain on valuation of derivative	(385)	—	(1,202)	—
Other expense (income), net	111	(60)	231	92
Income before income taxes	5,074	4,241	8,407	7,544
Income tax expense	2,148	1,739	3,547	3,093
Net income	\$ 2,926	\$ 2,502	\$ 4,860	\$ 4,451
Income per common share:				
Basic	\$ 0.10	\$ 0.09	\$ 0.17	\$ 0.16
Diluted	\$ 0.10	\$ 0.09	\$ 0.17	\$ 0.16
Weighted-average common shares outstanding:				
Basic	28,246	28,067	28,240	28,038
Diluted	28,483	28,174	28,513	28,204

See accompanying Notes to Summary Consolidated Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS)

	June 30, 2010 (Unaudited)	December 31, 2009
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 36,141	\$ 30,121
Restricted securities	5,301	—
Receivables, net	15,110	14,636
Deferred preservation costs	33,642	36,445
Inventories	7,645	6,446
Deferred income taxes	5,694	5,694
Prepaid expenses and other current assets	3,295	2,186
Total current assets	106,828	95,528
Property and equipment, net	13,497	14,309
Investment in equity securities	6,245	3,221
Restricted securities	—	5,000
Patents, net	3,466	4,248
Trademarks and other intangibles, net	2,718	2,724
Deferred income taxes	6,808	8,075
Other long-term assets	645	754
Total assets	\$140,207	\$ 133,859
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 5,569	\$ 2,954
Accrued compensation	2,552	3,361
Accrued procurement fees	3,234	3,228
Accrued expenses and other current liabilities	5,710	6,302
Deferred income	2,355	2,646
Derivative liability	143	725
Notes payable	788	—
Total current liabilities	20,351	19,216
Line of credit	—	315
Other long-term liabilities	3,810	3,882
Total liabilities	24,161	23,413
Shareholders' equity:		
Preferred stock	—	—
Common stock (issued shares of 29,718 in 2010 and 29,475 in 2009)	297	295
Additional paid-in capital	130,728	128,427
Retained deficit	(7,492)	(12,352)
Accumulated other comprehensive loss	(31)	(38)
Treasury stock at cost (shares of 1,283 in 2010 and 1,000 in 2009)	(7,456)	(5,886)
Total shareholders' equity	116,046	110,446
Total liabilities and shareholders' equity	\$140,207	\$ 133,859

See accompanying Notes to Summary Consolidated Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

	Six Months Ended June 30,	
	2010	2009
(Unaudited)		
Net cash from operating activities:		
Net income	\$ 4,860	\$ 4,451
Adjustments to reconcile net income to net cash from operating activities:		
Depreciation and amortization	1,934	2,093
Deferred income taxes	1,267	2,532
Non-cash compensation	1,455	1,254
Write-down of intangible asset	729	—
Gain on valuation of derivative	(1,202)	—
Other non-cash adjustments to income	(437)	356
Changes in operating assets and liabilities:		
Receivables	(632)	(1,588)
Deferred preservation costs and inventories	1,688	(2,000)
Prepaid expenses and other assets	(1,090)	(1,142)
Accounts payable, accrued expenses, and other liabilities	1,466	(1,972)
Net cash flows provided by operating activities	10,038	3,984
Net cash from investing activities:		
Capital expenditures	(827)	(975)
Purchases of restricted securities and investments	(2,703)	(564)
Sales and maturities of marketable securities	—	565
Other	(193)	(388)
Net cash flows used in investing activities	(3,723)	(1,362)
Net cash from financing activities:		
Principal payments on debt	(315)	—
Proceeds from financing of insurance policies	1,475	1,272
Principal payments on capital leases and short-term notes payable	(725)	(447)
Proceeds from exercise of stock options and issuance of common stock	156	364
Purchase of treasury stock	(1,449)	(20)
Other	555	121
Net cash flows (used in) provided by financing activities	(303)	1,290
Increase in cash and cash equivalents	6,012	3,912
Effect of exchange rate changes on cash	8	22
Cash and cash equivalents, beginning of period	30,121	17,201
Cash and cash equivalents, end of period	\$36,141	\$21,135

See accompanying Notes to Summary Consolidated Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
NOTES TO SUMMARY CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

1. Basis of Presentation

The accompanying summary consolidated financial statements include the accounts of CryoLife, Inc. and its subsidiaries (“CryoLife,” the “Company,” “we,” or “us”). All significant intercompany accounts and transactions have been eliminated in consolidation. The accompanying Summary Consolidated Balance Sheet as of December 31, 2009 has been derived from audited financial statements. The accompanying unaudited summary consolidated financial statements as of and for the three and six months ended June 30, 2010 and 2009 have been prepared in accordance with (i) accounting principles generally accepted in the U.S. for interim financial information and (ii) the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the U.S. Securities and Exchange Commission (“SEC”). Accordingly, such statements do not include all of the information and disclosures required by accounting principles generally accepted in the U.S. for a complete presentation of financial statements. In the opinion of management, all adjustments (including those of a normal, recurring nature) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2010 are not necessarily indicative of the results that may be expected for the year ending December 31, 2010. These summary consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in CryoLife’s Annual Report on Form 10-K for the year ended December 31, 2009.

2. Financial Instruments

Financial instruments measured at fair value are recorded in accordance with the fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair values in their broad levels. These levels from highest to lowest priority are as follows:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities;
- Level 2: Quoted prices in active markets for similar assets or liabilities or observable prices that are based on inputs not quoted on active markets, but corroborated by market data; and
- Level 3: Unobservable inputs or valuation techniques that are used when little or no market data is available.

A summary of the Company’s financial instruments measured at fair value as of June 30, 2010 is as follows (in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
Cash equivalents:				
U.S. Treasury money market funds	\$ —	\$2,487	\$ —	\$ 2,487
U.S. Treasury debt securities	20,495	—	—	20,495
Restricted securities:				
Money market funds	—	301	—	301
U.S. Treasury debt securities	5,000	—	—	5,000
Total assets	<u>25,495</u>	<u>2,788</u>	<u>—</u>	<u>28,283</u>
Liabilities				
Derivative liability	—	—	(143)	(143)
Total liabilities	<u>—</u>	<u>—</u>	<u>(143)</u>	<u>(143)</u>
Net assets (liabilities)	<u>\$25,495</u>	<u>\$2,788</u>	<u>\$(143)</u>	<u>\$28,140</u>

Changes in fair value of level 3 liabilities are listed in the table below (in thousands). Refer to Note 4 for further discussion of the derivative liability.

	Derivative Liability
Balance as of December 31, 2009	\$ 725
Total gains unrealized included in earnings	(1,202)
Purchases	620
Balance as of June 30, 2010	<u>\$ 143</u>

3. Cash Equivalents and Restricted Securities

The following is a summary of cash equivalents and marketable securities (in thousands):

	Cost Basis	Unrealized Holding Gains	Estimated Market Value
June 30, 2010 (Unaudited)			
Cash equivalents:			
U.S. Treasury money market funds	\$ 2,487	\$ —	\$ 2,487
U.S. Treasury debt securities	20,495	—	20,495
Restricted securities:			
Money market funds	301	—	301
U.S. Treasury debt securities	5,000	—	5,000
December 31, 2009			
Cash equivalents:			
U.S. Treasury money market funds	\$18,754	\$ —	\$18,754
U.S. Treasury debt securities	8,999	—	8,999
Restricted securities:			
U.S. Treasury money market funds, long-term	5,000	—	5,000

As of June 30, 2010 \$301,000 of the Company's money market funds were designated as short-term restricted securities due to a contractual commitment to hold the securities as pledged collateral relating to international tax obligations. As of June 30, 2010 \$5.0 million of the Company's U.S. Treasury debt securities and at December 31, 2009 \$5.0 million of the Company's U.S. Treasury money market funds were designated as restricted securities due to a financial covenant requirement under the Company's credit agreement with General Electric Capital Corporation ("GE Capital") as discussed in Note 7.

There were no material realized gains or losses on cash equivalents in the six months ended June 30, 2010 and 2009. At June 30, 2010 \$301,000 of restricted securities had a maturity date of between 90 days and one year. As of December 31, 2009 none of the Company's restricted securities had a maturity date.

4. Investment in Equity Securities

Medafor Common Stock

CryoLife currently distributes HemoStase® ("HemoStase") for Medafor, Inc. ("Medafor"), a privately held company incorporated in Minnesota, under a private label exclusive distribution agreement between the parties (the "EDA"). In November 2009 and in 2010 the Company executed stock purchase agreements to purchase a total of approximately 2.4 million shares of common stock in Medafor for \$4.9 million. As Medafor's common stock is not actively traded on any public stock exchange and as Medafor is a privately held company for which financial information is not readily available, the Company accounted for this investment using the cost method and recorded it as the long-term asset, investment in equity securities, on the Company's Summary Consolidated Balance Sheets.

The carrying value of this investment was \$6.2 million and \$3.2 million as of June 30, 2010 and December 31, 2009, respectively, which includes the purchase price and adjustments to record certain of the stock purchase agreements' embedded derivative liabilities at the fair market value on the purchase date, as discussed further below.

During the six months ended June 30, 2010, the Company reviewed available information and determined that no factors were present indicating that the Company should evaluate its investment in Medafor common stock for impairment. If the Company subsequently determines that the value of its Medafor common stock has been impaired or if the Company decides to sell its Medafor common stock for less than the carrying value, the resulting impairment charge or realized loss on sale of the investment in Medafor could be material.

The Company's previous attempt to purchase Medafor, the Company's ongoing litigation with Medafor, and Medafor's current and prior attempts to terminate the EDA, may negatively impact the Company's ability to distribute HemoStase, up to and including causing the Company to cease distribution of HemoStase. See also "Legal Action" below and Part I, Item 2, "Risks and Uncertainties."

Medafor Derivative

Per the terms of certain of the stock purchase agreements for the Medafor shares discussed above, in the event that CryoLife acquires more than 50% of the diluted outstanding stock of Medafor or merges with Medafor within a three-year period from each respective agreement date (a "Triggering Event"), CryoLife will make a future per share payment (the "Purchase Price Make-Whole Payment") to such sellers. The payment will be equal to the difference between an amount calculated using the average cost of any subsequent shares purchased, as defined in each respective agreement, and the price of the shares purchased pursuant to each applicable stock purchase agreement. The Company was required to account for these Purchase Price Make-Whole Payment provisions as embedded derivatives (collectively the "Medafor Derivative").

CryoLife performed a valuation of the Medafor Derivative using a Black-Scholes model to estimate the future value of the shares on the purchase date. Management's assumptions as to the likelihood of a Triggering Event occurring coupled with the valuation of the Purchase Price Make-Whole Payment were then used to calculate the derivative liability. The fair value of the Medafor Derivative was initially recorded as an increase to the investment in equity securities and a corresponding derivative liability on the Company's Summary Consolidated Balance Sheet. The Medafor Derivative is revalued quarterly, and any change in the value of the derivative subsequent to the purchase date is recorded in the Company's Summary Consolidated Statement of Operations.

The assumptions used in the Black-Scholes model to value the Purchase Price Make-Whole Payment as of June 30, 2010 included the Company's estimate of the current market value of Medafor stock of \$2.00 per share, an expected stock price volatility of .75, and a risk-free interest rate from 0.75% to 0.98%.

The value of the Medafor Derivative was \$143,000 and \$725,000 as of June 30, 2010 and December 31, 2009, respectively. The change in the value of derivative recorded on the Summary Consolidated Statement of Operations was a gain of \$385,000 and \$1.2 million for the three and six months ended June 30, 2010, respectively. The non-cash gain on valuation of the Medafor Derivative was due to changes during these periods in the Company's estimates of the likelihood of a Triggering Event occurring and due to the passage of time. The change for the six months ended June 30, 2010 was larger as the Company withdrew its offer to purchase Medafor during the first quarter of 2010. The gain on valuation of the Medafor Derivative was recorded as a decrease in the derivative liability on the Summary Consolidated Balance Sheet. This decrease in the liability was partially offset by an increase of \$620,000 related to additional purchases of Medafor common stock during 2010. See also the disclosure of the change in fair value of the derivative liability in Note 2.

The executed stock purchase agreements do not require the Company to pursue a Triggering Event or to purchase Medafor stock for a price higher than the price initially paid by CryoLife as set forth in the stock purchase agreements. The liability recorded for the Medafor Derivative will only result in a cash payment if a Triggering Event occurs, which is at the discretion of the Company. The Purchase Price Make-Whole Payment ultimately paid by the Company, if any, could be materially different from the amount accrued at June 30, 2010.

Legal Action

Overview

As previously reported in CryoLife's Annual Report on Form 10-K for the year ended December 31, 2009, and Form 10-Q for the quarter ended March 31, 2010, CryoLife filed a lawsuit against Medafor, Inc. in 2009 in the U.S. District Court for the Northern District of Georgia, alleging claims for, among other things, breach of contract, fraud, negligent misrepresentation, and violations of Georgia's Racketeer Influenced and Corrupt Organizations Act ("Georgia RICO"). The lawsuit arises out of the EDA, pursuant to which CryoLife has the right to distribute a product manufactured by Medafor under the name HemoStase. Medafor's partial motion to dismiss the Georgia RICO claim is still under review by the court, and discovery in the case has not

yet begun. On June 30, 2010 the court announced in a written order that it would endeavor to rule on Medafor's partial motion to dismiss within thirty days of that date.

Motion for Preliminary Injunction

As previously reported in CryoLife's Current Report on Form 8-K, dated March 19, 2010, and Form 10-Q for the quarter ended March 31, 2010, Medafor informed CryoLife on March 18, 2010 of its contention that CryoLife had repudiated the EDA, thereby entitling Medafor to terminate the EDA. Medafor asserted that it had made a valid statutory demand, in a February 10, 2010 letter to CryoLife, for "adequate assurances" of CryoLife's future performance under the EDA, and that CryoLife had repudiated the EDA by failing to respond in a timely manner. On March 22, 2010, CryoLife informed Medafor that it disputed Medafor's assertions, and that Medafor had no right to terminate the EDA. CryoLife then filed a motion for preliminary injunction, asking the court to enjoin Medafor from proceeding with its termination of the EDA. The parties filed briefs supporting their positions, and the court held hearings on CryoLife's motion on May 10, 2010 and June 28, 2010.

In its June 30, 2010 order, the court also took CryoLife's motion for preliminary injunction under advisement and granted the parties leave to file additional briefs on the motion. The court further invited CryoLife to consider converting its motion for preliminary injunction into a dispositive motion, and instructed the parties to submit a proposed discovery and briefing plan for conducting expedited discovery involving the possible infirmities of the February 10, 2010 letter on which Medafor based its termination of the EDA.

July 27, 2010 Notice of Termination

On July 27, 2010, Medafor informed CryoLife of its belief that CryoLife had materially breached its duties and obligations under the EDA and gave CryoLife notice of Medafor's intent to terminate the EDA effective August 27, 2010 if the alleged breach is not cured by that date. See Part II, Item 5, "Other Information," for a further discussion of this notice of termination.

5. Inventories

Inventories are comprised of the following (in thousands):

	June 30, 2010	December 31, 2009
	(Unaudited)	
Raw materials	\$ 3,838	\$ 4,144
Work-in-process	495	278
Finished goods	3,312	2,024
Total inventories	<u>\$ 7,645</u>	<u>\$ 6,446</u>

6. Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax return purposes. The Company generated deferred tax assets primarily as a result of write-downs of deferred preservation costs, accruals for tissue processing and product liability claims, and operating losses.

As of June 30, 2010 the Company had a net deferred tax asset of \$12.5 million, including a total of \$1.8 million in valuation allowances against deferred tax assets. As of December 31, 2009 the Company had a net deferred tax asset of \$13.8 million, including a total of \$1.8 million in valuation allowances against deferred tax assets. Valuation allowances at June 30, 2010 and December 31, 2009 related to state net operating loss carryforwards that are not expected to be fully utilized prior to their expiration. The realizability of the Company's deferred tax assets could be limited in future periods following a change in control as mandated by Section 382 of the Internal Revenue Code of 1986, as amended, which relates to certain specified changes in control of taxpayers. The tax years 2006 through 2009 remain open to examination by the major taxing jurisdictions to which the Company is subject.

The Company's effective income tax rate was 42% for both the three and six months ended June 30, 2010 and 41% for both the three and six months ended June 30, 2009.

7. Debt

GE Credit Agreement

On March 26, 2008 CryoLife entered into a credit agreement with GE Capital as lender, as amended (the "GE Credit Agreement"). The GE Credit Agreement provides for a revolving credit facility in an aggregate amount not to exceed the initial commitment of \$15.0 million (including a letter of credit subfacility). The initial commitment may be reduced or increased from time to time pursuant to the terms of the GE Credit Agreement. In the second quarter of 2009, as requested by the German courts, the Company obtained a letter of credit relating to the Company's patent infringement legal proceeding against Tenaxis, Inc. in Germany, which reduced the aggregate borrowing capacity to \$14.8 million. The letter of credit has a one-year initial term and automatically renews for additional one-year periods. While the Company currently expects that its aggregate borrowing capacity under the GE Credit Agreement will remain at \$14.8 million, there can be no assurance that the borrowing capacity will remain at this level.

The GE Credit Agreement places limitations on the amount that the Company may borrow and includes various affirmative and negative covenants, including financial covenants such as a requirement that CryoLife (i) not exceed a defined leverage ratio, (ii) maintain a minimum adjusted earnings subject to defined adjustments as of specified dates, and (iii) not make or commit capital expenditures in excess of a defined limitation. Further, since April 15, 2008 as required under the terms of the GE Credit Agreement, the Company has been maintaining cash and cash equivalents of at least \$5.0 million in accounts in which GE Capital has a first priority perfected lien. These amounts are recorded as restricted securities on the Company's Summary Consolidated Balance Sheets, as they are restricted for the term of the GE Credit Agreement. Also, the GE Credit Agreement requires that after giving effect to a stock repurchase the Company maintain liquidity, as defined, of at least \$20.0 million. The GE Credit Agreement includes customary conditions on incurring new indebtedness and prohibits payments of cash dividends on the Company's common stock. There is no restriction on the payment of stock dividends. Commitment fees are paid based on the unused portion of the facility. The GE Credit Agreement expires on March 25, 2011, at which time any outstanding principal balance will be due. Based on the expiration date, the Company will classify any amounts due under the GE Credit Agreement as short-term debt and has classified the related restricted securities as a current asset on the June 30, 2010 Summary Consolidated Balance Sheet. As of July 28, 2010 the Company was in compliance with the covenants of the GE Credit Agreement.

Amounts borrowed under the GE Credit Agreement are secured by substantially all of the tangible and intangible assets of CryoLife and its subsidiaries and bear interest at LIBOR, with a minimum rate of 3%, or GE Capital's base rate, with a minimum rate of 4% each, plus the applicable margin. As of June 30, 2010 the outstanding balance of the GE Credit Agreement was zero, the aggregate interest rate was 6.25%, and the remaining availability was \$14.8 million. As of December 31, 2009 the outstanding balance of the GE Credit Agreement was \$315,000, the aggregate interest rate was 5.50%, and the remaining availability was \$14.5 million.

Other

The Company routinely enters into agreements to finance insurance premiums for periods not to exceed the terms of the related insurance policies. In March 2010 the Company entered into an agreement to finance approximately \$1.5 million in insurance premiums at a 2.707% annual interest rate, which was payable in equal monthly payments over a nine month period. In April 2009 the Company entered into an agreement to finance approximately \$1.3 million in insurance premiums at a 3.695% annual interest rate, which is payable in equal monthly payments over a nine month period. As of June 30, 2010 and December 31, 2009 the aggregate outstanding balances under these agreements were \$788,000 and zero, respectively.

Total interest expense was \$65,000 and \$61,000 for the three months ended June 30, 2010 and 2009, respectively, and \$116,000 and \$110,000 for the six months ended June 30, 2010 and 2009, respectively, which included interest on debt, capital leases, and uncertain tax positions.

8. Comprehensive Income

The following is a summary of comprehensive income (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2010	2009	2010	2009
	(Unaudited)		(Unaudited)	
Net income	\$ 2,926	\$ 2,502	\$ 4,860	\$ 4,451
Change in translation adjustment	11	34	7	46
Comprehensive income	<u>\$ 2,937</u>	<u>\$ 2,536</u>	<u>\$ 4,867</u>	<u>\$ 4,497</u>

The tax effect on the translation adjustment is zero for each period presented. The accumulated other comprehensive loss of \$31,000 and \$38,000 as of June 30, 2010 and December 31, 2009, respectively, consisted solely of currency translation adjustments.

9. Income Per Common Share

The following is the computation of basic and diluted income per common share (in thousands, except per share data):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2010	2009	2010	2009
	(Unaudited)		(Unaudited)	
Basic income per common share:				
Net income	\$ 2,926	\$ 2,502	\$ 4,860	\$ 4,451
Basic weighted-average common shares outstanding	<u>28,246</u>	<u>28,067</u>	<u>28,240</u>	<u>28,038</u>
Basic income per common share	<u>\$ 0.10</u>	<u>\$ 0.09</u>	<u>\$ 0.17</u>	<u>\$ 0.16</u>
	(Unaudited)		(Unaudited)	
Diluted income per common share:				
Net income	\$ 2,926	\$ 2,502	\$ 4,860	\$ 4,451
Basic weighted-average common shares outstanding	<u>28,246</u>	<u>28,067</u>	<u>28,240</u>	<u>28,038</u>
Effect of dilutive stock options ^a	101	37	129	91
Effect of dilutive unvested restricted stock awards	<u>136</u>	<u>70</u>	<u>144</u>	<u>75</u>
Diluted weighted-average common shares outstanding	<u>28,483</u>	<u>28,174</u>	<u>28,513</u>	<u>28,204</u>
Diluted income per common share	<u>\$ 0.10</u>	<u>\$ 0.09</u>	<u>\$ 0.17</u>	<u>\$ 0.16</u>

^a Stock options to purchase 1.6 million and 1.7 million common shares for the three months ended June 30, 2010 and 2009, respectively, and 1.4 million common shares for both the six months ended June 30, 2010 and 2009 were excluded from the calculation of diluted weighted-average common shares outstanding, as such stock options would be antidilutive to the computation of income per common share.

In future periods, basic and diluted income per common share are expected to be affected by the fluctuations in the fair value of the Company's common stock, the exercise and issuance of additional stock options, the issuance of additional restricted stock awards, and stock repurchases as discussed below.

10. Stock Repurchase

On June 1, 2010 the Company publicly announced that its Board of Directors authorized the purchase of up to \$15.0 million of its common stock over the course of the next two years. The purchase of shares may be made from time to time in the open market or through privately negotiated transactions on such terms as management deems appropriate, and will be dependent upon various factors, including price, regulatory requirements, and other market conditions. As of June 30, 2010, the Company had

purchased 274,000 shares of its common stock for an aggregate purchase price of \$1.5 million. These shares were accounted for as part of treasury stock, carried at cost, and reflected as a reduction of shareholders' equity on the Company's Summary Consolidated Balance Sheet.

11. Stock Compensation

Overview

The Company has stock option and stock incentive plans for employees and non-employee Directors that provide for grants of restricted stock awards and options to purchase shares of Company common stock at exercise prices generally equal to the fair values of such stock at the dates of grant. The Company also maintains a shareholder approved Employee Stock Purchase Plan (the "ESPP") for the benefit of its employees. The ESPP allows eligible employees the right to purchase common stock on a regular basis at the lower of 85% of the market price at the beginning or end of each offering period.

Equity Grants

The Compensation Committee of the Company's Board of Directors authorized awards of stock from approved stock incentive plans to non-employee Directors and certain Company officers totaling 215,000 and 160,000 shares of common stock during the six months ended June 30, 2010 and 2009, respectively, which had an aggregate market value of \$1.3 million and \$1.1 million, respectively.

The Compensation Committee of the Company's Board of Directors authorized grants of stock options from approved stock incentive plans to certain Company officers and employees totaling 427,000 and 438,000 shares during the six months ended June 30, 2010 and 2009, respectively, with exercise prices equal to the stock prices on the respective grant dates.

Employees purchased common stock totaling 26,000 and 35,000 shares in the six months ended June 30, 2010 and 2009, respectively, through the Company's ESPP.

Stock Compensation Expense

The Company values its stock awards based on the stock price on the date of grant and expenses the related compensation cost using the straight-line method over the vesting period. The Company uses a Black-Scholes model to value its stock option grants and expenses the related compensation cost using the straight-line method over the vesting period. The fair value of the Company's ESPP options is also determined using a Black-Scholes model and is expensed over the vesting period. The fair value of stock options and ESPP options is determined on the grant date using assumptions for the expected term, expected volatility, dividend yield, and the risk-free interest rate. The period expense is then determined based on this valuation and, at that time, an estimated forfeiture rate is used to reduce the expense recorded. The Company's estimate of pre-vesting forfeitures is primarily based on the recent historical experience of the Company and is adjusted to reflect actual forfeitures at each vesting date.

The following weighted-average assumptions were used to determine the fair value of options:

	Three Months Ended June 30, 2010		Six Months Ended June 30, 2010	
	Stock Options	ESPP Options	Stock Options	ESPP Options
	(Unaudited)		(Unaudited)	
Expected life of options	N/A	.25 Years	3.75 Years	.25 Years
Expected stock price volatility	N/A	.535	.650	.455
Risk-free interest rate	N/A	0.16%	1.29%	0.11%
	Three Months Ended June 30, 2009		Six Months Ended June 30, 2009	
	Stock Options	ESPP Options	Stock Options	ESPP Options
	(Unaudited)		(Unaudited)	
Expected life of options	N/A	.25 Years	4.00 Years	.25 Years
Expected stock price volatility	N/A	.600	.650	.810
Risk-free interest rate	N/A	0.21%	1.51%	0.15%

The following table summarizes stock compensation expenses (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2010	2009	2010	2009
	(Unaudited)		(Unaudited)	
Stock grant expense	\$ 279	\$ 233	\$ 552	\$ 451
Stock option expense	533	476	1,040	924
Total stock compensation expense	<u>\$ 812</u>	<u>\$ 709</u>	<u>\$1,592</u>	<u>\$1,375</u>

Included in the total stock compensation expense were expenses related to common stock awards and stock options issued in the current year as well as those issued in prior years that continue to vest during the period, and compensation related to the Company's ESPP. These amounts were recorded as compensation expense and were subject to the Company's normal allocation of expenses to deferred preservation costs and inventory. The Company capitalized \$78,000 and \$62,000 in the three months ended June 30, 2010 and 2009, respectively, and \$137,000 and \$121,000 in the six months ended June 30, 2010 and 2009, respectively, of the stock compensation expense into its deferred preservation costs and inventory costs.

As of June 30, 2010 the Company had a total of \$1.7 million in unrecognized compensation costs related to unvested stock awards, before considering the effect of expected forfeitures. As of June 30, 2010 this expense is expected to be recognized over a weighted-average period of 1.7 years. As of June 30, 2010 there was approximately \$2.3 million in total unrecognized compensation costs related to unvested stock options, before considering the effect of expected forfeitures. As of June 30, 2010 this expense is expected to be recognized over a weighted-average period of 1.7 years.

12. Segment Information

The Company has two reportable segments organized according to its services and products: Preservation Services and Medical Devices. The Preservation Services segment includes external services revenues from the preservation of cardiac and vascular tissues during 2010 and 2009 and from shipments of previously preserved orthopaedic tissues during 2009. The Medical Devices segment includes external revenues from product sales of BioGlue® Surgical Adhesive ("BioGlue"), BioFoam® Surgical Matrix ("BioFoam"), and HemoStase, as well as sales of other medical devices. BioGlue includes BIOGLUE *Aesthetic*® Medical Adhesive. There are no intersegment revenues.

The primary measure of segment performance, as viewed by the Company's management, is segment gross margin, or net external revenues less cost of preservation services and products. The Company does not segregate assets by segment; therefore, asset information is excluded from the segment disclosures below.

The following table summarizes revenues, cost of preservation services and products, and gross margins for the Company's operating segments (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(Unaudited)		(Unaudited)	
Revenues:				
Preservation services	\$15,005	\$14,091	\$30,588	\$27,639
Medical devices	14,146	13,918	28,101	26,863
Other ^a	112	154	291	349
Total revenues	29,263	28,163	58,980	54,851
Cost of preservation services and products:				
Preservation services	9,013	8,027	18,411	15,518
Medical devices	2,481	2,241	5,008	4,203
Total cost of preservation services and products	11,494	10,268	23,419	19,721
Gross margin:				
Preservation services	5,992	6,064	12,177	12,121
Medical devices	11,665	11,677	23,093	22,660
Other ^a	112	154	291	349
Total gross margin	\$17,769	\$17,895	\$35,561	\$35,130

The following table summarizes net revenues by product (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
	(Unaudited)		(Unaudited)	
Preservation services:				
Cardiac tissue	\$ 6,861	\$ 6,470	\$13,764	\$12,062
Vascular tissue	8,144	7,577	16,824	15,448
Orthopaedic tissue	—	44	—	129
Total preservation services	15,005	14,091	30,588	27,639
Products:				
BioGlue and BioFoam	12,261	12,379	24,173	24,143
HemoStase	1,893	1,467	3,998	2,577
Other medical devices	(8)	72	(70)	143
Total products	14,146	13,918	28,101	26,863
Other^a	112	154	291	349
Total revenues	\$29,263	\$28,163	\$58,980	\$54,851

^a For the three and six months ended June 30, 2010 and 2009, the "Other" designation includes grant revenue.

13. Commitments and Contingencies

Liability Claims

In the normal course of business the Company is made aware of adverse events involving its tissues and products. Any adverse event could ultimately give rise to a lawsuit against the Company. In addition, tissue processing and product liability claims may be asserted against the Company in the future based on events it is not aware of at the present time. The Company maintains claims-made insurance policies to mitigate its financial exposure to tissue processing and product liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. Thus, a claims-made policy does not generally represent a transfer of risk for claims and incidents that

have been incurred but not reported to the insurance carrier during the policy period. Any punitive damage components of claims are uninsured.

The Company believes that the assumptions it uses to determine its unreported loss liability provide a reasonable basis for its calculation. However, the accuracy of the estimates is limited by the general uncertainty that exists for any estimate of future activity due to uncertainties surrounding the assumptions used and due to Company specific conditions and the scarcity of industry data directly relevant to the Company's business activities. Due to these factors, actual results may differ significantly from the assumptions used and amounts accrued.

The Company accrues its estimate of unreported tissue processing and product liability claims as components of accrued expenses and other long-term liabilities and records the related recoverable insurance amounts as a component of receivables and other long-term assets. The amounts recorded represent management's estimate of the probable losses and anticipated recoveries for unreported claims related to services performed and products sold prior to the balance sheet date.

At June 30, 2010 and December 31, 2009 the short-term and long-term portions of the unreported loss liability and any related recoverable insurance amounts are as follows (in thousands):

	June 30, 2010	December 31, 2009
	(Unaudited)	
Short-term liability	\$ 1,520	\$ 1,890
Long-term liability	1,480	1,790
Total liability	<u>3,000</u>	<u>3,680</u>
Short-term recoverable	550	660
Long-term recoverable	590	680
Total recoverable	<u>1,140</u>	<u>1,340</u>
Total net unreported loss liability	<u>\$ 1,860</u>	<u>\$ 2,340</u>

Further analysis indicated that the liability as of June 30, 2010 could be estimated to be as high as \$5.2 million, based on a higher estimate of future claims frequency.

On March 31, 2010 the Company bound liability coverage for the 2010/2011 insurance policy year. This policy is an eight-year claims-made insurance policy, i.e. claims incurred during the period April 1, 2003 through March 31, 2011 and reported during the period April 1, 2010 through March 31, 2011 are covered by this policy. Claims incurred prior to April 1, 2003 that have not been reported are uninsured.

As of July 28, 2010 there were no pending tissue processing or product liability lawsuits filed against the Company.

PART I – FINANCIAL INFORMATION

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Overview

CryoLife, Inc. (“CryoLife”, the “Company”, “we”, or “us”), incorporated January 19, 1984 in Florida, preserves and distributes human tissues and develops, manufactures, and commercializes medical devices for cardiac and vascular transplant applications. The human tissue distributed by CryoLife includes the CryoValve® SG pulmonary heart valve (“CryoValve SGPV”) and the CryoPatch® SG pulmonary cardiac patch tissue (“CryoPatch SG”), both processed using CryoLife’s proprietary SynerGraft® technology. CryoLife’s medical devices consist primarily of surgical adhesives, sealants, and hemostats including BioGlue® Surgical Adhesive (“BioGlue”), BioFoam® Surgical Matrix (“BioFoam”), and HemoStase® (“HemoStase”), which the Company distributes for Medafor, Inc. (“Medafor”).

CryoLife achieved record revenues for a second quarter of \$29.3 million for the three months ended June 30, 2010 and record revenues for a first six month period of \$59.0 million for the six months ended June 30, 2010. This growth in revenues was led by a 6% and an 11% increase in preservation services revenue for the three and six months ended June 30, 2010, respectively. In addition, CryoLife generated \$10.0 million in cash from operations during the first six months of 2010. This cash flow performance is largely due to the Company’s strong sales coupled with careful management of its operating cash requirements, including a \$2.8 million reduction in the Company’s deferred preservation cost balances since December 31, 2009. See the “Results of Operations” section below for additional analysis of the second quarter 2010 results.

Recent Events

CryoValve SGPV

During the second quarter of 2010 CryoLife announced that it had received 510(k) clearance from the Food and Drug Administration (the “FDA”) for a five-year shelf-life on its CryoValve SGPV, which the Company believes will allow it to increase the percentage of heart valves it preserves that are processed utilizing the SynerGraft technology.

Stock Repurchase Program

The Company announced on June 1, 2010 that its Board of Directors authorized the purchase of up to \$15.0 million of its common stock over the course of the next two years. In June the Company repurchased approximately 274,000 shares or \$1.5 million of its common stock in accordance with this plan.

Medafor

As previously reported, on March 18, 2010 Medafor informed the Company and the public that it was terminating the exclusive distribution agreement (the “EDA”) between the parties. The Company disputed this attempt by Medafor to terminate the EDA and filed a motion for preliminary injunction against Medafor in the U.S. District Court for the Northern District of Georgia, requesting that the court prevent Medafor’s March 18 termination of the EDA. Hearings on the motion for preliminary injunction occurred on May 10, 2010 and June 28, 2010. As of July 27, 2010, the court had not yet ruled on the Company’s motion for an injunction.

After Medafor notified the Company that it was terminating the EDA, Medafor rejected three purchase orders from CryoLife in March and April totaling approximately \$1.8 million. However, on June 29, 2010 Medafor began shipments of HemoStase to CryoLife pursuant to a \$2.5 million purchase order that CryoLife submitted on June 25, 2010. On July 9, 2010 CryoLife issued an additional purchase order for \$1.35 million of HemoStase, and Medafor has shipped a portion of that purchase order. As of July 27, 2010, approximately \$2.5 million of the June 25, 2010 and July 9, 2010 purchase orders had been shipped in the aggregate by Medafor. Medafor has informed CryoLife that it will not make all shipments of HemoStase consistent with the June 25, 2010 or July 9, 2010 purchase orders, which CryoLife believes will constitute a breach of the EDA by Medafor.

On July 27, 2010, Medafor informed CryoLife of its belief that CryoLife had materially breached its duties and obligations under the EDA and gave CryoLife notice of Medafor’s intent to terminate the EDA effective August 27, 2010 if the alleged breach is not cured by that date. The Company has an ongoing lawsuit with Medafor in the U.S. District Court for the Northern District of Georgia in which CryoLife is alleging claims for, among other things, breach of contract, fraud, negligent misrepresentation, and violations of Georgia’s Racketeer Influenced and Corrupt Organizations Act. CryoLife has also made a previous attempt to

purchase Medafor, which was rejected by Medafor. Medafor's efforts to terminate the EDA, the Company's ongoing litigation with Medafor, and the strained relationship between the two companies may negatively impact CryoLife's ability to distribute HemoStase, up to and including causing the Company to cease distribution of HemoStase.

As of June 30, 2010 CryoLife owned approximately 2.4 million shares of Medafor common stock valued at approximately \$2 per share, before any adjustment for embedded derivative instruments.

See also Part I, Item 2, "Risks and Uncertainties" Part II, Item 1, "Legal Proceedings," and Part II, Item 5, "Other Information."

Critical Accounting Policies

A summary of the Company's significant accounting policies is included in Note 1 of the "Notes to Consolidated Financial Statements," contained in the Company's Form 10-K for the year ended December 31, 2009. Management believes that the consistent application of these policies enables the Company to provide users of the financial statements with useful and reliable information about the Company's operating results and financial condition. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S., which require the Company to make estimates and assumptions. The Company did not experience any significant changes during the quarter ended June 30, 2010 in its Critical Accounting Policies from those contained in the Company's Form 10-K for the year ended December 31, 2009.

New Accounting Pronouncements

There were no new accounting pronouncements relevant to the Company that management anticipates implementing during the year ending December 31, 2010.

Results of Operations
(Tables in thousands)

Revenues

	Revenues for the Three Months Ended June 30,		Revenues as a Percentage of Total Revenues for the Three Months Ended June 30,	
	2010	2009	2010	2009
Preservation services:				
Cardiac tissue	\$ 6,861	\$ 6,470	23%	23%
Vascular tissue	8,144	7,577	28%	27%
Orthopaedic tissue	—	44	—%	—%
Total preservation services	15,005	14,091	51%	50%
Products:				
BioGlue and BioFoam	12,261	12,379	42%	44%
HemoStase	1,893	1,467	7%	5%
Other medical devices	(8)	72	—%	—%
Total products	14,146	13,918	49%	49%
Other	112	154	—%	1%
Total	\$29,263	\$28,163	100%	100%

	Revenues for the Six Months Ended June 30,		Revenues as a Percentage of Total Revenues for the Six Months Ended June 30,	
	2010	2009	2010	2009
Preservation services:				
Cardiac tissue	\$13,764	\$12,062	23%	22%
Vascular tissue	16,824	15,448	29%	28%
Orthopaedic tissue	—	129	—%	—%
Total preservation services	30,588	27,639	52%	50%
Products:				
BioGlue and BioFoam	24,173	24,143	41%	44%
HemoStase	3,998	2,577	7%	5%
Other medical devices	(70)	143	—%	—%
Total products	28,101	26,863	48%	49%
Other	291	349	—%	1%
Total	\$58,980	\$54,851	100%	100%

Revenues increased 4% for the three months and 8% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009, respectively. A detailed discussion of the changes in preservation services revenues, product revenues, and other revenues for the three and six months ended June 30, 2010 is presented below.

Preservation Services

Revenues from preservation services increased 6% for the three months and 11% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009, respectively. The increases were due to an increase in both cardiac preservation services revenues and vascular preservation services revenues. See further discussion of cardiac and vascular preservation services revenues below.

Cardiac Preservation Services

Revenues from cardiac preservation services (consisting of revenues from the distribution of heart valves, cardiac patch tissues, and minimally processed tissues that are distributed to a third party tissue processor) increased 6% for the three months

ended June 30, 2010 as compared to the three months ended June 30, 2009, primarily due to the aggregate impact of favorable tissue mix and a 1% increase in shipments of heart valves and cardiac patch tissues.

Revenues from cardiac preservation services increased 14% for the six months ended June 30, 2010 as compared to the six months ended June 30, 2009, primarily due to the aggregate impact of favorable tissue mix and a 10% increase in shipments of heart valves and cardiac patch tissues.

The favorable tissue mix in the three and six months ended June 30, 2010 was primarily due to the favorable impact of SynerGraft tissues including the CryoValve SGPV and CryoPatch SG, which command a premium fee over standard processed tissues.

The increase in cardiac tissue shipments for the three months ended June 30, 2010 was primarily in CryoValve SGPV, CryoPatch SG, and traditionally processed aortic valves, partially offset by a decrease in traditionally processed cardiac patch tissues. The increase in cardiac tissue shipments for the six months ended June 30, 2010 was primarily in CryoValve SGPV, CryoPatch SG, and traditionally processed pulmonary and aortic valves, partially offset by a decrease in traditionally processed cardiac patch tissues.

The Company believes that the increase in shipments of cardiac tissues in the six months ended June 30, 2010 was primarily due to increased demand for these tissues in domestic markets and to a lesser extent to increased demand in Europe. The Company believes that the increase was partially due to the efforts of the Company's cardiac specialists, its cardiac tissue focused sales force, and that another contributing factor was the Company's physician training efforts, including the Ross Summit and monthly Aortic Allograft Workshops, which have resulted in additional physicians implanting the Company's tissues.

Revenues from SynerGraft processed tissues, including the CryoValve SGPV and CryoPatch SG, accounted for 31% and 30% of total cardiac preservation services revenues for the three and six months ended June 30, 2010, respectively, and 24% and 22% of total cardiac preservation services revenues for the three and six months ended June 30, 2009, respectively. Domestic revenues accounted for 93% of total cardiac preservation services revenues for both the three and six months ended June 30, 2010 and 96% and 95% of total cardiac preservation services revenues for the three and six months ended June 30, 2009, respectively.

As described in "Recent Events" above, in the second quarter of 2010 the Company received FDA clearance to extend the shelf-life of the CryoValve SGPV to five years. Following the announcement of the shelf-life extension, in June 2010 the Company shipped significantly more CryoValve SGPVs than in any other month since the initial FDA clearance of this valve in March 2008. As a result, the Company believes that it may experience additional favorable tissue mix during the remainder of 2010 if the Company continues shipping a higher percentage of CryoValve SGPVs than in the corresponding prior year periods, however, this trend may not continue or may slow in future months.

Vascular Preservation Services

Revenues from vascular preservation services increased 7% for the three months ended June 30, 2010 as compared to the three months ended June 30, 2009, primarily due to a 6% increase in unit shipments of vascular tissues, which increased revenues by 6% and an increase in average service fees, which increased revenues by 1%.

Revenues from vascular preservation services increased 9% for the six months ended June 30, 2010 as compared to the six months ended June 30, 2009, primarily due to a 7% increase in unit shipments of vascular tissues, which increased revenues by 8% and an increase in average service fees, which increased revenues by 1%.

The increase in vascular volume for the three and six months ended June 30, 2010 was primarily due to increases in shipments of saphenous veins, resulting from the strong demand for these tissues in domestic markets, primarily for use in peripheral vascular reconstruction surgeries to avoid limb amputations.

Products

Revenues from products increased 2% for the three months and 5% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009, respectively. These increases were primarily due to an increase in HemoStase revenues. See further discussions of BioGlue, BioFoam, and HemoStase revenues below.

BioGlue and BioFoam

Revenues from the sale of BioGlue and BioFoam decreased 1% for the three months ended June 30, 2010 as compared to the three months ended June 30, 2009. This decrease was primarily due to a 4% decrease in the volume of milliliters sold, which decreased revenues by 4% and the unfavorable impact of foreign exchange, which decreased revenues by 1%, largely offset by an increase in average selling prices, which increased revenues by 4%.

Revenues from the sale of BioGlue and BioFoam were flat for the six months ended June 30, 2010 as compared to the six months ended June 30, 2009. The revenues were impacted by a 4% decrease in the volume of milliliters sold, which decreased revenues by 4%, offset by an increase in average selling prices, which increased revenues by 4%.

The decrease in sales volume for BioGlue and BioFoam for the three and six months ended June 30, 2010 was primarily due to a decrease in shipments of BioGlue in domestic markets, particularly in the northeast region of the U.S., which has been disproportionately affected by the poor economic conditions. Management believes that the decrease in domestic BioGlue shipments is a result of various factors, including: poor economic conditions and their constraining effect on hospital budgets; the resulting attempts by hospitals to control costs by reducing spending on consumable items such as BioGlue; the efforts of some large competitors in imposing and enforcing contract purchasing requirements for competing non-CryoLife products; and the introduction of competitors' approved products in certain indications, reducing off-label usage of BioGlue.

The impact of foreign exchange for the three months ended June 30, 2010 was due to changes in the exchange rates between the U.S. Dollar and both the British Pound and the Euro in the three and six months ended June 30, 2010 as compared to the respective periods in 2009. The Company's sales of BioGlue and BioFoam through its direct sales force to United Kingdom hospitals are denominated in British Pounds, and its sales to German hospitals and certain distributors are denominated in Euros.

The increase in average selling prices for the three and six months ended June 30, 2010 was primarily due to list price increases on certain BioGlue products that went into effect during 2009 and 2010 and the negotiation of pricing contracts with certain customers.

Sales of BioGlue and BioFoam for the three and six months ended June 30, 2010 included international sales of BioFoam following receipt of the CE Mark approval during the third quarter of 2009. BioFoam sales accounted for less than 1% of total BioGlue and BioFoam sales for the three and six months ended June 30, 2010. Domestic revenues accounted for 68% and 69% of total BioGlue revenues for the three and six months ended June 30, 2010, respectively, and 68% and 70% of total BioGlue revenues for the three and six months ended June 30, 2009, respectively.

BioGlue is a mature product that has experienced increasing competitive pressures. Management believes that as economic conditions begin to improve, growth of BioGlue revenues in future periods would most likely be due to price increases and smaller volume increases. The Company expects volume growth of BioGlue in domestic markets due to increases in cardiac and vascular surgical procedure volumes where BioGlue is used, partially offset by a decrease in usage of BioGlue in off-label surgical procedures, due to increasing competitive pressures.

HemoStase

Revenues from the sale of HemoStase increased 29% for the three months ended June 30, 2010 as compared to the three months ended June 30, 2009. This increase was primarily due to a 24% increase in the volume of grams sold, which increased revenues by 24% and an increase in average selling prices, which increased revenues by 5%.

Revenues from the sale of HemoStase increased 55% for the six months ended June 30, 2010 as compared to the six months ended June 30, 2009. This increase was primarily due to a 53% increase in the volume of grams sold, which increased revenues by 53% and an increase in average selling prices, which increased revenues by 2%.

The increase in sales volume for the three and six months ended June 30, 2010 was primarily due to an increase in shipments of HemoStase in domestic markets and to a lesser extent in international markets.

Management believes that the Company lost additional sales of HemoStase during the second quarter due to Medafor's announcement that it was terminating the EDA, which created uncertainty in the market as to whether the Company had authority to market HemoStase and as to whether it would be able to continue to supply the product in the future. Management believes that second quarter HemoStase sales were also adversely impacted by continued sales by Medafor of Medafor's product into the Company's exclusive territory in violation of the EDA. In addition, management believes that during the three months ended June

30, 2010, sales of HemoStase were negatively impacted by Medafor's refusal to fulfill the Company's purchase orders, as described above in "Recent Events," which resulted in depleted inventory levels of certain HemoStase products.

The increase in average selling prices for the three months ended June 30, 2010 was primarily due to increases in both international and domestic average selling prices. The increase in average selling prices for the six months ended June 30, 2010 was due to an increase in domestic average selling prices.

Domestic revenues accounted for 78% and 74% of total HemoStase revenues for the three and six months ended June 30, 2010, respectively, and 78% and 76% of total HemoStase revenues for the three and six months ended June 30, 2009, respectively.

Subject to possible continued sales interference from Medafor by selling into the Company's exclusive territory and possible termination of the EDA, management believes that HemoStase revenues will increase for the full year 2010 as compared to 2009. HemoStase is still in a growth phase and has significant room to further penetrate CryoLife's existing customer base. However, the Company's ongoing litigation with Medafor and recent Medafor actions, including Medafor's notice to the company of July 27, 2010 alleging that the Company had materially breached the EDA and statements that Medafor would terminate the EDA if the breach is not cured in 30 days, may negatively affect the Company's ability to continue to distribute HemoStase, and HemoStase revenues may be materially, adversely impacted. Based on the Company's existing inventory levels of HemoStase as of June 30, 2010 and additional receipts of HemoStase through July 27, 2010, the Company expects that it can generate \$6.0 to \$7.0 million in future sales of HemoStase, unless the EDA is ultimately terminated or Medafor sales interference continues. See also Part I, Item 2, "Risks and Uncertainties" Part II, Item 1, "Legal Proceedings," and Part II, Item 5, "Other Information."

Other Revenues

Other revenues for the three and six months ended June 30, 2010 and 2009 included revenues related to funding allocated from U.S. Congress Defense Appropriations Conference Reports in 2005 through 2008, collectively the ("DOD Grants"). As of June 30, 2010 CryoLife has been awarded and has received a total of \$5.4 million for the development of protein hydrogel technology, which the Company is currently developing for use in organ sealing. Through June 30, 2010 CryoLife had \$2.4 million remaining in unspent cash advances from the DOD Grants recorded as cash and cash equivalents and deferred income on the Company's Summary Consolidated Balance Sheet.

Cost of Preservation Services and Products

Cost of Preservation Services

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2010	2009	2010	2009
Cost of preservation services	\$9,013	\$8,027	\$18,411	\$15,518
Cost of preservation services as a percentage of preservation services revenues	60%	57%	60%	56%

Cost of preservation services increased 12% for the three months and 19% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009, respectively.

The increase in cost of preservation services in the three months ended June 30, 2010 was primarily due to an increase in the per unit cost of processing tissues and an increase in vascular tissues shipped, as discussed above. The increase in cost of preservation services in the six months ended June 30, 2010 was primarily due to an increase in the per unit cost of processing tissues and an increase in cardiac and vascular tissues shipped, as discussed above.

The increase in cost of preservation services as a percentage of preservation services revenues for the three and six months ended June 30, 2010 was primarily due to the increase in the per unit cost of processing tissues. The increase in the per unit cost of processing tissues in 2010 was largely a result of decreased processing and packaging throughput.

Cost of Products

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Cost of products	\$2,481	\$2,241	\$5,008	\$4,203
Cost of products as a percentage of product revenues	18%	16%	18%	16%

Cost of products increased 11% for the three months and 19% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009.

The increase in cost of products in the three months ended June 30, 2010 was primarily due to a slight increase in the per unit cost of BioGlue and the increase in shipments of HemoStase, as discussed above. The increase in cost of products in the six months ended June 30, 2010 was primarily due to the increase in shipments of HemoStase, as discussed above and a slight increase in the per unit cost of BioGlue, partially offset by a decrease in the per unit cost of HemoStase.

The increase in cost of products as a percentage of product revenues for the three and six months ended June 30, 2010 was primarily due to a slight increase in the per unit cost of BioGlue and increasing revenues from HemoStase, which has a lower profit margin than BioGlue, partially offset by an increase in BioGlue average selling prices, as discussed above.

Operating Expenses

General, Administrative, and Marketing Expenses

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
General, administrative, and marketing expenses	\$11,670	\$12,306	\$25,487	\$25,054
General, administrative, and marketing expenses as a percentage of total revenues	40%	44%	43%	46%

General, administrative, and marketing expenses decreased 5% for the three months and increased 2% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009.

The decrease in general, administrative, and marketing expenses for the three months ended June 30, 2010 was primarily due to a decrease in marketing expenses, including personnel costs and spending on marketing materials, partially offset by an increase in spending on legal and professional fees. Expenses in the three months ended June 30, 2010 included approximately \$420,000 in costs associated with litigation with Medafor.

The increase in general, administrative, and marketing expenses for the six months ended June 30, 2010 was primarily due to an increase in spending on legal and professional fees. Expenses in the six months ended June 30, 2010 included \$729,000 in previously capitalized legal fees associated with BioGlue patent litigation in Germany, approximately \$834,000 in costs associated with litigation with Medafor, and approximately \$553,000 in business development costs, primarily associated with the Company's proposal to acquire Medafor. These increases were partially offset by a decrease in marketing expenses, including personnel costs and spending on marketing materials.

The Company's general, administrative, and marketing expenses included \$654,000 and \$579,000 for the three months ended June 30, 2010 and 2009, respectively, and \$1.3 million and \$1.1 million for the six months ended June 30, 2010 and 2009, respectively, related to the grant of stock options and restricted stock awards.

The Company believes that expenses associated with lawsuits, including lawsuits with Medafor, and business development opportunities, including costs associated with potential acquisitions, may materially impact the Company's general, administrative, and marketing expenses for the remainder of 2010.

Research and Development Expenses

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Research and development expenses	\$1,240	\$1,367	\$2,532	\$2,393
Research and development expenses as a percentage of total revenues	4%	5%	4%	4%

Research and development spending in 2010 and 2009 was primarily focused on the Company's BioGlue family of products, including: BioGlue, BioGlue Aesthetic, BioFoam, and BioDisc®, and SynerGraft products and tissues, including: CryoValve SGPV, CryoValve SG aortic heart valves, CryoPatch SG, and xenograft SynerGraft tissue products.

Other Income and Expenses

Interest expense was \$65,000 and \$61,000 for the three months ended June 30, 2010 and 2009, respectively, and \$116,000 and \$110,000 for the six months ended June 30, 2010 and 2009, respectively. Interest expense for the three and six months ended June 30, 2010 and 2009 included interest incurred related to the Company's debt, capital leases, and interest related to uncertain tax positions.

Interest income was \$6,000 and \$20,000 for the three months ended June 30, 2010 and 2009, respectively, and \$10,000 and \$63,000 for the six months ended June 30, 2010 and 2009, respectively. Interest income for the three and six months ended June 30, 2010 and 2009 was primarily due to interest earned on the Company's cash, cash equivalents, and restricted securities. The decrease in interest income in 2010 was primarily due to a decline in interest rates paid on the Company's cash and cash equivalents, partially offset by an increase in the balance in these accounts.

The gain on valuation of derivative was \$385,000 for the three months ended June 30, 2010 and \$1.2 million for the six months ended June 30, 2010. During the fourth quarter of 2009 and during 2010, the Company made several purchases of Medafor common stock that contained purchase price make-whole provisions, which the Company accounted for as embedded derivatives. The decrease in the value of the liability for these embedded derivatives, largely resulting from a decrease in the likelihood of a triggering event occurring, resulted in a non-cash gain for the three and six months ended June 30, 2010.

The Company's valuation of the Medafor derivative is based on several assumptions including the Company's estimates of the likelihood of concluding an acquisition of Medafor and the current fair market value of Medafor stock. If in the future the Company's assumptions change, the value of the derivative liability could change and result in a non-cash gain or loss for the Company. Specifically, if CryoLife decides to make a new offer to acquire Medafor and the Company's estimate of the likelihood of an acquisition occurring increases, this could result in a non-cash loss to the Company related to the valuation of the derivative. Additionally, the Company's investment in Medafor stock had a carrying value of \$6.2 million as of June 30, 2010. If the Company subsequently determines that the value of its Medafor common stock has been impaired or if the Company decides to sell its Medafor common stock for less than the carrying value, the resulting impairment charge or realized loss on sale of the investment in Medafor may materially increase the Company's other expenses for the remainder of 2010.

Earnings

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Income before income taxes	\$ 5,074	\$ 4,241	\$ 8,407	\$ 7,544
Income tax expense	2,148	1,739	3,547	3,093
Net income	\$ 2,926	\$ 2,502	\$ 4,860	\$ 4,451
Diluted weighted-average common shares outstanding	28,483	28,174	28,513	28,204
Diluted income per common share	\$ 0.10	\$ 0.09	\$ 0.17	\$ 0.16

Income before income taxes increased 20% for the three months and 11% for the six months ended June 30, 2010 as compared to the three and six months ended June 30, 2009. Income before income taxes for the three and six months ended June 30, 2010 was impacted by an increase in revenues and a gain on valuation of derivative, largely offset by an increase in costs and expenses as discussed above.

The Company's effective income tax rate was 42% for both the three and six months ended June 30, 2010 as compared to 41% for both the three and six months ended June 30, 2009. Net income and diluted income per common share for the three and six months ended June 30, 2010 increased compared to the corresponding periods in 2009 due to the increase in income before income taxes as discussed above. Diluted income per common share could benefit in future periods from the Company's repurchase of its common stock.

Seasonality

The Company believes the demand for its cardiac preservation services is seasonal, with peak demand generally occurring in the third quarter. Management believes this trend for cardiac preservation services is primarily due to the high number of surgeries scheduled during the summer months for school-aged patients, who drive the demand for a large percentage of cardiac tissues processed by CryoLife.

The Company believes the demand for its vascular preservation services is seasonal, with lowest demand generally occurring in the fourth quarter. Management believes this trend for vascular preservation services is primarily due to fewer surgeries being scheduled during the winter holiday months.

The Company believes the demand for BioGlue is seasonal, with a decline in demand generally occurring in the third quarter followed by stronger demand in the fourth quarter. Management believes that this trend for BioGlue may be due to the summer holiday season in Europe and fewer surgeries being performed on adult patients in the summer months in the U.S.

The Company is uncertain whether the demand for HemoStase will be seasonal. As HemoStase is in a growth phase generally associated with a recently introduced product that has not fully penetrated the marketplace, the nature of any seasonal trends in HemoStase sales may be obscured.

Liquidity and Capital Resources

Net Working Capital

At June 30, 2010 net working capital (current assets of \$106.8 million less current liabilities of \$20.3 million) was \$86.5 million, with a current ratio (current assets divided by current liabilities) of 5 to 1, compared to net working capital of \$76.3 million and a current ratio of 5 to 1 at December 31, 2009.

Overall Liquidity and Capital Resources

The Company's primary cash requirements for the six months ended June 30, 2010 arose out of general working capital needs, the acquisition of Medafor common stock, repurchases of the Company's common stock, and the payment of legal and professional fees. Legal and professional fees during the three and six months ended June 30, 2010 included costs associated with the Company's litigation with Medafor and business development costs. The Company funded its cash requirements primarily through its operating activities, which generated cash during the period.

During 2009 the Company analyzed its deferred preservation cost balances and their recent growth, and began a series of initiatives to reduce the growth of deferred preservation costs. As a result of these initiatives, the growth rate of the Company's deferred preservation costs slowed during 2009, and the balance of the Company's deferred preservation costs decreased by \$2.8 million during the first half of 2010. The Company believes that its deferred preservation cost balances will continue to decrease for the remainder of 2010; however, the rate of decrease may slow in future months. The Company will continue to manage its incoming tissue procurement and other costs in an effort to manage its deferred preservation cost balances. However, the Company cannot predict its specific deferred preservation cost balances in the future with certainty. The Company believes that the current balance of its deferred preservation costs along with its ongoing preservation service activities is sufficient to support its current and projected revenues.

CryoLife entered into a credit facility with GE Capital in March of 2008, as amended (the "GE Credit Agreement") which provides for up to \$15.0 million in revolving credit for working capital, acquisitions, and other corporate purposes, of which \$14.8 million was available for borrowing as of June 30, 2010. As of June 30, 2010 the outstanding balance under this agreement was zero. As required under the terms of the GE Credit Agreement, the Company is maintaining cash and cash equivalents of at least \$5.0 million in accounts in which GE Capital has a first priority perfected lien. As a result, these funds will not be available to meet the Company's liquidity needs during the term of the GE Credit Agreement, and as such have been recorded in restricted securities on the Company's Summary Consolidated Balance Sheet. Also, the GE Credit Agreement requires that after giving effect to a stock repurchase the Company maintain liquidity, as defined, of at least \$20.0 million.

The Company's cash equivalents include advance funding received under the DOD Grants for the continued development of protein hydrogel technology. As of June 30, 2010 \$2.4 million of the Company's cash equivalents were related to these DOD Grants, which must be used for the specified purposes.

The Company believes that its anticipated cash from operations and existing cash and cash equivalents will enable the Company to meet its operational liquidity needs for at least the next twelve months. The Company's future cash requirements may include cash for general working capital needs, to fund business development activities, including acquisitions and attempted acquisitions, to purchase license agreements, future repurchases of the Company's common stock, and for other corporate purposes. The Company has net operating loss carryforwards that will reduce otherwise required cash payments for federal and state income taxes for the 2010 tax year. Cash payments for taxes will increase in 2011 as the Company's net operating loss carryforwards are expected to be fully utilized in 2010.

Liability Claims

As of June 30, 2010 the Company had accrued a total \$3.0 million for the estimated costs of unreported tissue processing and product liability claims related to services performed and products sold prior to June 30, 2010 and had recorded a receivable of \$1.1 million representing estimated amounts to be recoverable from the Company's insurance carriers with respect to such accrued liability. Further analysis indicated that the liability could be estimated to be as high as \$5.2 million, based on a higher estimate of future claims frequency. The \$3.0 million accrual does not represent cash set aside. The timing of future payments related to the accrual is dependent on when and if claims are asserted, judgments are rendered, and/or settlements are reached. Should payments related to the accrual be required, these monies would have to be paid from insurance proceeds and liquid assets. Since the amount accrued is based on actuarial estimates, actual amounts required could vary significantly from this estimate.

Net Cash from Operating Activities

Net cash provided by operating activities was \$10.0 million for the six months ended June 30, 2010 as compared to \$4.0 million for the six months ended June 30, 2009. The change in the Company's working capital needs provided cash in the six months ended June 30, 2010 and in comparison used cash in the six months ended June 30, 2009, primarily due to a decrease in the Company's deferred preservation cost balances during the current year as compared to an increase in these balances in the prior year period.

The Company uses the indirect method to prepare its cash flow statement, and accordingly, the operating cash flows are based on the Company's net income, which is then adjusted to remove non-cash items and for changes in operating assets and liabilities from the prior year end. For the six months ended June 30, 2010 these non-cash items included a favorable \$1.9 million in depreciation and amortization expense, \$1.3 million in deferred income taxes, \$1.5 million in non-cash stock based compensation, and \$729,000 in write-down of intangible asset, partially offset by a \$1.2 million non-cash gain on valuation of derivative.

The Company's working capital needs, or changes in operating assets and liabilities, also affected cash from operations. For the six months ended June 30, 2010 these changes included a favorable \$1.7 million due to decreases in deferred preservation costs and inventory balances and \$1.5 million due to the timing differences between the recording of accounts payable, accrued expenses, and other current liabilities and the actual payment of cash, partially offset by an unfavorable \$632,000 due to the increase in receivables, \$1.1 million due to the timing difference between making cash payments and the expensing of assets, including prepaid insurance policy premiums.

The Company expects that the favorable impacts of deferred preservation costs and deferred income taxes on its net cash from operating activities, as discussed above, will continue for the remainder of 2010.

Net Cash from Investing Activities

Net cash used in investing activities was \$3.7 million for the six months ended June 30, 2010 as compared to \$1.4 million for the six months ended June 30, 2009. The current year cash used was primarily due to \$2.7 million in purchases of marketable securities and investments, largely related to the purchase of Medafor common stock, and \$827,000 in capital expenditures.

Net Cash from Financing Activities

Net cash used by financing activities was \$303,000 for the six months ended June 30, 2010 as compared to net cash provided of \$1.3 million for the six months ended June 30, 2009. The current year cash used was primarily due to \$1.4 million in purchases of treasury stock, largely related to the Company's publicly announced stock repurchase plan, and \$725,000 in principal payments on capital leases and short-term notes payable, partially offset by \$1.5 million in proceeds from the financing of insurance policies.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

Scheduled Contractual Obligations and Future Payments

Scheduled contractual obligations and the related future payments as of June 30, 2010 are as follows (in thousands):

	Total	Remainder of					
		2010	2011	2012	2013	2014	Thereafter
Operating leases	\$29,776	\$ 1,075	\$2,577	\$2,523	\$2,453	\$2,478	\$18,670
Compensation payments	3,960	—	1,975	—	992	993	—
Research obligations	3,181	1,225	760	768	428	—	—
Insurance premium obligations	1,059	927	132	—	—	—	—
Purchase commitments	795	776	19	—	—	—	—
Royalty payments	411	—	411	—	—	—	—
Other obligations	402	388	11	3	—	—	—
Total contractual obligations	<u>\$39,584</u>	<u>\$ 4,391</u>	<u>\$5,885</u>	<u>\$3,294</u>	<u>\$3,873</u>	<u>\$3,471</u>	<u>\$18,670</u>

The Company's operating lease obligations result from the lease of land and buildings that comprise the Company's corporate headquarters and manufacturing facilities, leases related to additional office and warehouse space, leases on Company vehicles, and leases on a variety of office equipment. Changes in the Company's operating lease obligations from those reported in the prior quarter are primarily due to an amendment to the lease on its corporate headquarters that the Company signed with its landlord during the second quarter of 2010, which extended the lease until 2022, included some rental rate reductions, and contained \$762,000 in payments from the landlord to CryoLife over the revised lease term.

The Company's research obligations represent commitments for ongoing studies and payments to support research and development activities, the majority of which will be funded by the advances received under the DOD Grants. The timing of these obligations is based on the Company's estimates and will likely change as the related projects progress toward completion.

The Company's compensation payment obligations represent estimated cash payments to be made for its 2010 performance-based bonus plans and estimated payments for post employment benefits for the Company's Chief Executive Officer ("CEO"). The timing of the CEO's post employment benefits is based on the December 2012 expiration date of the CEO's employment agreement. Payment of this benefit may be accelerated by a change in control or by the voluntary retirement of the CEO.

The Company's insurance premium obligations represent the 2010 renewal of certain of the Company's insurance policies. The Company's purchase commitments include obligations from agreements with suppliers to stock certain custom raw materials needed for the Company's processing and production and contractual payments for telecommunication services. The Company's royalty payments are related to BioGlue and BioFoam revenues. The Company's other obligations contain various items including estimated real and personal property tax payments, advertising commitments, and other items as appropriate.

The schedule of contractual obligations above excludes (i) obligations for estimated tissue processing and product liability claims unless they are due as a result of a pending settlement agreement or other contractual obligation; (ii) any estimated liability for uncertain tax positions and interest and penalties, currently estimated to be \$873,000, because the Company can not make a reasonably reliable estimate of the amount and period of related future payments as no specific assessments have been made for specific litigation or by any taxing authorities; (iii) any payments related to the Medafor Derivative, because the Company could not make a reasonably reliable estimate of the amount and period of the future payments that would be required, if any; and (iv) any contractually specified purchases of HemoStase. The Company's EDA with Medafor does not require that the Company make minimum purchases. If, however, the Company does not make the minimum purchases as stated in the EDA it may be terminated by Medafor.

Capital Expenditures

Capital expenditures for the six months ended June 30, 2010 were \$827,000 compared to \$975,000 for the six months ended June 30, 2009. Capital expenditures in the six months ended June 30, 2010 were primarily related to routine purchases of tissue processing, manufacturing, computer, and office equipment, computer software, and renovations to the Company's corporate headquarters needed to support the Company's business.

Forward-Looking Statements

This Form 10-Q includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. Forward-looking statements give the Company’s current expectations or forecasts of future events. The words “could,” “may,” “might,” “will,” “would,” “shall,” “should,” “pro forma,” “potential,” “pending,” “intend,” “believe,” “expect,” “anticipate,” “estimate,” “plan,” “future,” and other similar expressions generally identify forward-looking statements. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned not to place undue reliance on these forward-looking statements, which are made as of the date of this Form 10-Q. Such forward-looking statements reflect the views of management at the time such statements are made and are subject to a number of risks, uncertainties, estimates, and assumptions, including, without limitation, in addition to those identified in the text surrounding such statements, those identified under “Risks and Uncertainties” and elsewhere in this Form 10-Q.

All statements, other than statements of historical facts, included herein that address activities, events or developments that the Company expects or anticipates will or may occur in the future, are forward-looking statements, including statements regarding:

- The Company’s expectations about usage and expiration of its income tax net operating loss carryforwards;
- The Company’s expectations regarding its borrowing capacity under the GE Credit Agreement;
- Estimated liability for uncertain tax positions and interest and penalties;
- The Company’s belief that diluted income per common share could benefit in future periods by the Company’s repurchase of its common stock;
- The Company’s estimate of probable losses and anticipated recoveries for unreported liability claims;
- Anticipated future demand for cardiac and vascular tissues;
- The Company’s belief that FDA clearance will allow it to increase the percentage of heart valves it preserves that are processed using the SynerGraft technology, and thereby experience additional favorable tissue mix if the Company continues shipping a higher percentage of CryoValve SGPV;
- Expectations regarding growth of BioGlue volume and revenues in future periods;
- Expectations regarding the ability of the Company to distribute HemoStase;
- Expectations regarding the impact of the Company’s previous attempt to purchase Medafor and the Company’s ongoing litigation with Medafor and recent Medafor actions on the Company’s distribution of HemoStase and relationship with Medafor;
- Expectations regarding any future impairment charges or realized losses related to the Company’s investment in Medafor;
- The Company’s belief that if the EDA with Medafor remains in place, HemoStase revenues will increase in 2010 as compared to 2009;
- The Company’s expectation that it can generate \$6.0 to \$7.0 million in sales of HemoStase without any further shipments from Medafor;
- Expectations that the Company’s general, administrative, and marketing expenses for the remainder of 2010 may be materially impacted by expenses associated with lawsuits and business development opportunities;
- The Company’s belief that its deferred preservation cost balances will continue to decrease for the remainder of 2010;
- The Company’s belief that the current balance of its deferred preservation costs along with its ongoing preservation service activities is sufficient to support its current and projected revenues;
- The Company’s expectations that the favorable impacts of deferred preservation costs and deferred income taxes on its net cash from operating activities will continue for the remainder of 2010;
- The Company’s belief that it will have sufficient cash to meet its operational liquidity needs for at least the next twelve months;
- Expectations that the Company’s future cash requirements may include cash for general working capital needs, to fund business development activities, including acquisitions and attempted acquisitions, to purchase license agreements, future repurchases of the Company’s common stock, and for other corporate purposes;
- Anticipated impact of changes in interest rates and foreign currency exchange rates;
- The Company’s expectations regarding the timing of court rulings in its legal proceedings and actions the Company may take during the course of litigation;
- Expectations regarding the impact of healthcare legislation on the medical device industry; and

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- Other statements regarding future plans and strategies, anticipated events, or trends.

These statements are based on certain assumptions and analyses made by the Company in light of its experience and its perception of historical trends, current conditions, and expected future developments as well as other factors it believes are appropriate in the circumstances. However, whether actual results and developments will conform with the Company's expectations and predictions is subject to a number of risks and uncertainties which could cause actual results to differ materially from the Company's expectations, including, without limitation, in addition to those specified in the text surrounding such statements, the risk factors set forth below, the risks set forth under Part II, Item 1A of this Form 10-Q, the risks set forth under Part II, Item 1A of the Company's Form 10-Q for the quarter ended March 31, 2010, the risk factors set forth under Part I, Item 1A of the Company's Form 10-K for the year ended December 31, 2009, and other factors, many of which are beyond the control of the Company. Consequently, all of the forward-looking statements made in this Form 10-Q are qualified by these cautionary statements and there can be no assurance that the actual results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences to or effects on the Company or its business or operations. The Company assumes no obligation to update publicly any such forward-looking statements, whether as a result of new information, future events, or otherwise.

Risks and Uncertainties

The risks and uncertainties which might impact the forward-looking statements and the Company, its ability to continue as a going concern, and the trading value of its common stock include the risk factors described under Part II, Item 1A of this Form 10-Q and concerns that:

- We are significantly dependent on our revenues from BioGlue and are subject to a variety of risks affecting this product;
- We are subject to stringent domestic and foreign regulation which may impede the approval process of our tissues and products, hinder our development activities and manufacturing processes and, in some cases, result in the recall or seizure of previously cleared or approved tissues and products;
- Our investment in Medafor has been diluted as a result of Medafor's issuance of 1.8 million shares to Magle Life Sciences, and we could in the future determine that an impairment in the value of our investment in Medafor common stock has occurred, which could have a material, adverse impact on our financial condition and profitability;
- We may not be able to readily liquidate our investment in Medafor, and if we are able to liquidate our investment, we may receive less cash than our original investment and we may receive less than the carrying value of our investment;
- If Medafor is successful in its attempts to terminate the EDA, we will be unable to continue to distribute HemoStase, which will have a material adverse impact on our revenues and profitability;
- Medafor could refuse to comply with the EDA or continue to not perform under the EDA, which could have a material, adverse impact on our revenues and profitability;
- Healthcare policy changes, including recent federal legislation to reform the U.S. healthcare system, may have a material adverse effect on us;
- 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 CryoLife may adversely affect the ability of CryoLife to distribute those products;
- The tissues we process and our products allegedly have 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;
- We are dependent on the availability of sufficient quantities of tissue from human donors;
- Our CryoValve SGPV post-clearance study may not provide expected results;
- Demand for our tissues and products could decrease in the future, which could have a material adverse effect on our business;
- The success of many of our tissues and products depends upon strong relationships with physicians;
- Consolidation in the healthcare industry could lead to demands for price concessions or limits or eliminate our ability to sell to certain of our significant market segments;
- Our existing insurance policies may not be sufficient to cover our actual claims liability;
- We may be unable to obtain adequate insurance at a reasonable cost, if at all;
- The loss of any of our sole-source suppliers could have an adverse effect on our revenues, financial condition, profitability, and cash flows;
- Intense competition may affect our ability to operate profitably;
- Regulatory action outside of the U.S. has affected our business in the past and may affect our business in the future;
- Rapid technological change could cause our services and products to become obsolete;
- Continued fluctuation of foreign currencies relative to the U.S. Dollar could materially and adversely impact our business;
- Our credit facility limits our ability to pursue significant acquisitions;
- Key growth strategies may not generate the anticipated benefits;
- There are limitations on the use of our net operating loss carryforwards;
- Our ability to borrow under our credit facility may be limited;
- We may not be successful in obtaining necessary clinical results and regulatory approvals for services and products in development, and our new services and products may not achieve market acceptance;
- Extensive government regulation may adversely affect our ability to develop and sell services and products;
- 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 may be unable to increase our revenues;

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- We are not insured against all potential losses. Natural disasters or other catastrophes could adversely affect our business, financial condition, and profitability;
 - We are dependent on our key personnel;
 - Trading prices for our common stock, and for the securities of biotechnology companies in general, have been, and may continue to be, volatile;
 - Anti-takeover provisions may discourage or make more difficult an attempt to obtain control of us; and
 - We have not paid cash dividends on our capital stock and may be unable to do so due to legal or contractual restrictions.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.***Interest Rate Risk***

The Company's interest income and expense are sensitive to changes in the general level of U.S. interest rates. In this regard, changes in U.S. interest rates affect the interest earned on the Company's cash and cash equivalents of \$36.1 million and \$5.0 million of the Company's restricted securities as of June 30, 2010, and could impact interest paid on future borrowings under the Company's variable rate line of credit. A 10% adverse change in interest rates as compared to the rates experienced by the Company in the three months ended June 30, 2010, affecting the Company's cash and cash equivalents, restricted securities, and line of credit would not have a material impact on the Company's financial position, profitability, or cash flows.

Foreign Currency Exchange Rate Risk

The Company has balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency denominated balances are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the U.S. Dollar equivalent of cash or funds that the Company will receive in payment for assets or that the Company would have to pay to settle liabilities. As a result, the Company could be required to record these changes as gains or losses on foreign currency translation.

The Company has revenues and expenses that are denominated in foreign currencies. Specifically, a majority of the Company's international BioGlue and BioFoam revenues, a portion of the Company's HemoStase revenues, and a portion of the Company's general, administrative, and marketing expenses are denominated in British Pounds and Euros. These foreign currency transactions are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the U.S. Dollar equivalent of net income from transactions conducted in other currencies. As a result, the Company could recognize a reduction in revenues or an increase in expenses related to a change in exchange rates.

Changes in exchange rates which occurred during the six months ended June 30, 2010 as well as any future material adverse fluctuations in exchange rates could have a material and adverse effect on the Company's revenues, profitability, and cash flows for the full year of 2010. An additional 10% adverse change in exchange rates from the exchange rates in effect on June 30, 2010 affecting the Company's balances denominated in foreign currencies would not have had a material impact on the Company's financial position or cash flows. An additional 10% adverse change in exchange rates from the exchange rates in effect on June 30, 2010 as compared to the weighted-average exchange rates experienced by the Company for the six months ended June 30, 2010 affecting the Company's revenue and expense transactions denominated in foreign currencies, would not have had a material impact on the Company's financial position, profitability, or cash flows.

Item 4. Controls and Procedures.

The Company maintains disclosure controls and procedures ("Disclosure Controls") as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934. These Disclosure Controls are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosures.

The Company's management, including the Company's President and CEO and the Company's Executive Vice President of Finance, Chief Operating Officer, and CFO, does not expect that its Disclosure Controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdown can occur because of simple error or mistake.

Based upon the most recent Disclosure Controls evaluation, conducted by management with the participation of the CEO and CFO, as of June 30, 2010 the CEO and CFO have concluded that the Company's Disclosure Controls were effective at the reasonable assurance level to satisfy their objectives and to ensure that the information required to be disclosed by the Company in its periodic

reports is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely decisions regarding disclosure and is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms.

During the quarter ended June 30, 2010, there were no changes in the Company's internal control over financial reporting that materially affected or that are reasonably likely to materially affect the Company's internal control over financial reporting.

Part II – OTHER INFORMATION

Item 1. Legal Proceedings.

Tenaxis

With respect to the patent nullity action filed by Tenaxis, Inc. ("Tenaxis") against the German part of European patent EP 0 650 512 (German publication number DE 693 31 011), in the Federal Patent Court in the State of Bavaria in Munich in the Federal Republic of Germany, previously discussed in the Company's Form 10-K for the year ended December 31, 2009, Form 8-K dated March 5, 2010, and Form 10-Q for the quarter ended March 31, 2010, on April 22, 2010, the Federal Patent Court in Munich issued a judgment declaring the German part of this BioGlue patent as void. CryoLife has filed an appeal against this judgment with the German Supreme Court. Until the decision on the appeal, the patent formally remains in force. It is likely that the appeal will not be heard until 2012.

In the event that the German part of this main BioGlue patent is ultimately declared invalid, CryoLife will still be able to sell BioGlue in Germany and the rest of Europe; however, the Federal Patent Court's ruling, if upheld on appeal, would prevent CryoLife from suing to prevent third parties from infringing the main BioGlue patent in Germany.

With respect to the patent infringement action filed by CryoLife against Tenaxis in the District Court in the State of North Rhein-Westphalia in Düsseldorf in the Federal Republic of Germany previously discussed in the Company's Form 10-K for the year ended December 31, 2009 and Form 8-K dated March 5, 2010, on March 10, 2010, the District Court had stayed the proceedings pending the issuance of the first instance judgment of the Federal Patent Court in the nullity proceeding. If a patent is declared invalid by the Federal Patent Court in the first instance, infringement proceedings are normally stayed if an appeal is filed until final decision by the German Supreme Court. However, as CryoLife believes that the judgment by the Federal Patent Court in Munich was incorrectly decided and because the BioGlue patent in question will expire in mid-2013, CryoLife filed a request with the District Court in Düsseldorf to reschedule the infringement hearing as soon as possible and to grant a permanent injunction thereupon irrespective of the judgment by the Federal Patent Court. Tenaxis has filed a motion to oppose this rescheduling. The District Court in Düsseldorf has not yet ruled on CryoLife's request.

Medafor

Overview

As previously reported in CryoLife's Annual Report on Form 10-K for the year ended December 31, 2009, and Form 10-Q for the quarter ended March 31, 2010, CryoLife filed a lawsuit against Medafor, Inc. in 2009 in the U.S. District Court for the Northern District of Georgia, alleging claims for, among other things, breach of contract, fraud, negligent misrepresentation, and violations of Georgia's Racketeer Influenced and Corrupt Organizations Act ("Georgia RICO"). The lawsuit arises out of an exclusive distribution agreement between the parties (the "EDA"), pursuant to which CryoLife has the right to distribute a product manufactured by Medafor under the name HemoStase. Medafor's partial motion to dismiss the Georgia RICO claim is still under review by the court, and discovery in the case has not yet begun. On June 30, 2010 the court announced in a written order that it would endeavor to rule on Medafor's partial motion to dismiss within thirty days of that date.

Motion for Preliminary Injunction

As previously reported in CryoLife's Current Report on Form 8-K, dated March 19, 2010, and Form 10-Q for the quarter ended March 31, 2010, Medafor informed CryoLife on March 18, 2010 of its contention that CryoLife had repudiated the EDA, thereby entitling Medafor to terminate the EDA. Medafor asserted that it had made a valid statutory demand, in a February 10, 2010 letter to CryoLife, for "adequate assurances" of CryoLife's future performance under the EDA, and that CryoLife had repudiated the EDA by failing to respond in a timely manner. On March 22, 2010, CryoLife informed Medafor that it disputed Medafor's assertions, and that Medafor had no right to terminate the EDA. CryoLife then filed a motion for preliminary

injunction, asking the court to enjoin Medafor from proceeding with its termination of the EDA. The parties filed briefs supporting their positions, and the court held hearings on CryoLife's motion on May 10, 2010 and June 28, 2010.

In its June 30, 2010 order, the court also took CryoLife's motion for preliminary injunction under advisement and granted the parties leave to file additional briefs on the motion. The court further invited CryoLife to consider converting its motion for preliminary injunction into a dispositive motion, and instructed the parties to submit a proposed discovery and briefing plan for conducting expedited discovery involving the possible infirmities of the February 10, 2010 letter on which Medafor based its termination of the EDA.

July 27, 2010 Notice of Termination

On July 27, 2010, Medafor informed CryoLife of its belief that CryoLife had materially breached its duties and obligations under the EDA and gave CryoLife notice of Medafor's intent to terminate the EDA effective August 27, 2010 if the alleged breach is not cured by that date. See Part II, Item 5 "Other Information," for a further discussion of this notice of termination.

Item 1A. Risk Factors.

Other than the risk factors included below, there have been no material changes to the Risk Factors as previously disclosed in Part I, Item 1A, "Risk Factors" in our 10-K for the year ended December 31, 2009, as updated by Part II, Item 1A, "Risk Factors" in our Form 10-Q for the quarter ended March 31, 2010.

If Medafor Is Successful In Its Attempts To Terminate The EDA, We Will Be Unable To Continue To Distribute HemoStase, Which Will Have A Material, Adverse Impact On Our Revenues And Profitability.

On March 18, 2010 Medafor informed us and the public that it was terminating the EDA. Medafor alleged that it was entitled under Georgia law to demand adequate assurances from us that we would perform under the EDA, and that we had repudiated the EDA by not timely providing adequate assurances. We disputed this attempt by Medafor to terminate the EDA and filed a motion for preliminary injunction against Medafor in the U.S. District Court for the Northern District of Georgia, requesting that the court prevent Medafor from proceeding with its March 18 termination of the EDA. Hearings on the motion for preliminary injunction occurred on May 10, 2010 and June 28, 2010. As of July 27, 2010, the court had not yet ruled on our motion for an injunction.

Medafor has sent us four other notices of termination alleging we have materially breached the EDA. Medafor has withdrawn one of the notices, we have disputed the allegations of material breaches in two of the other notices, and we will dispute the allegation of material breach contained in the fourth notice when our response to the notice comes due. Medafor has not withdrawn these last three notices and could attempt to follow through on its threat to terminate the EDA based on any of them. If we fail to obtain our preliminary injunction discussed above, or if Medafor is successful in its attempt to terminate the EDA based on these notices of termination that have not been withdrawn or any future ground, we would no longer be able to distribute HemoStase as contemplated by the EDA, and our revenues and profitability would be materially, adversely impacted including in the remainder of 2010.

Revenues from HemoStase were approximately \$1.9 million, \$4.0 million, and \$6.0 million for the three months ended June 30, 2010, the six months ended June 30, 2010, and the year ended December 31, 2009, respectively.

See Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," for further information regarding our EDA with Medafor and see Part II, Item 1, "Legal Proceedings," and Part II, Item 5, "Other Information," for further information regarding our litigation with Medafor.

Medafor Could Refuse To Comply With The EDA Or Continue To Not Perform Under The EDA, Which Could Have A Material, Adverse Impact On Our Revenues And Profitability.

After Medafor notified CryoLife on March 18, 2010 that it was terminating the EDA, Medafor rejected three purchase orders from CryoLife in March and April totaling approximately \$1.8 million. However, on June 29, 2010 Medafor began shipments of HemoStase to CryoLife pursuant to a \$2.5 million purchase order that CryoLife submitted on June 25, 2010. On July 9, 2010 CryoLife issued an additional purchase order for \$1.35 million of HemoStase, and Medafor has shipped a portion of that purchase order. As of July 27, 2010, approximately \$2.5 million of the June 25, 2010 and July 9, 2010 purchase orders had been shipped in the aggregate by Medafor. Medafor has informed CryoLife that some of its shipments of HemoStase will not be consistent with the June 25, 2010 and July 9, 2010 purchase orders, which CryoLife believes will constitute a breach of the EDA by Medafor.

Medafor could choose to refuse to ship HemoStase again, even though it currently has stated that it will continue to fulfill valid purchase orders as long as the court has not ruled on our motion for preliminary injunction or on any final dispositive motion regarding Medafor's termination announcement on March 18, 2010. Medafor has also given notice to CryoLife of its intent to terminate the EDA due to alleged material breaches, as discussed below under Part II, Item 5, "Other Information." Even if Medafor is not successful in its current attempt to terminate the EDA, our relationship with Medafor is very strained, primarily as a result of litigation with respect to the EDA, our recent bid to acquire Medafor, and our status as a shareholder of Medafor. Thus, even if Medafor is enjoined from terminating the EDA pursuant to its March 18, 2010 termination announcement and Medafor is unsuccessful in its current attempt to terminate the EDA due to alleged breaches, Medafor might again refuse to perform under the EDA, and our relationship with Medafor may continue to become further strained, potentially hindering our ability to effectively distribute HemoStase. Such refusal to perform could include refusing to ship us HemoStase, refusing to ship HemoStase in the manner required under the EDA, continuing to sell into our exclusive fields and territories in violation of the EDA, or other breaches of the EDA, any of which could have a material, adverse impact on our revenues and profitability.

Revenues from HemoStase were approximately \$1.9 million, \$4.0 million, and \$6.0 million for the three months ended June 30, 2010, the six months ended June 30, 2010, and the year ended December 31, 2009, respectively.

See Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," for further information regarding our EDA with Medafor and see Part II, Item 1, "Legal Proceedings," for further information regarding our litigation with Medafor.

Healthcare Policy Changes, Including Recent Federal Legislation To Reform The U.S. Healthcare System, May Have A Material Adverse Effect On Us.

In response to perceived increases in health care costs in recent years, there have been and continue to be proposals by the federal government, state governments, regulators, and third-party payors to control these costs and, more generally, to reform the U.S. healthcare system. Certain of these proposals could limit the prices we are able to charge for our products or services or the amounts of reimbursement available for our products or services and could limit the acceptance and availability of our products and services. In addition, as discussed below, recent federal legislation would impose significant new taxes on medical device makers such as us. The adoption of some or all of these proposals, including the recent federal legislation, could have a material adverse effect on our financial position, cash flows, and results of operations.

On March 23, 2010, President Obama signed the Patient Protection and Affordable Care Act. This legislation imposes significant new taxes on medical device makers. Under the legislation, the total cost to the medical device industry would be approximately \$20 billion in additional taxes over ten years. These taxes will result in a significant increase in the tax burden on our industry, which could have a material, adverse impact on our financial position, results of operations, and cash flows.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

(c) The following table provides information about purchases by the Company during the quarter ended June 30, 2010 of equity securities that are registered by the Company pursuant to Section 12 of the Exchange Act:

Issuer Purchases of Equity Securities
Common Stock

Period	Total Number of Common Shares Purchased	Average Price Paid per Common Share	Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Common Shares That May Yet Be Purchased Under the Plans or Programs
04/01/10 – 04/30/10	—	\$ —	N/A	\$ N/A
05/01/10 – 05/31/10	—	—	N/A	N/A
06/01/10 – 06/30/10	274,030	5.52	274,030	13,488,682
Total	274,030	\$ 5.52	274,030	\$ 13,488,682

On June 1, 2010 the Company publicly announced that its Board of Directors authorized the purchase of up to \$15.0 million of its common stock over the course of the next two years. The purchase of shares may be made from time to time in the open

market or through privately negotiated transactions on such terms as management deems appropriate, and will be dependant upon various factors, including price, regulatory requirements, and other market conditions. As of June 30, 2010 the Company had purchased 274,000 shares of its common stock for an aggregate purchase price of \$1.5 million.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. (Removed and Reserved).

Item 5. Other information.

- (a) On July 27, 2010, Medafor informed CryoLife of its belief that CryoLife had materially breached its duties and obligations under the EDA and gave CryoLife notice of Medafor's intent to terminate the EDA effective August 27, 2010 if the alleged breach is not cured by that date. Medafor contends that the alleged material breach of the EDA occurred because CryoLife employees have improperly promoted, marketed, sold and/or distributed HemoStase outside of CryoLife's exclusive field under the EDA at Oklahoma University Medical Center. CryoLife is currently investigating these allegations, but nonetheless believes, regardless of the outcome of its investigation, that a court would find that a material breach of the EDA has not occurred. In the event that a material breach has occurred, CryoLife believes that it would be able to cure it in a timely manner, and that a court would determine that Medafor's requests for cure are too broad and overreaching and not consistent with the EDA. As such, CryoLife does not believe that Medafor will be able to terminate the EDA per the terms of the notice without breaching the EDA. This is Medafor's fifth attempt to terminate the EDA since September 2009. The EDA has a three-year term from its effective date of May 1, 2008 and will automatically renew for an additional three-year period if CryoLife makes minimum purchase as designated under the EDA; however, there is no contractual obligation for CryoLife to make minimum purchases.

Item 6. Exhibits.

The exhibit index can be found below.

<u>Exhibit Number</u>	<u>Description</u>
3.1	Amended and Restated Articles of Incorporation of the Company. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 10-K for the year ended December 31, 2007.)
3.2	Amended and Restated By-Laws. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed January 6, 2010.)
4.1	Form of Certificate for the Company's Common Stock. (Incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997.)
4.2	First Amended and Restated Rights Agreement, dated as of November 2, 2005, between CryoLife, Inc. and American Stock Transfer & Trust Company. (Incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K filed November 3, 2005.)
10.1*	Fourth Amendment, dated May 28, 2010, to the Credit Agreement by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, General Electric Capital Corporation, as lender, letter of credit issuer, and agent for all lenders, and GE Capital Markets, Inc., as sole lead arranger and bookrunner.
10.2*	Amended and Restated Lease Agreement between the Company and Amli Land Development – I Limited Partnership, dated May 10, 2010.
31.1*	Certification by Steven G. Anderson pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification by D. Ashley Lee pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.

* Filed herewith.

SIGNATURES

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

CRYOLIFE, INC.
(Registrant)

/s/ STEVEN G. ANDERSON
STEVEN G. ANDERSON
Chairman, President, and
Chief Executive Officer
(Principal Executive Officer)

/s/ D. ASHLEY LEE
D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and
Chief Financial Officer
(Principal Financial and Accounting Officer)

July 29, 2010
DATE

FOURTH AMENDMENT TO CREDIT AGREEMENT

THIS FOURTH AMENDMENT TO CREDIT AGREEMENT ("Amendment") is entered into as of May 28, 2010, by and among CryoLife, Inc., a Florida corporation ("CryoLife"), CryoLife Acquisition Corporation, a Florida corporation ("Acquisition Corp"), AuraZyme Pharmaceuticals, Inc., a Florida corporation ("AuraZyme"), CryoLife International, Inc., a Florida corporation ("International") (CryoLife, Acquisition Corp, International and AuraZyme are sometimes referred to herein together as the "Borrowers" and individually as a "Borrower"), CryoLife, as Borrower Representative, the other Persons party hereto that are designated as a "Credit Party", General Electric Capital Corporation, a Delaware corporation (the "Agent"), as administrative agent for the several financial institutions from time to time party to this Amendment (collectively, the "Lenders" and individually each a "Lender") and for itself as a Lender and L/C Issuer, and such Lenders.

RECITALS

A. The Borrowers, the other Credit Parties signatory thereto, the Lenders signatory thereto from time to time and Agent are parties to that certain Credit Agreement, dated as of March 27, 2008, as amended by that certain Letter Amendment, dated as of January 15, 2009, that certain First Amendment to Credit Agreement, dated as of May 7, 2009, that certain Second Amendment to Credit Agreement, dated as of November 9, 2009 and as further amended by that certain Third Amendment to Credit Agreement, dated as of January 12, 2010, (as so amended, and as further amended, supplemented, revised, restated, replaced or otherwise modified, the "Credit Agreement").

B. The Borrowers have requested that Lenders amend the Credit Agreement in certain respects and Lenders have agreed to so amend the Credit Agreement, subject to the terms and conditions hereof.

NOW, THEREFORE, in consideration of the premises and the mutual covenants hereinafter contained, and intending to be legally bound, the parties hereto agree as follows:

A. AMENDMENTS

(a) Amendment to Section 5.11 Section 5.11 of the Credit Agreement is amended by deleting "and" at the end of clause (b), replacing the "." at the end of clause (c) with "; and" and adding the following new clause (d):

(d) Purchases or redemptions of the common stock of CryoLife pursuant to a stock buyback program (each, a "Stock Buyback") in an aggregate amount not to exceed \$15,000,000; provided, that (i) both before and after giving effect to each such Stock Buyback the Credit Parties shall be in compliance with the covenants set forth in Article VI, (ii) both before and after giving effect to each such Stock Buyback no Default or Event of Default shall have occurred and be continuing, (iii) after giving effect to each such Stock Buyback the Credit Parties shall have at least \$20,000,000 of Liquidity and (iv) the Credit Parties shall promptly comply with the requirements of Section 5.3 of the Guaranty and Security Agreement with respect to any Stock acquired pursuant to a Stock Buyback which are not cancelled or retired and which remain issued and outstanding.

(b) Amendment to Section 11.1 Section 11.1 of the Credit Agreement is hereby amended by adding the following new definition of "Liquidity" in proper alphabetical order:

"Liquidity" shall mean, as of any date of determination, (a) Availability *plus* (b) available cash and Cash Equivalents in bank accounts or securities accounts subject to Control Agreements.

B. CONDITIONS TO EFFECTIVENESS

Notwithstanding any other provision of this Amendment and without affecting in any manner the rights of the Lenders hereunder, it is understood and agreed that this Amendment shall not become effective, and the Borrower shall have no rights under this Amendment, until Agent shall have received (a) duly executed signature pages to this Amendment from the Required Lenders, Borrowers, L/C Issuer, Agent and each Credit Party and (b) an amendment fee in the amount of \$37,500.

C. REPRESENTATIONS

Each Credit Party hereby represents and warrants to Lenders, L/C Issuer and Agent that:

1. The execution, delivery and performance by such Credit Party of this Amendment (a) are within such Credit Party's power; (b) have been duly authorized by all necessary corporate, limited liability company or limited partnership action; (c) are not in contravention of any provision of such Credit Party's certificate of incorporation or bylaws or other organizational documents; (d) do not violate any law or regulation, or any order or decree of any Governmental Authority; (e) do not conflict with or result in the breach or termination of, constitute a default under or accelerate any performance required by, any indenture, mortgage, deed of trust, lease, agreement or other instrument to which such Credit Party or any of its Subsidiaries is a party or by which such Credit Party or any such Subsidiary or any of their respective property is bound; (f) do not result in the creation or imposition of any Lien upon any of the property of such Credit Party or any of its Subsidiaries other than those in favor of Agent, on behalf of itself and the Lenders, pursuant to the Loan Documents; and (g) do not require the consent or approval of any Governmental Authority or any other Person;

2. This Amendment has been duly executed and delivered for the benefit of or on behalf of each Credit Party and constitutes a legal, valid and binding obligation of each Credit Party, enforceable against such Credit Party in accordance with its terms except as the enforceability hereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting creditors' rights and remedies in general; and

3. Both before and after giving effect to this Amendment, the representations and warranties contained in the Credit Agreement and the other Credit Documents are true and correct in all material respects and no Default or Event of Default has occurred and is continuing as of the date hereof.

D. OTHER AGREEMENTS

1. Continuing Effectiveness of Loan Documents. As amended hereby, all terms of the Credit Agreement and the other Loan Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Credit Parties party thereto. To the extent any terms and conditions in any of the other Loan Documents shall contradict or be in conflict with any terms or conditions of the Credit Agreement, after giving effect to this Amendment, such terms and conditions are hereby deemed modified and amended accordingly to reflect the terms and conditions of the Credit Agreement as modified and amended hereby. Upon the effectiveness of this Amendment such terms and conditions are hereby deemed modified and amended accordingly to reflect the terms and conditions of the Credit Agreement as modified and amended hereby.

2. Reaffirmation of Guaranty. Each Credit Party consents to the execution and delivery of this Amendment by all parties hereto and the consummation of the transactions described herein, and ratifies and confirms the terms of the Guaranty and Security Agreement to which such Guarantor is a party with respect to the indebtedness now or hereafter outstanding under the Credit Agreement as amended hereby and all promissory notes issued thereunder. Each Credit Party acknowledges that, notwithstanding anything to the contrary contained herein or in any other document evidencing any indebtedness of any Borrower to the Lenders or any other obligation of Borrowers, or any actions now or hereafter taken by the Lenders with respect to any obligation of Borrowers, the Guaranty to which such Credit Party is a party (i) is and shall continue to be a primary obligation of such Credit Party, (ii) is and shall continue to be an absolute, unconditional, continuing and irrevocable guaranty of payment, and (iii) is and shall continue to be in full force and effect in accordance with its terms. Nothing contained herein to the contrary shall release, discharge, modify, change or affect the original liability of any Credit Party under the Guaranty to which such Credit Party is a party.

3. Acknowledgment of Perfection of Security Interest. Each Credit Party hereby acknowledges that, as of the date hereof, the security interests and liens granted to Agent, the L/C Issuer and the Lenders under the Credit Agreement and the other Loan Documents are in full force and effect, are properly perfected and are enforceable in accordance with the terms of the Credit Agreement and the other Loan Documents.

4. Effect of Agreement. Except as set forth expressly herein, all terms of the Credit Agreement, as amended hereby, and the other Loan Documents shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of the Borrowers to the Lenders, the L/C Issuer and Agent. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of the Lenders under the Credit Agreement, nor constitute a waiver of any provision of the Credit Agreement. This Amendment shall constitute a Loan Document for all purposes of the Credit Agreement.

5. Governing Law. This Amendment shall be governed by, and construed in accordance with, the internal laws of the State of New York and all applicable federal laws of the United States of America.

6. No Novation. This Amendment is not intended by the parties to be, and shall not be construed to be, a novation of the Credit Agreement and the other Loan Documents or an accord and satisfaction in regard thereto.

7. Costs and Expenses. The Borrowers agree to pay on demand all costs and expenses of Agent in connection with the preparation, execution and delivery of this Amendment, including, without limitation, the reasonable fees and out-of-pocket expenses of outside counsel for Agent with respect thereto.

8. Counterparts. This Amendment may be executed by one or more of the parties hereto in any number of separate counterparts, each of which shall be deemed an original and all of which, taken together, shall be deemed to constitute one and the same instrument. Delivery of an executed counterpart of this Amendment by facsimile transmission, Electronic Transmission or containing an E-Signature shall be as effective as delivery of a manually executed counterpart hereof.

9. Binding Nature. This Amendment shall be binding upon and inure to the benefit of the parties hereto, their respective successors, successors-in-titles, and assigns.

10. Entire Understanding. This Amendment sets forth the entire understanding of the parties with respect to the matters set forth herein, and shall supersede any prior negotiations or agreements, whether written or oral, with respect thereto.

[signature pages to follow]

IN WITNESS WHEREOF, this Amendment has been duly executed as of the date first written above.

BORROWERS:

CRYOLIFE, INC.

By: /s/ D. A. Lee
Title: Executive V.P., COO & CFO

CRYOLIFE ACQUISITION CORPORATION

By: /s/ D. A. Lee
Title: VP Finance and Treasurer

AURAZYME PHARMACEUTICALS, INC.

By: /s/ D. A. Lee
Title: VP Finance, CFO and Treasurer

CRYOLIFE INTERNATIONAL, INC.

By: /s/ D. A. Lee
Title: VP, CFO and Treasurer

AGENT, L/C ISSUER AND LENDERS:

GENERAL ELECTRIC CAPITAL
CORPORATION, as Agent, L/C Issuer and sole Lender

By: /s/ Ryan Guenin
Its Duly Authorized Signatory

[Signature Page to Fourth Amendment to Credit Agreement]

SECOND AMENDMENT TO LEASE

This Second Amendment to Lease ("Second Amendment") is entered into by and between P&L BARRETT, L.P. ("Landlord") and CRYOLIFE, INC. (hereinafter referred to as "Tenant"), as of the date hereinafter set forth.

WITNESSETH:

WHEREAS, Amli-Land Development-I Limited Partnership ("Amli") and Tenant entered into that certain Lease having an effective date of April 14, 1995, concerning certain buildings, improvements and appurtenances, located at 1655 Roberts Boulevard, Kennesaw, Georgia 30144, in Cobb County, Georgia, as amended, as more particularly described therein ("Lease");

WHEREAS, Landlord purchased the buildings from Amli and the Lease was assigned by Amli to Landlord and Landlord has succeeded to Amli's position as landlord;

WHEREAS, the parties hereto desire to amend the Lease as hereinafter provided;

NOW THEREFORE, for and in consideration of the premises, Ten Dollars (\$10.00) in hand paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. The statements set forth in the preamble herein above are hereby incorporated herein by reference as if totally set forth herein.
2. Capitalized terms used herein shall have the meaning as defined in the Lease unless otherwise defined herein.
3. The Lease is hereby amended whereby the Term is extended for six (6) additional years through March 31, 2022 ("Extended Term"). Notwithstanding anything to the contrary contained in the Lease, the defined term, "Termination Date" shall be March 31, 2022.
4. The Lease is hereby amended whereby during the remaining Term and the Extended Term the Base Rent shall be as follows:

Term	Per/SF
04/01/2010 - 03/31/2011	\$11.15
04/01/2011 - 03/31/2012	\$11.37
04/01/2012 - 03/31/2013	\$11.60
04/01/2013 - 03/31/2014	\$11.83
04/01/2014 - 03/31/2015	\$12.17
04/01/2015 - 03/31/2016	\$12.31
04/01/2016 - 03/31/2017	\$12.56
04/01/2017 - 03/31/2018	\$12.81
04/01/2018 - 03/31/2019	\$13.06
04/01/2019 - 03/31/2020	\$13.33
04/01/2020 - 03/31/2021	\$13.59
04/01/2021 - 03/31/2022	\$13.86

5. The Lease is hereby amended as follows:

Commission. Tenant is represented by Richard Bowers & Co. (“Agent”) and Landlord agrees to pay the Agent a fee pursuant to a separate Commission Agreement between Landlord and the Agent.

6. The Lease is hereby amended as follows:

Settlement Agreement. In consideration of the Mutual Release as hereinafter provided, Landlord, without admitting any liability or wrong doing, agrees to pay Tenant the amount of \$762,000.01 (“Settlement Fee”) in two separate installments which can be paid in cash. The cash due and payable to Tenant is as follows:

- (a) First payment in the amount of \$200,000.00 shall be due and payable upon the execution of the Second Amendment; and
- (b) Second payment in the amount of \$562,000.01 shall be due and payable on April 1, 2016.

7. The Lease is hereby amended as follows:

Mutual Release. In consideration of the payment of the Settlement Fee, Landlord and Tenant agree as follows:

Tenant does hereby release, acquit, exonerate and forever discharge Landlord and its respective employees, officers, agents, advisors, trustees, legal representatives, successors and assigns of and from any and all past, present and future obligations, liabilities, responsibilities, actions, causes of actions, debts, suits, contracts, agreements, promises, claims and demands whatsoever of Tenant, for or on account of or growing or arising from, under, upon or pursuant to any written or oral agreement, document, instrument or undertaking made by Landlord with respect, or in any way directly or indirectly related to the previous dispute over Rent billed, owed, paid or collected.

Landlord does hereby release, acquit, exonerate and forever discharge Tenant and its respective employees, officers, agents, advisors, trustees, legal representatives, successors and assigns of and from any and all past, present and future obligations, liabilities, responsibilities, actions, causes of actions, debts, suits, contracts, agreements, promises, claims and demands whatsoever of Landlord, for or on account of or growing or arising from, under, upon or pursuant to any written or oral agreement, document, instrument or undertaking made by Tenant with respect, or in any way directly or indirectly related to the previous dispute over Rent billed, owed, paid or collected.

8. Tenant at the execution of this Second Amendment, agrees to execute and deliver a Tenant Estoppel Certificate concerning the Lease, including, but not limited to, that no defaults exist under the Lease, no disputes exist under the Lease, verification of terms, dates and conditions of the Lease in the form attached to the Lease.

9. Notwithstanding anything contained in the Lease, in the event of a conflict between the Lease and this Second Amendment, the terms of the Second Amendment shall control. The Lease shall remain in full force and effect except as hereby amended, and the Landlord and Tenant hereby ratify, affirm, and confirm the terms of the Lease, as hereby amended.

[Signatures commence on next page]

IN WITNESS WHEREOF, Landlord and Tenant have set their hands and seals hereunto and have caused their Second Amendment to be executed by duly authorized officers thereof, as of this 10th day of May, 2010.

LANDLORD:
P&L BARRETT, L.P., a Georgia limited partnership

BY: P&L Barrett Partner GP, LLC, a Georgia limited liability company, General Partner

By: /s/ H. Mason Zimmerman

Name: H. Mason Zimmerman

Title: Manager

Date of Execution
by Landlord
5/10/10

TENANT:

CRYOLIFE, INC.

By: /s/ Steven G. Anderson

Name: Steven G. Anderson

Title: President and CEO

Date of Execution
by Tenant:
5/5/10

(CORPORATE SEAL)

CERTIFICATIONS

I, Steven G. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 29, 2010

/s/ STEVEN G. ANDERSON
Chairman, President, and
Chief Executive Officer

I, David Ashley Lee, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 29, 2010

/s/ D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of CryoLife Inc. (the "Company") on Form 10-Q for the quarter ending June 30, 2010, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of Steven G. Anderson, the Chairman, President, and Chief Executive Officer of the Company, and David Ashley Lee, the Executive Vice President, Chief Operating Officer, and Chief Financial Officer of the Company, hereby certifies, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ STEVEN G. ANDERSON

STEVEN G. ANDERSON
Chairman, President, and
Chief Executive Officer
July 29, 2010

/s/ D. ASHLEY LEE

D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and
Chief Financial Officer
July 29, 2010