UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

X	QUARTERLY REPORT PURSUANT TO SECTION 13 (1934	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
	For the quarterly period ended March 31, 2010	
	OR	
	TRANSITION REPORT PURSUANT TO SECTION 13 (OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
	For the transition period from to	
	Commission file nu	mber: 1-13165
	CRYOLII (Exact name of registrant as	
	Florida (State or other jurisdiction of incorporation or organization)	59-2417093 (I.R.S. Employer Identification No.)
	1655 Roberts Boulevard, NW, Kennesaw, Georgia (Address of principal executive offices)	30144 (Zip Code)
	(770) 419- (Registrant's telephone numb	
	Not Appli (Former name, former address and former f	
durir	cate by check mark whether the registrant (1) has filed all reports required to lag the preceding 12 months (or for such shorter period that the registrant was irements for the past 90 days.	
Yes	⊠ No □	
be su	cate by check mark whether the registrant has submitted electronically and polymitted and posted pursuant to Rule 405 of Regulation S-T during the precedit and post such files).	
Yes	□ No □	
	cate by check mark whether the registrant is a large accelerated filer, an accel- nations of "large accelerated filer," "accelerated filer" and "smaller reporting of	
	e accelerated filer (Do not check if a smaller reporting company)	Accelerated filer ⊠ Smaller reporting company □
Indic	cate by check mark whether the registrant is a shell company (as defined in R	ule 12b-2 of the Exchange Act).
Yes	□ No ⊠	
Indic	cate the number of shares outstanding of each of the issuer's classes of comme	on stock, as of the latest practicable date.
	Class	Outstanding at April 23, 2010
	Common Stock, \$0.01 par value per share	28,652,288 shares

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements.

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

		nths Ended ch 31,
	2010	2009
_	(Unau	ıdited)
Revenues:	Ф1 <u>г. г.о.</u>	012.540
Preservation services	\$15,583	\$13,548
Products Other	13,955 179	12,945 195
Total revenues	29,717	26,688
1 otal revenues	29,/1/	20,000
Cost of preservation services and products:		
Preservation services	9,398	7,491
Products	2,527	1,962
Total cost of preservation services and products	11,925	9,453
Gross margin	17,792	17,235
0		
Operating expenses: General, administrative, and marketing	13,817	12,748
Research and development	1.292	1,026
Total operating expenses	15,109	
Total operating expenses	15,109	13,774
Operating income	2,683	3,461
Interest expense	51	49
Interest income	(4)	(43)
Gain on valuation of derivative	(817)	_
Other expense, net	120	152
Income before income taxes	3,333	3,303
Income tax expense	1,399	1,354
N	0.4004	0.1010
Net income	<u>\$ 1,934</u>	\$ 1,949
Income per common share:		
Basic	\$ 0.07	\$ 0.07
Diluted	\$ 0.07	\$ 0.07
Waighted average common shares outstanding.		
Weighted-average common shares outstanding: Basic	28,235	28,009
Diluted	28,233	28,230
Differen	26,339	20,230

 $See\ accompanying\ Notes\ to\ Summary\ Consolidated\ Financial\ Statements.$

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

	March 31, 2010	December 31, 2009
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 32,399	\$ 30,121
Restricted securities	5,300	
Receivables, net	15,386	14,636
Deferred preservation costs	34,693	36,445
Inventories	6,265	6,446
Deferred income taxes	5,694	5,694
Prepaid expenses and other current assets	3,234	2,186
Total current assets	102,971	95,528
Property and equipment, net	13,881	14,309
Investment in equity securities	6,142	3,221
Restricted securities	_	5,000
Patents, net	3,471	4,248
Trademarks and other intangibles, net	2,720	2,724
Deferred income taxes	7,373	8,075
Other long-term assets	784	754
Total assets	<u>\$137,342</u>	\$ 133,859
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 3,693	\$ 2,954
Accrued compensation	2,231	3,361
Accrued procurement fees	3,297	3,228
Accrued expenses and other current liabilities	6,208	6,302
Deferred income	2,467	2,646
Derivative liability	525	725
Line of credit	315	_
Notes payable Total current liabilities	1,490 20.226	19,216
Line of credit	3.951	315 3,882
Other long-term liabilities		
Total liabilities	24,177	23,413
Shareholders' equity:		
Preferred stock	_	
Common stock (issued shares of 29,645 in 2010 and 29,475 in 2009)	297	295
Additional paid-in capital	129,273	128,427
Retained deficit	(10,418)	(12,352)
Accumulated other comprehensive loss	(42)	(38)
Treasury stock at cost (shares of 1,009 in 2010 and 1,000 in 2009)	(5,945)	(5,886)
Total shareholders' equity	113,165	110,446
Total liabilities and shareholders' equity	<u>\$137,342</u>	\$ 133,859

See accompanying Notes to Summary Consolidated Financial Statements.

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

		oths Ended ch 31,
	2010	2009
	(Unau	ıdited)
Net cash from operating activities:		
Net income	\$ 1,934	\$ 1,949
Adjustments to reconcile net income to net cash from operating activities:		
Depreciation and amortization	968	1,052
Deferred income taxes	702	1,002
Non-cash compensation	721	607
Write-down of intangible asset	729	_
Gain on valuation of derivative	(817)	_
Other non-cash adjustments to income	128	(94)
Changes in operating assets and liabilities:		
Receivables	(759)	(1,101)
Deferred preservation costs and inventories	1,939	(1,026)
Prepaid expenses and other assets	(1,033)	541
Accounts payable, accrued expenses, and other liabilities	(572)	(1,336)
Net cash flows provided by operating activities	3,940	1,594
Net cash from investing activities:		
Capital expenditures	(481)	(679)
Purchases of restricted securities and investments	(2,604)	
Other	(33)	(189)
Net cash flows used in investing activities	(3,118)	(868)
Net cash from financing activities:		
Proceeds from financing of insurance policies	1,481	_
Principal payments on capital leases and short-term notes payable	(36)	(13)
Proceeds from exercise of stock options and issuance of common stock	99	114
Purchase of treasury stock	(59)	_
Other	(31)	142
Net cash flows provided by financing activities	1,454	243
Increase in cash and cash equivalents	2,276	969
Effect of exchange rate changes on cash	2	12
Cash and cash equivalents, beginning of period	30,121	17,201
Cash and cash equivalents, end of period	\$32,399	\$18,182

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 months ended March 31, 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 months ended March 31, 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 March 31, 2010 is as follows (in thousands):

	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
U.S. Treasury debt securities	\$8,999	\$ —	\$ —	\$ 8,999
U.S. Treasury money market funds	_	10,005	_	10,005
Restricted securities:				
Money market funds	_	300	_	300
U.S. Treasury money market funds		5,000	_	5,000
Total assets	8,999	15,305		24,304
Liabilities				
Derivative liability		_	(525)	(525)
Total liabilities		_	(525)	(525)
Net assets (liabilities)	\$8,999	\$15,305	\$(525)	\$23,779

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	(817)
Purchases, issuances, and settlements	617
Balance as of March 31, 2010	\$ 525

Unroalized

Letimated

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
March 31, 2010 (Unaudited)			
Cash equivalents:			
U.S. Treasury money market funds	\$10,005	\$ —	\$10,005
U.S. Treasury debt securities	8,999	_	8,999
Restricted securities:			
Money market funds	300	_	300
U.S. Treasury money market funds	5,000	_	5,000
<u>December 31, 2009</u>			
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 March 31, 2010 \$300,000 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 March 31, 2010 and December 31, 2009 \$5.0 million of the Company's 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 gross realized gains or losses on sales of available-for-sale securities for the three months ended March 31, 2010 and 2009. At March 31, 2010 \$300,000 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 "Agreement"). In November 2009 and in January 2010 the Company executed stock purchase agreements to purchase a total of approximately 2.3 million shares of common stock in Medafor for \$4.8 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 Sheet.

The carrying value of this investment was \$6.1 million and \$3.2 million as of March 31, 2010 and December 31, 2009, respectively, which includes the purchase price and adjustments to record certain of the stock purchase agreements' embedded derivative liabilities on the purchase date, as discussed further below.

During the quarter ended March 31, 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.

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 agreement, 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 (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 March 31, 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 0.37% to 1.50%.

The value of the Medafor Derivative was \$525,000 and \$725,000 as of March 31, 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 \$817,000 for the three months ended March 31, 2010. The non-cash gain on valuation of the Medafor Derivative was largely due to the Company's offer to purchase Medafor being withdrawn in the first quarter of 2010 because it was less likely that CryoLife would make payments on the derivative. This gain 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 \$617,000 related to additional purchases of Medafor common stock during the quarter. 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 March 31, 2010.

Legal Action

Overview

As previously reported in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, the Company has filed a lawsuit against Medafor, Inc. 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 Racketeer Influenced and Corrupt Organizations Act ("Georgia RICO"). The lawsuit arises out of a distribution agreement between the parties ("Agreement"), pursuant to which the Company has the right to distribute a product manufactured by Medafor (the "Product") under the name HemoStase. On March 8, 2010, pursuant to the Court's February 18, 2010 order that reinstated the Company's fraud and negligent misrepresentation claims, the Company filed a Third Amended Complaint, asserting those claims, reasserting its recast Georgia RICO Claim, and reasserting its remaining claims for, among other things, breach of contract. On March 22, 2010 Medafor filed a partial motion to dismiss the Third Amended Complaint, asking the Court to dismiss only the Georgia RICO claim. On April 15, 2010, the Company filed its response brief in opposition to Medafor's partial motion to dismiss the Third Amended Complaint.

Medafor has yet to file their reply brief in support of the partial motion to dismiss. The Company does not know when the Court will rule on the new partial motion to dismiss.

Medafor's 2010 Notices of Termination

As previously reported in the Company's Current Report on Form 8-K dated March 5, 2010, Medafor informed the Company on March 2, 2010 of its belief that the Company had materially breached its duties and obligations under the Agreement and gave the Company notice of its intent to terminate the Agreement if the alleged material breach was not cured by April 5, 2010. Medafor contends that the alleged material breach of the Agreement occurred because the Company's employees and representatives in New Jersey were allegedly offering certain bundling packages beyond the scope of the Agreement and intentionally misrepresenting the scope of the Agreement and the nature of the relationship between the parties. On March 23, 2010, the Company sent a letter to Medafor responding to Medafor's allegations contained in the March 2, 2010 letter, in which the Company explained, with evidentiary support, its contention that it did not materially breach the Agreement and that Medafor's allegations of intentionally inappropriate marketing were without merit.

Medafor and the Company agreed on March 5, 2010 that if Medafor decides after April 5, 2010 that a material breach has occurred in reference to the matters discussed above, and that the Company has failed to cure the breach, Medafor will not terminate the Agreement from the date on which Medafor informs the Company of its decision but instead will give the Company three-weeks notice before terminating. In exchange, the Company has agreed that it will not, prior to being informed of Medafor's decision, petition a court to enjoin the threatened termination of the Agreement. The parties also agreed that the three-week period would not begin to run until one of the two parties affirmatively and explicitly informs the other that it has begun.

As previously reported in the Company's Current Report on Form 8-K dated March 19, 2010, Medafor informed the Company on March 18, 2010 of its belief that the Company repudiated the Agreement by failing to provide certain requested assurances within thirty days. Medafor alleges that it had reasonable grounds to demand, pursuant to Georgia law, that the Company take certain steps that Medafor asserts amounted to a request for "adequate assurances" of CryoLife's performance with respect to the Agreement. On March 22, 2010 CryoLife informed Medafor that it disputed Medafor's assertions and that Medafor had no right to terminate the Agreement. On March 19, 2010, the parties entered into an agreement whereby the parties agreed to an accelerated briefing schedule for CryoLife's motion for emergency preliminary injunction to require Medafor to comply with the Agreement. The parties have already filed their respective briefs on the motion. The Court scheduled a hearing on the Company's motion for a preliminary injunction for May 10, 2010. The Company does not know when the Court will rule on the motion for preliminary injunction.

5. Inventories

Inventories are comprised of the following (in thousands):

	March 31, 2010	December 31, 2009
	(unaudited)	
Raw materials	\$ 3,817	\$ 4,144
Work-in-process	421	278
Finished goods	2,027	2,024
Total inventories	\$ 6,265	\$ 6,446

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 March 31, 2010 the Company had a net deferred tax asset of \$13.1 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 March 31, 2010 and

December 31, 2009 related to state net operating loss carryforwards 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.

7. Debt

GE Credit Agreement

On March 26, 2008 CryoLife entered into a credit agreement with GE Capital as lender, as amended on January 12, 2010 (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 Consolidated Balance Sheets, as they are restricted for the term of the GE Credit Agreement. The GE Credit Agreement also 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 has reclassified the amounts due under the GE Credit Agreement as short-term debt and the related restricted securities as a current asset on the March 31, 2010 Summary Consolidated Balance Sheet. As of March 31, 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 March 31, 2010 the outstanding balance of the GE Credit Agreement was \$315,000, the aggregate interest rate was 6.25%, and the remaining availability was \$14.5 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 March 31, 2010 and December 31, 2009 the aggregate outstanding balances under these agreements were \$1.5 million and zero, respectively.

Total interest expense was \$51,000 and \$49,000 for the three months ended March 31, 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):

		ch 31,
	2010	2009
	(Una	udited)
Net income	\$1,934	\$ 1,949
Change in translation adjustment	(4)	12
Comprehensive income	\$1,930	\$ 1,961

Three Months Ended

The tax effect on the translation adjustment is zero for each period presented. The accumulated other comprehensive loss of \$42,000 and \$38,000 as of March 31, 2010 and December 31, 2009, respectively, consisted solely of currency translation adjustments.

9. Income Per Common Share

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

		nths Ended ch 31,
	2010	2009
	(Unat	udited)
Basic income per common share:		
Net income	\$ 1,934	\$ 1,949
Basic weighted-average common shares outstanding	28,235	28,009
Basic income per common share	\$ 0.07	\$ 0.07
Diluted income per common share:		
Net income	\$ 1,934	\$ 1,949
Basic weighted-average common shares outstanding	28,235	28,009
Effect of dilutive stock options ^a	155	142
Effect of dilutive restricted stock awards	149	79
Diluted weighted-average common shares outstanding	28,539	28,230
Diluted income per common share	\$ 0.07	\$ 0.07

Stock options to purchase 1.1 million common shares were excluded from the calculation of diluted weighted-average common shares outstanding for each of the quarters ended March 31, 2010 and 2009, 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, and the issuance of additional restricted stock awards.

10. 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.

Stock Awards

The Compensation Committee of the Company's Board of Directors authorized awards of stock from approved stock incentive plans to certain Company officers totaling 152,000 and 87,000 shares of common stock during the quarters ended March 31, 2010 and 2009, respectively, which had an aggregate market value of \$957,000 and \$717,000, respectively.

Stock Options

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 quarters ended March 31, 2010 and 2009, respectively, with exercise prices equal to the stock prices on the respective grant dates.

Employees purchased common stock totaling 15,000 and 14,000 shares in the quarters ended March 31, 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 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 the valuation of the options 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:

		ths Ended 31, 2010		ths Ended 31, 2009	
	Stock Options	ESPP Options	Stock Options	ESPP Options	
	(Unau	idited)	(Unaudited)		
Expected life of options	3.75 Years	.25 Years	4.00 Years	.25 Years	
Expected stock price volatility	.650	.370	.650	1.035	
Risk-free interest rate	1.29%	0.05%	1.51%	0.08%	

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

	March 31,			
	1	2010		2009
	(Unaudite			
Stock grant expense	\$	273	\$	218
Stock option expense	_	507		448
Total stock compensation expense	\$	780	\$	666

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 \$59,000 in each of the three months ended March 31, 2010 and 2009 of the stock compensation expense into its deferred preservation costs and inventory costs.

As of March 31, 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 March 31, 2010 this expense is expected to be recognized over a weighted average period of 1.8 years. As of March 31, 2010 there was approximately \$2.4 million in total unrecognized compensation costs related to unvested stock options, before considering the effect of expected forfeitures. As of March 31, 2010 this expense is expected to be recognized over a weighted average period of 1.9 years.

11. 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 and from shipments of previously preserved orthopaedic tissues. 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):

		onths Ended rch 31,
	2010	2009
	(Una	udited)
Revenues:		
Preservation services	\$15,583	\$13,548
Medical devices	13,955	12,945
Other ^a	179	195
Total revenues	29,717	26,688
Cost of preservation services and products:		
Preservation services	9,398	7,491
Medical devices	2,527	1,962
Total cost of preservation services and products	11,925	9,453
Gross margin:		
Preservation services	6,185	6,057
Medical devices	11,428	10,983
Other ^a	179	195
Total gross margin	\$17,792	\$17,235
The following table summerizes not revenues by product (in thousands).		

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

		ths Ended
	2010	2009
	(Unau	ıdited)
Preservation services:		
Cardiac tissue	\$ 6,903	\$ 5,592
Vascular tissue	8,680	7,871
Orthopaedic tissue		85
Total preservation services	15,583	13,548
Products:		
BioGlue and BioFoam	11,912	11,764
HemoStase	2,105	1,110
Other medical devices	(62)	71
Total products	13,955	12,945
Other ^a	179	195
Total revenues	\$29,717	\$26,688

^a For the quarter ended March 31, 2010 and 2009, the "Other" designation includes grant revenue.

12. Commitments and Contingencies

Liability Claims

In the normal course of business we are made aware of adverse events involving our 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 March 31, 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):

	March 31, 2010		De	ecember 31, 2009
	(Ur	naudited)		
Short-term liability	\$	1,890	\$	1,890
Long-term liability		1,870		1,790
Total liability		3,760		3,680
Short-term recoverable		675		660
Long-term recoverable	<u>_</u>	725		680
Total recoverable		1,400		1,340
Total net unreported loss liability	\$	2,360	\$	2,340

Further analysis indicated that the liability as of March 31, 2010 could be estimated to be as high as \$8.1 million, after including a reasonable margin for statistical fluctuations calculated based on actuarial simulation techniques.

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 April 27, 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 has been distributing for Medafor, Inc. ("Medafor"), as well as other medical devices.

For the quarter ended March 31, 2010 CryoLife achieved record quarterly revenues of \$29.7 million. In addition, CryoLife generated \$3.9 million in cash from operations during the first quarter of 2010, despite the fact that the Company typically experiences higher operating cash outflows in the first quarter of each year. The additional cash is largely due to the Company's strong sales growth coupled with careful management of its operating cash requirements, illustrated by the \$1.8 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 first quarter 2010 results.

Recent Events

During the fourth quarter of 2009 and in January 2010, CryoLife completed the purchase of approximately 2.3 million shares of Medafor common stock for approximately \$2 per share. In January 2010 CryoLife announced that it had contacted Medafor's board and proposed a purchase price of \$2 per share for the remaining outstanding shares, to be paid in a mixture of cash and CryoLife stock. On March 12, 2010 Medafor announced that it had signed a long-term raw material supply agreement with Magle Life Sciences of Sweden ("Magle"), the supplier of the key powder component for HemoStase, in exchange for an undisclosed amount of cash and 1.8 million shares of Medafor common stock. The Company believes, based on the limited information made available to Medafor shareholders, that the Medafor board's stated strategic rationale for entering into the Magle transaction does not justify the significant dilution suffered by Medafor shareholders. See also Part II, Item 1a, "Risk Factors." Shortly thereafter, CryoLife withdrew its \$2 per share offer to purchase Medafor.

The Company's previous attempt to purchase Medafor and the Company's ongoing litigation with Medafor may negatively impact the Company's ability to distribute HemoStase, up to and including causing the Company to cease distribution of HemoStase. Medafor informed the Company on March 18, 2010 that the distribution agreement between the parties was terminated. CryoLife filed an emergency motion for preliminary injunction in Federal Court requesting that the Court order the agreement to not be terminated. The Court has set a hearing date for May 10, 2010. CryoLife does not know when the Court will rule on its motion. Medafor stated that while the motion is pending it will treat the distribution agreement as effective, but that it can choose to change this treatment at any time. The Company submitted two purchase orders in April 2010. On April 28, 2010 CryoLife received notice that Medafor agreed to partially fulfill the first order and has rejected the second purchase order because Medafor believed CryoLife had repudiated the Agreement. This position is inconsistent with Medafor's previous statements that it would treat the Agreement as not terminated. Based on this rejection, CryoLife does not believe Medafor will fulfill any further purchase orders absent a court order. The Company believes that it presently has enough inventory, with or without the fulfillment of any further purchase orders, to meet its business needs into July 2010. See also Part II, Item 1, "Legal Proceedings" and Part I, Item 2, "Risks and Uncertainties."

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 March 31, 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

	Three Mon	Revenues for the Three Months Ended March 31,		Percentage ues for the hs Ended 31,
	2010	2009	2010	2009
	(Un au	ıdited)		
Preservation services:				
Cardiac tissue	\$ 6,903	\$ 5,592	23%	21%
Vascular tissue	8,680	7,871	29%	30%
Orthopaedic tissue		85	%	%
Total preservation services	15,583	13,548	52%	51%
Products:				
BioGlue and BioFoam	11,912	11,764	40%	44%
HemoStase	2,105	1,110	7%	4%
Other medical devices	(62)	71	%	%
Total products	13,955	12,945	47%	48%
Other	179	195	1%	1%
Total	\$29,717	\$26,688	100%	100%

Revenues increased 11% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. A detailed discussion of the changes in preservation services revenues, product revenues, and other revenues for the three months ended March 31, 2010 is presented below.

Preservation Services

Revenues from preservation services increased 15% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009 primarily due to an increase in cardiac preservation services revenues and to a lesser extent an increase in vascular preservation services revenues. See further discussion of cardiac and vascular preservation services revenues below.

The Company's procurement of tissues increased 3% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. As a part of the normal course of business, CryoLife routinely adjusts its criteria for accepting incoming tissue based on certain variables. These variables include changes in demand for certain types of tissues processed by the Company, the level of tissues currently available for shipment, changes in incoming tissue availability, and the likelihood that certain tissues will pass the Company's quality controls and testing processes. The increase in procurement for the three months ended March 31, 2010 was primarily the result of changes in tissue acceptance criteria made during 2009, which increased the procurement of vascular tissues, partially offset by a decrease in cardiac tissues. The Company may continue to make changes in incoming tissue acceptance criteria, and as a result, the Company's level of procurement may continue to vary from quarter-to-quarter and year-to-year. The Company believes that its existing tissues available for shipment and current procurement levels are sufficient to support anticipated future demand for cardiac and vascular tissues for the reasonably foreseeable future.

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 23% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. This increase was primarily due to the aggregate impact of volume and tissue mix, which together increased revenues by 24%, partially offset by a decrease in average service fees, which decreased revenues by 1%.

The 24% increase in revenues from the net effect of volume and tissue mix was primarily due to a 21% increase in shipments of heart valves and cardiac patch tissues, primarily in CryoPatch SG, CryoValve SGPV, and standard processed pulmonary valves. The Company believes that the increase in shipments of cardiac tissues in the three months ended March 31, 2010 was primarily due to increased demand for these tissues in domestic markets and to a lesser extent to increased demand in Europe. This increase was partially due to the efforts of the Company's cardiac specialists, its cardiac tissue focused sales force. Another contributing

factor is 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.

Domestic revenues accounted for 93% and 95% of total cardiac preservation services revenues in the three months ended March 31, 2010 and 2009, respectively.

Vascular Preservation Services

Revenues from vascular preservation services increased 10% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009, primarily due to an 8% increase in unit shipments of vascular tissues, which increased revenues by 9% and an increase in average service fees, which increased revenues by 1%.

The increase in vascular volume for the three months ended March 31, 2010 was primarily due to increases in shipments of saphenous veins, due to 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 8% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. This increase was 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 increased 1% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. This increase was primarily due to an increase in average selling prices, which increased revenues by 5%, and the favorable impact of foreign exchange, which increased revenues by 1%, partially offset by a 5% decrease in the volume of milliliters sold, which decreased revenues by 5%.

Sales of BioGlue and BioFoam for the three months ended March 31, 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 months ended March 31, 2010.

The increase in average selling prices for the three months ended March 31, 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.

The decrease in sales volume for BioGlue and BioFoam for the three months ended March 31, 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; and the efforts of some large competitors in enforcing contract purchasing requirements.

The impact of foreign exchange for the three months ended March 31, 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 months ended March 31, 2010 as compared to the respective period 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.

Domestic revenues accounted for 69% and 72% of total BioGlue revenues in the three months ended March 31, 2010 and 2009, respectively.

CryoLife is currently engaged in legal action with Tenaxis, Inc. ("Tenaxis"), which has sought to invalidate CryoLife's main BioGlue patent in Germany. On April 22, 2010 the German Patent Court issued an order nullifying this BioGlue patent. The Company expects to appeal the court's ruling, although the appeal may not be heard until 2012. In the event that this main BioGlue patent is ultimately declared invalid, CryoLife would still be able to sell BioGlue in Germany and the rest of Europe; however, the German court's ruling, if upheld on appeal, would prevent CryoLife from suing a party to prevent them from infringing the main BioGlue patent in Germany. Sales of BioGlue in Germany represented approximately 4% of total Company BioGlue and BioFoam revenues for the three months ended March 31, 2010.

HemoStase

Revenues from the sale of HemoStase increased 90% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009. This increase was primarily due to a 90% increase in the volume of grams sold, which increased revenues by 93%, partially offset by a decrease in average selling prices, which decreased revenues by 3%.

The increase in sales volume for the three months ended March 31, 2010 was due to an increase in shipments of HemoStase in both domestic and international markets. CryoLife began marketing and distribution of HemoStase under a multinational distribution agreement with Medafor in the second quarter of 2008.

The decrease in average selling prices for the three months ended March 31, 2010 was primarily due to the increasing penetration of HemoStase in international markets through the Company's network of independent distributors. Sales of HemoStase to distributors in international markets generally have lower average selling prices than the Company's domestic sales.

Domestic revenues accounted for 69% and 74% of total HemoStase revenues in the three months ended March 31, 2010 and 2009, respectively.

If the distribution agreement with Medafor remains in place, the Company believes that HemoStase revenues will increase for the full year 2010 as compared to 2009, as this product is still in a high growth phase, due to its limited penetration in the Company's existing customer base. However, the Company's previous attempt to purchase Medafor and the Company's ongoing litigation with Medafor may negatively impact the Company's ability to distribute HemoStase, up to and including causing the Company to cease distribution of HemoStase. Medafor informed the Company on March 18, 2010 that the distribution agreement between the parties was terminated. CryoLife filed an emergency motion for preliminary injunction in Federal Court requesting that the Court order the agreement to not be terminated. The Court has set a hearing date for May 10, 2010. CryoLife does not know when the Court will rule on its motion. Medafor stated that while the motion is pending it will treat the distribution agreement as effective, but that it can choose to change this treatment at any time. The Company submitted two purchase orders in April 2010. On April 28, 2010 CryoLife received notice that Medafor agreed to partially fulfill the first order and has rejected the second purchase order because Medafor believed CryoLife had repudiated the Agreement. This position is inconsistent with Medafor's previous statements that it would treat the Agreement as not terminated. Based on this rejection, CryoLife does not believe Medafor will fulfill any further purchase orders absent a court order. The Company believes that it presently has enough inventory, with or without the fulfillment of any further purchase orders, to meet its business needs into July 2010. If Medafor is successful in terminating the distribution agreement CryoLife expects 2010 HemoStase revenues to be materially, adversely impacted. See also Part II, Item 1, "Legal Proceedings" and Part I, Item 2, "Risks and Uncertainties."

Other Revenues

Other revenues for the three months ended March 31, 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 March 31, 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 March 31, 2010 CryoLife had \$2.5 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	
	March 31,	
	2010	2009
Cost of preservation services	\$ 9,398	\$ 7,491
Cost of preservation services as a percentage of preservation services revenues	60%	55%

Thus Months Ended

Cost of preservation services increased 25% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009.

The increase in cost of preservation services in the three months ended March 31, 2010 was primarily due to an increase in cardiac and vascular tissues shipped, as discussed above, and an 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.

The increase in cost of preservation services as a percentage of preservation services revenues for the three months ended March 31, 2010 was primarily due to the increase in the per unit cost of processing tissues, partially offset by an increase in average service fees, which had a small favorable effect.

Cost of Products

	Three Mo	nths Ended
	Mar	rch 31,
	2010	2009
Cost of products	\$ 2,527	\$ 1,962
Cost of products as a percentage of product revenues	18%	15%

Cost of products increased 29% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009.

The increase in cost of products in the three months ended March 31, 2010 was primarily due to the increase in shipments of HemoStase, as discussed above. To a lesser extent, the increase in cost of products was due to a slight increase in the per unit cost of BioGlue, largely offset by a decrease in the per unit cost of HemoStase. The per unit cost of HemoStase decreased due to increased distribution of HemoStase internationally, as international product has a reduced cost.

The increase in cost of products as a percentage of product revenues for the three months ended March 31, 2010 was primarily due to increasing revenues from HemoStase, which has a lower profit margin than BioGlue, as well as an increase in the per unit cost of BioGlue, partially offset by an increase in BioGlue average selling prices, as discussed above.

Operating Expenses

General, Administrative, and Marketing Expenses

	Three Months Ended	
	March 31,	
	2010	2009
General, administrative, and marketing expenses	\$13,817	\$12,748
General, administrative, and marketing expenses as a percentage of total revenues	46%	48%

General, administrative, and marketing expenses increased 8% for the three months ended March 31, 2010 as compared to the three months ended March 31, 2009.

The increase in general, administrative, and marketing expenses for the three months ended March 31, 2010 was primarily due to an increase in spending on legal and professional fees. Expenses in the three months ended March 31, 2010 included \$729,000 in previously capitalized legal fees associated with BioGlue patent litigation in Germany, approximately \$415,000 in costs associated with litigation with Medafor, and approximately \$380,000 in business development costs, primarily associated with the Company's proposal to acquire Medafor.

As discussed in "BioGlue and BioFoam" above, on April 22, 2010 the German Patent Court issued an order nullifying the Company's BioGlue patent in Germany, after previously notifying the Company in March that it would do so. With the likelihood that any appeal of this order would not be heard until 2012 and with the postponement of the patent infringement proceeding, the Company deemed it appropriate to write down the \$729,000 in previously capitalized patent defense costs during the first quarter of 2010. See further discussion in Part II, Item 1, "Legal Proceedings."

The Company's general, administrative, and marketing expenses included \$651,000 and \$553,000 for the three months ended March 31, 2010 and 2009, respectively, related to the grant of stock options and restricted stock awards.

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

Research and Development Expenses

	Mar	ch 31,
	2010	2009
Research and development expenses	\$ 1,292	\$ 1,026
Research and development expenses as a percentage of total revenues	4%	4%

Three Months Ended

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 \$51,000 and \$49,000 for the three months ended March 31, 2010 and 2009, respectively. Interest expense for the three months ended March 31, 2010 and 2009 included interest incurred related to the Company's debt, capital leases, and interest related to uncertain tax positions.

Interest income was \$4,000 and \$43,000 for the three months ended March 31, 2010 and 2009, respectively. Interest income for the three months ended March 31, 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 \$817,000 for the three months ended March 31, 2010. During the fourth quarter of 2009 and the first quarter of 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 the Company's withdrawal of its offer to purchase Medafor in the first quarter of 2010, resulted in a non-cash gain for the three months ended March 31, 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.

Earnings

	Three Mon	iths Ended
	Marc	h 31,
	2010	2009
Income before income taxes	\$ 3,333	\$ 3,303
Income tax expense	1,399	1,354
Net income	\$ 1,934	\$ 1,949
Diluted weighted-average common shares outstanding	28,539	28,230
Diluted income per common share	\$ 0.07	\$ 0.07

Income before income taxes for the three months ended March 31, 2010 was comparable to the three months ended March 31, 2009. Income before income taxes for the three months ended March 31, 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% and 41% for the three months ended March 31, 2010 and 2009, respectively. Net income and diluted income per common share for the three months ended March 31, 2010 were comparable to the corresponding period in 2009.

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 March 31, 2010 net working capital (current assets of \$102.9 million less current liabilities of \$20.2 million) was \$82.7 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 three months ended March 31, 2010 arose out of general working capital needs, the acquisition of Medafor common stock, and the payment of legal and professional fees. Legal and professional fees during the three months ended March 31, 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 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 \$1.8 million during the first quarter of 2010. 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 on January 12, 2010 (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 \$14.5 million was available for borrowing as of March 31, 2010. As of March 31, 2010 the outstanding balance under this agreement was \$315,000. 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.

The Company's cash equivalents include advance funding received under the DOD Grants for the continued development of protein hydrogel technology. As of March 31, 2010 \$2.5 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, 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 utilized in 2010.

Liability Claims

As of March 31, 2010 the Company had accrued a total \$3.8 million for the estimated costs of unreported tissue processing and product liability claims related to services performed and products sold prior to March 31, 2010 and had recorded a receivable of \$1.4 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 \$8.1 million, after including a reasonable margin for statistical fluctuations calculated based on actuarial simulation techniques. The \$3.8 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 \$3.9 million for the three months ended March 31, 2010 as compared to \$1.6 million for the three months ended March 31, 2009. The increase in the Company's working capital needs was less in the three months ended March 31, 2010 than in the three months ended March 31, 2009, primarily due to a reduction in the Company's deferred preservation cost balances.

The current year cash provided of \$3.9 million was primarily due to net income generated during the period and the net effect of non-cash items, partially offset by an increase in working capital needs due to the timing of receipts and payments in the ordinary course of business.

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 three months ended March 31, 2010 these non-cash items included a favorable \$968,000 in depreciation and amortization expense, \$702,000 in deferred income taxes, and \$721,000 in non-cash stock based compensation, and \$729,000 in write-down of intangible asset, partially offset by an \$817,000 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 three months ended March 31, 2010 these changes included \$759,000 due to the increase in receivables, \$1.0 million due to the timing difference between making cash payments and the expensing of assets, including prepaid insurance policy premiums, and an unfavorable \$572,000 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 a favorable \$1.9 million due to decreases in deferred preservation costs and inventory balances.

Net Cash from Investing Activities

Net cash used in investing activities was \$3.1 million for the three months ended March 31, 2010 as compared to \$868,000 for the three months ended March 31, 2009. The current year cash used was primarily due to \$481,000 in capital expenditures and \$2.6 million in purchases of restricted securities and investments, primarily related to the purchase of Medafor common stock.

Net Cash from Financing Activities

Net cash provided by financing activities was \$1.5 million for the three months ended March 31, 2010 as compared to \$243,000 for the three months ended March 31, 2009. The current year cash provided was primarily due to \$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 March 31, 2010 are as follows (in thousands):

		Remain	der of					
	Total	2010	0	2011	2012	2013	2014	Thereafter
Operating leases	\$15,451	\$ 1,	,941	\$2,556	\$2,505	\$2,466	\$2,501	\$ 3,482
Research obligations	3,215	1,	,670	983	562	_	_	_
Compensation payments	2,474		_	489	_	993	992	_
Insurance premium obligations	1,948	1,	,815	133	_	_	_	_
Purchase commitments	628		609	19	_	_	_	_
Line of credit	315		_	315	_	_	_	_
Royalty payments	205		_	205	_	_	_	_
Other obligations	429		416	10	3			
Total contractual obligations	\$24,665	\$ 6,	,451	\$4,710	\$3,070	\$3,459	\$3,493	\$ 3,482

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.

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 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 line of credit obligation results from the Company's borrowing of funds under the GE Credit Agreement. The timing of this obligation is based on the agreement's March 25, 2011 expiration date, at which time the outstanding principal balance will be due. The table above does not include interest and fees on the line of credit, as these can vary due to changes in the level of borrowings and changes in interest rates.

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 \$842,000, because the Company could 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 specified purchases of HemoStase. The Company's exclusive distribution agreement 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 agreement, the exclusive distribution agreement may be terminated by Medafor.

Capital Expenditures

Capital expenditures for the three months ended March 31, 2010 were \$481,000 compared to \$679,000 for the three months ended March 31, 2009. Capital expenditures in the first quarter of 2010 were primarily related to routine purchases of tissue processing, manufacturing, computer, and office equipment 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," "should," "pro forma," "potential," "pending," "intend," "believe," "expect," "anticipate," "estimate," "plan," "future," and other similar expressions generally identify forwarding-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 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 regarding the timing of court rulings in its legal proceedings and actions the Company may take during the course of litigation;
- The Company's estimate of probable losses and anticipated recoveries for unreported liability claims;
- · Estimated liability for uncertain tax positions and interest and penalties;
- Anticipated future demand for cardiac and vascular tissues;
- · Management's beliefs that current cardiac and vascular procurement levels are sufficient to support future demand;
- The Company's expectations regarding any future changes to its incoming tissue acceptance criteria and resultant variances in the Company's level of tissue procurement;
- Anticipated impact of changes in interest rates and foreign currency exchange rates;
- 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 on the Company's distribution of HemoStase and relationship with Medafor;
- The Company's belief that if the distribution agreement with Medafor remains in place, HemoStase revenues will increase in 2010 as compared to 2009;
- The Company's belief that it presently has enough HemoStase inventory, with or without the fulfillment of any further purchase orders, to meet its business needs into July 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, and for other corporate purposes;
- The Company's expectations regarding its borrowing capacity under the GE Credit Agreement;
- 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;
- 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 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 our distribution agreement with it, we will be unable to continue to distribute HemoStase, which will have a material adverse impact on our revenues and profitability;
- · Healthcare policy changes, including pending proposals 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;
- 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;
- We have not paid cash dividends on our capital stock and may be unable to do so due to legal or contractual restrictions; and
- Our CryoValve SG pulmonary heart valves have a one year shelf life.

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 \$32.4 million and \$5.0 million of the Company's restricted securities and interest paid on the Company's variable rate line of credit as of March 31, 2010. A 10% adverse change in interest rates as compared to the rates experienced by the Company in the three months ended March 31, 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 three months ended March 31, 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 March 31, 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 March 31, 2010 as compared to the weighted average exchange rates experienced by the Company for the three months ended December 31, 2009 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 March 31, 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 March 31, 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 CryoLife's main BioGlue patent (No. EP 0 650 512) in the Federal Patent Court in the State of Bavaria 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, the Federal Patent Court held a hearing on the nullity action on November 24, 2009. On March 2, 2010, as previously reported in CryoLife's 8-K dated March 5, 2010, CryoLife received a brief notice from the Federal Patent Court in Munich that this BioGlue patent in Germany will be declared invalid. On April 22, 2010 the German Patent Court issued an order nullifying this BioGlue patent. CryoLife expects to appeal the Court's ruling to the German Supreme Court. An appeal will stay the nullification proceedings.

In the event that this main BioGlue patent is ultimately declared invalid, CryoLife would still be able to sell BioGlue in Germany and the rest of Europe; however, the German court's ruling, if upheld on appeal, would prevent CryoLife from suing a party to prevent them from infringing the main BioGlue patent in Germany.

With respect to the patent infringement action filed by CryoLife against Tenaxis in Patent 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, the original patent infringement hearing date was set for March 30, 2010. On March 10, 2010, the Patent Court postponed the hearing, pending the issuance of the court order in the nullity proceeding. CryoLife is still in the process of reviewing the court order in the nullity action, but will likely request that this Patent Court in Düsseldorf reschedule the infringement hearing to occur as soon as possible.

Medafor

Overview

As previously reported in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, the Company has filed a lawsuit against Medafor, Inc. 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 Racketeer Influenced and Corrupt Organizations Act ("Georgia RICO"). The lawsuit arises out of a distribution agreement between the parties ("Agreement"), pursuant to which the Company has the right to distribute a product manufactured by Medafor (the "Product") under the name HemoStase. On March 8, 2010, pursuant to the Court's February 18, 2010 order that reinstated the Company's fraud and negligent misrepresentation claims, the Company filed a Third Amended Complaint, asserting those claims, reasserting its recast Georgia RICO Claim, and reasserting its remaining claims for, among other things, breach of contract. On March 22, 2010 Medafor filed a partial motion to dismiss the Third Amended Complaint, asking the Court to dismiss only the Georgia RICO claim. On April 15, 2010, the Company filed its response brief in opposition to Medafor's partial motion to dismiss the Third Amended Complaint. Medafor has yet to file their reply brief in support of the partial motion to dismiss. The Company does not know when the Court will rule on the new partial motion to dismiss.

Medafor's Notices of Termination

As previously reported in the Company's Current Report on Form 8-K dated March 5, 2010, Medafor informed the Company on March 2, 2010 of its belief that the Company had materially breached its duties and obligations under the Agreement and gave the Company notice of its intent to terminate the Agreement if the alleged material breach was not cured by April 5, 2010. Medafor contends that the alleged material breach of the Agreement occurred because the Company's employees and representatives in New Jersey were allegedly offering certain bundling packages beyond the scope of the Agreement and intentionally misrepresenting the scope of the Agreement and the nature of the relationship between the parties. On March 23,

2010, the Company sent a letter to Medafor responding to Medafor's allegations contained in the March 2, 2010 letter, in which the Company explained, with evidentiary support, its contention that it did not materially breach the Agreement and that Medafor's allegations of intentionally inappropriate marketing were without merit.

Medafor and the Company agreed on March 5, 2010 that if Medafor decides after April 5, 2010 that a material breach has occurred in reference to the matters discussed above, and that the Company has failed to cure the breach, Medafor will not terminate the Agreement from the date on which Medafor informs the Company of its decision but instead will give the Company three-weeks notice before terminating. In exchange, the Company has agreed that it will not, prior to being informed of Medafor's decision, petition a court to enjoin the threatened termination of the Agreement. The parties also agreed that the three-week period would not begin to run until one of the two parties affirmatively and explicitly informs the other that it has begun.

As previously reported in the Company's Current Report on Form 8-K dated March 19, 2010, Medafor informed the Company on March 18, 2010 of its belief that the Company repudiated the Agreement by failing to provide certain requested assurances within thirty days. Medafor alleges that it had reasonable grounds to demand, pursuant to Georgia law, that the Company take certain steps that Medafor asserts amounted to a request for "adequate assurances" of CryoLife's performance with respect to the Agreement. On March 22, 2010 CryoLife informed Medafor that it disputed Medafor's assertions and that Medafor had no right to terminate the Agreement. On March 19, 2010, the parties entered into an agreement whereby the parties agreed to an accelerated briefing schedule for CryoLife's motion for emergency preliminary injunction to require Medafor to comply with the Agreement. The parties have already filed their respective briefs on the motion. The Court scheduled a hearing on the Company's motion for a preliminary injunction for May 10, 2010. The Company does not know when the Court will rule on the motion for preliminary injunction.

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.

If Medafor Is Successful In Its Attempts To Terminate Our Distribution Agreement With It, 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, the manufacturer of HemoStase, informed us that it is treating our exclusive distribution agreement with Medafor as terminated. Medafor alleges that it was entitled under Georgia law to demand adequate assurances from CryoLife that we would perform under the agreement and that CryoLife has repudiated the agreement by not providing adequate assurances.

We have disputed this attempt by Medafor to terminate the agreement, along with prior attempts by Medafor to terminate the agreement on other grounds, and have filed with the court an emergency motion for a preliminary injunction against Medafor to prevent Medafor's current attempt to terminate the agreement. The hearing on the emergency motion for a preliminary injunction is scheduled to occur on May 10, 2010. We believe that we presently have enough inventory, with or without the fulfillment of any further purchase orders, to meet our business needs into July 2010.

If Medafor is successful in any current or future attempt to terminate the agreement, we would no longer be able to distribute HemoStase and our revenues and profitability would be adversely impacted. Also, in the event that our emergency motion for a preliminary injunction is not favorably ruled upon by the court by the time our current inventory is depleted, our distribution of HemoStase would likely be hampered and our revenues and profitability would be materially, adversely impacted. Even if Medafor is not successful in its current attempt to terminate the agreement, our relationship with Medafor is strained, primarily as a result of our recent bid to acquire Medafor and litigation with respect to the agreement and our status as a shareholder of Medafor. Thus, even if Medafor is enjoined from terminating the agreement, Medafor may in the future attempt to terminate the agreement over other issues and our relationship with Medafor may continue to become further strained, potentially hindering our ability to effectively distribute HemoStase.

Revenues from HemoStase were approximately \$2.1 million and \$6.0 million for the quarter ended March 31, 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 distribution agreement with Medafor and see Part II, Item 1, "Legal Proceedings," for further information regarding our litigation with Medafor.

Our Investment In Medafor Was Diluted As A Result Of Medafor's Issuance Of 1.8 Million Shares To Magle Life Sciences, And Could Be Further Diluted By Medafor. As A Result, 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.

In November 2009 and January 2010, CryoLife purchased approximately 2.3 million shares of Medafor common stock. The carrying value of that investment on our books is currently \$6.1 million. On March 12, 2010, Medafor announced that it had signed a long-term raw material supply agreement with Magle Life Sciences, the supplier of the key powder component for HemoStase, in exchange for an undisclosed amount of cash and 1.8 million shares of Medafor common stock. Medafor released limited information about the transaction with Magle, making it difficult for us to understand the economics of that transaction

Medafor's transaction with Magle diluted our investment and that of the other Medafor shareholders. In accordance with accounting principles generally accepted in the U.S. ("GAAP") we reviewed available information and determined that as of March 31, 2010, despite the dilution of our investment in Medafor, no factors were present indicating that we should evaluate our investment in Medafor common stock for impairment. We may not be able to obtain from Medafor information to adequately assess the level of such an impairment. If we do obtain additional information, we could subsequently determine that, in accordance with GAAP, an impairment in the value of our investment in Medafor common stock has occurred. In the future, Medafor could issue additional shares or take other actions which could further dilute our investment and that of the other Medafor shareholders. If an impairment occurs in the future, we would be required to take a charge to earnings, which could have a material, adverse impact on our financial condition and profitability.

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

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.

In November 2009 and January 2010, CryoLife purchased approximately 2.3 million shares of Medafor common stock. The carrying value of that investment on our books is currently \$6.1 million. We are a minority Medafor shareholder and may not be able to readily liquidate our investment in Medafor because Medafor is privately held and there is not a public market for Medafor shares. In addition, the value of the Medafor common stock may have declined in value or could decline in value in the future for reasons including those disclosed in the immediately preceding risk factor. If we wish to liquidate our investment in Medafor to raise cash, we might not be able to do so in a timely fashion or at all and we may not receive a value that we believe is appropriate at that time. In addition, the cash we receive from such as sale could be less than the \$4.8 million initially paid for the Medafor common stock. In the event that we chose to sell our Medafor stock for less than \$6.1 million, the recorded value of our investment in Medafor, the difference would be recorded as a charge against earnings, which could have a material, adverse impact on our financial condition and profitability.

We Are Significantly Dependent On Our Revenues From BioGlue And Are Subject To A Variety Of Risks Affecting This Product.

BioGlue is a significant source of our revenues. Should the product be the subject of adverse developments with regard to its safety, efficacy, or reimbursement practices, or if a competitor's product obtains greater acceptance, or our rights to manufacture and market this product are challenged, the result could have a material adverse effect on our revenues, financial condition, profitability, and cash flows. Also, we have only two suppliers of bovine serum albumen, which is necessary for the manufacture of BioGlue. Furthermore, we presently have only one supplier for our BioGlue syringe. If we lose one or more of these suppliers, our ability to manufacture and sell BioGlue could be adversely impacted. We cannot be sure that we would be able to replace any such loss on a timely basis, if at all. In addition, our U.S. patent for BioGlue expires in 2012 and our patents in the rest of the world for BioGlue expire in 2013. Our main BioGlue patent was the subject of an action to nullify it in Germany by a competitor, and we have been informed by the Patent Court that the patent will be nullified. We expect to appeal the nullification. Following expiration or nullification of these patents, competitors may utilize the inventions disclosed in the BioGlue patents in competing products, which could materially reduce our revenues and income from BioGlue. See "Uncertainties Related To Patents And

Protection of Proprietary Technology May Adversely Affect The Value Of Our Intellectual Property," below. For a further discussion of the patent nullity action, see Part II, Item I, "Legal Proceedings."

Uncertainties Related To Patents And Protection Of Proprietary Technology May Adversely Affect The Value Of Our Intellectual Property.

We own several patents, patent applications, and licenses relating to our technologies, which we believe provide us with important competitive advantages. In addition, we have certain proprietary technologies and methods that provide us with important competitive advantages. We cannot be certain that our pending patent applications will issue as patents or that no one will challenge the validity or enforceability of any patent that we own. We also cannot be certain that if anyone does make such a challenge, that we will be able to successfully defend that challenge. We may have to incur substantial litigation costs to uphold the validity and prevent infringement of a patent or to protect our proprietary technologies and methods. Furthermore, competitors may independently develop similar technologies or duplicate our technologies or design around the patented aspects of such technologies. In addition, our proposed technologies could infringe patents or other rights owned by others, or others could infringe our patents.

We have filed suit in Germany against Tenaxis, Inc. because we believe that Tenaxis is infringing our main BioGlue patent in Germany. Tenaxis filed a separate suit to nullify this same BioGlue patent in Germany, and the Patent Court issued an order nullifying this patent. We expect to appeal the nullification; however, there can be no guarantee that we will succeed. The ultimate nullification of this patent, if it occurs, will not prohibit CryoLife from selling BioGlue in Germany, but would allow Tenaxis and others to market competing products based on the BioGlue technology. Tenaxis has been selling its competing product in Germany since at least 2009 and has been competing with CryoLife's BioGlue product since that time. Should we be unsuccessful in our lawsuit regarding infringement of our BioGlue patent, in our appeal of the nullification or in prohibiting any other infringements of our patents, or should the validity of our patents be successfully challenged by other third parties, we may face increased competition from products based on the BioGlue technology, and our revenues, financial condition, profitability, and cash flows could be materially, adversely affected. We continue to investigate other potential infringements of our BioGlue patents.

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 March 31, 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

	Total Number of Common Shares	Average Price Paid per	Total Number of Common Shares Purchased as Part of Publicly Announced Plans	Maximum Number of Common Shares That May Yet Be Purchased Under the
Period	Purchased	Common Share	or Programs	Plans or Programs
01/01/10 - 01/31/10	_	\$ —	-	_
02/01/10 - 02/28/10	9,402	629		_
03/01/10 - 03/31/10	<u></u> _	<u></u>		
Total	9,402	\$ 629	_	_

The Company currently has no stock repurchase program, publicly announced or otherwise. The common shares shown were tendered to the Company in payment of taxes on stock compensation.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. (Removed and Reserved).

Item 5. Other information.

None.

Item 6. Exhibits.

The exhibit index can be found below.

Exhibit Number	Description
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*	Form of 2010 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan entered into with each Named Executive Officer.
10.2*	Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan entered into with each Named Executive Officer.
10.3+*	Third Amendment, dated January 12, 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.
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.
- + The Registrant has requested confidential treatment for certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

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)

April 29, 2010 DATE

/s/ D. ASHLEY LEE

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

FISCAL YEAR____ BONUS AGREEMENT UNDER THE 2007 EXECUTIVE INCENTIVE PLAN

This CRYOLIFE, INC. FISCAL YEAREX	ECUTIVE INCENTIVE PLAN	BONUS AGREEMENT (this	"Agreement") was adopted by the	
Plan Committee pursuant to the CryoLife, Inc. (the "Com	pany") 2007 Executive Incentiv	ve Plan (the "Plan") (a copy of	which is attached as Exhibit 1) and	
agreed to by the Company and("Executive")	effective, This	Agreement is effective for the	fiscal year ending December 31,	
(the "Plan Year"). Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Plan.				

- 1. <u>Calculation of Bonus</u>. Subject to the further adjustments, limitations and additions provided for in the Plan and this Agreement, Executive's bonus for the _____ fiscal year shall be computed as set forth on <u>Exhibit 2</u> attached hereto.
 - 2. Term of Agreement. This Agreement shall be effective only for the Plan Year (i.e., the fiscal year ending December 31,_____).
- 3. No Employment Arrangement Implied. Nothing in this Agreement or the Plan shall imply any right of Employment for Executive, and except as set forth in Section 10 of the Plan with respect to a Change of Control or as otherwise determined by the Committee, in its discretion, or contained in any other agreement between Executive and the Company, which shall not be affected hereby, if Executive is terminated, voluntarily or involuntarily, with or without cause, prior to the end of the Plan Year, Executive shall not be entitled to any bonus for the Plan Year regardless of whether or not such bonus had been or would have been earned in whole or in part, but any unpaid bonus earned with respect to a prior fiscal year shall not be affected.
- **4.** Plan Provisions shall Govern. This Agreement is subject to and governed by the Plan and in the case of any conflict between the terms of this Agreement and the contents of the Plan, the terms of the Plan will control.
- **5.** Governing Law. The interpretation, construction and performance of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of Georgia without regard to the principle of conflict of laws.
- **6.** Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.
- 7. Severability. Provided the other provisions of this Agreement do not frustrate the purpose and intent of the law, in the event that any portion of this Agreement shall be determined to be invalid or unenforceable to any extent, the same shall to that extent be deemed severable from this Agreement, and the invalidity or unenforceability thereof shall not affect the validity and enforceability of the remaining portion of this Agreement.
- 8. <u>Amendment and Termination</u>. The Company may amend this Agreement, at any time prior to the payment of the bonus, without the approval of Executive. Notwithstanding anything to the contrary contained in this Agreement, the Company may terminate this Agreement at any time prior to the payment of the bonus and Executive shall not be entitled to any bonus under this Agreement for the Plan Year regardless of when this Agreement is terminated.

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by a duly authorized officer of the Company and Executive has executed this Agreement as of the day and year first written above.			
CRYOLIFE, INC.	EXECUTIVE		
By:			
Title:			
2			

EXHIBIT 1

"PLAN"

EXHIBIT 2
Executive may earn an additional percentage of Executive's base salary based on three components: (i) the Company attaining specified adjusted revenue targets; (ii) the Company attaining specified adjusted net income targets and (iii) the Executive's personal performance review. Executive's target bonus of% is based on the achievement of% of target in each of the three components (% for Adjusted Revenues,% for Adjusted Net Income,% for Personal Performance).
No bonus is payable in a given category if the specified minimum set forth below in that category is not obtained. Subject to the provisions of the Plan and the discretion of the Committee, all bonuses will be paid in cash. Details regarding bonus calculation are set forth below, with the% target level bolded

Adjusted Revenues*

for ease of reference (data points shown in the tables, other than the minimum and maximum levels, are representative only, and a pro rata portion of the

bonus shall be earned for performance achieved that falls between the data points shown):

Adjusted Revenue* Target (in thousands)	\$ Minimum Level	\$ \$	\$ \$	\$ \$	\$ \$	\$
Bonus Payable	\$	\$ \$	\$ \$	\$ \$	\$ \$	\$

^{*} Adjusted Revenues are fiscal _____Company revenues from (i) cardiac and vascular allograft tissue processing, (ii) BioGlue, BioFoam and related product sales, and (iii) Hemostase sales.

^{**} There is no maximum level for adjusted revenues. Achievement of adjusted revenues above this level will result in bonus payments on a sliding scale consistent with the above payment ratios.

Adjusted Net Income*

Adjusted Net Income* Target (in thousands)	\$ Minimum Level	\$ \$	\$ \$	\$ \$	\$ \$	\$ \$
Bonus Payable	\$	\$ \$	\$ \$	\$ \$	\$ \$	\$ \$

- Adjusted Net Income is GAAP net income for ______, exclusive of interest expense, interest income, stock compensation expense (other than stock compensation expense related to the bonus plan), R&D expense (excluding salaries and related expenses), other income and expense, income taxes, and charges related to acquisitions.
- ** There is no maximum level for adjusted net income. Achievement of adjusted net income above this level will result in bonus payments on a sliding scale consistent with the above payment ratios.

Personal Performance

Personal Performance Rating	4 or higher	3	2	1
		Minimum		Maximum
		Level		Level
Bonus Pavable	\$ 0	\$	\$	\$

CryoLife, Inc. 1655 Roberts Boulevard N.W. Kennesaw, Georgia 30144

Date:		
Name:		
Address:		
Address:		
Re: Grant of Non-Qualified Stock Option		
Dear:		
This letter sets forth the agreement (the "Agreement") between y acquire shares of the Company's Common Stock.	you and CryoLife, Inc., a Florida corporation	(the "Company"), regarding your option to
1. Grant of Option. Subject to the terms set forth below, the Correshares (of Common Stock the "Option Shares") at the purchase p This option is intended to be and shall be treated as a "Noption" pursuant to Section 422 of the Internal Revenue Code of Employee Stock Incentive Plan (the "Plan").	price of \$ per share. The date of grant ('Non-Qualified Stock Option," which is an opt	"Grant Date") of the option is, ion that is not intended to be an "incentive stoc
2. <u>Time of Exercise of Option</u> . Prior to its termination as set fortl granted herein on the following dates, or thereafter provided the		nd the Employee may exercise the option
Exercise Date	Number of Option Shares Exercisable	Cumulative Percentage of Option Shares Exercisable

3. Method of Exercise. The option shall be exercised by written notice directed to the Compensation Committee (the "Committee"), at the Company's principal executive office, and except as set forth below, must be accompanied by payment of the option price for the number of Option Shares purchased in accordance with the Plan's requirements. The payment for the number of Option Shares purchased may be payable in cash or by tendering (by actual delivery of shares) unrestricted shares of the Company's common stock in accordance with the Plan. To

the extent permitted by applicable law, you may elect to pay for the number of Option Shares purchased by irrevocably authorizing a third party to sell shares of the Company's common stock acquired upon exercise of the Option Shares and remitting to the Company a sufficient portion of the sale proceeds as payment of the entire option price for the number of Option Shares purchased, including any tax withholding resulting from such exercise. The Company shall make delivery of such shares in accordance with the Plan provided that if any law or regulation requires the Company to take any action with respect to the shares specified in such notice before the issuance thereof, then the date of delivery of such shares shall be extended for the period necessary to take such action

- 4. The Plan. The Company's 2009 Employee Stock Incentive Plan, as amended from time to time by the Board of Directors of the Company, is hereby incorporated in this Agreement and to the extent that anything in this Agreement is inconsistent with the Plan, the terms of the Plan shall control. Employee acknowledges that the Company has provided a copy of the Plan to Employee.
- 5. <u>Termination of Option</u>. Except as herein otherwise stated, the option, to the extent not previously exercised, shall terminate in accordance with the Plan and upon the first to occur of the following events:
 - (a) <u>Disability</u>. The expiration of 36 months after the date on which Employee's employment by the Company is terminated, if such termination be by reason of Employee's permanent and total disability, provided, however, that (i) the option shall be exercisable only to the extent that Employee had the right to exercise the option at the time of termination and (ii) if the Employee dies within such 36 month period, any unexercised option held by such Employee shall thereafter be exercisable in accordance with the provisions of and shall terminate upon the first to occur of the events described in Sections 5(b) and (d);
 - (b) <u>Death</u>. In the event of Employee's death while in the employ of the Company, the expiration of 12 months following the date of his or her death, provided that the option shall be exercisable following the Employee's death only to the extent that Employee had the right to exercise the option at the time of his or her death.
 - (c) <u>Retirement</u>. In the event Employee's employment with the Company terminates by reason of normal or early retirement, any option held by such Employee may be exercised by the Employee for a period of 36 months from the date of such termination; provided, however, that if the Employee dies within such 36 month period any unexercised option held by Employee shall thereafter be exercisable in accordance with the provisions of and shall terminate upon the first to occur of the events described in Section 5(b) and (d); or
 - (d) Other. Upon the earlier to occur of (i) 84 months following the Grant Date, or (ii) upon termination of Employee's employment by the Company (except if such termination be by reason of death, disability, or normal or early retirement). It is in Compensation Committee's sole discretion to determine whether the Employee's

employment with the Company terminates by reason of disability, normal or early retirement.

Except as set forth above, the option may not be exercised unless Employee, at the time he or she exercises the option, is, and has been at all times since the date of grant of the option, an employee of the Company. Employee shall be deemed to be employed by the Company if he or she is employed by the Company or any of its subsidiaries. Notwithstanding the above, in no event may the option be exercised after 84 months following the Grant Date.

- 6. <u>Reclassification</u>, <u>Consolidation</u>, <u>or Merger</u>. The number of Option Shares may be adjusted in accordance with the Plan if certain events such as merger, reorganization, consolidation, recapitalization, stock dividends, stock splits, or other changes in the Company's corporate structure affecting its Common Stock occur.
- 7. <u>Rights Prior to exercise of Option</u>. This Option is not transferrable by Employee, except by will or by the laws of descent and distribution or as otherwise set forth in the Plan, and during Employee's lifetime shall be exercisable only by Employee. This option shall confer no rights to the holder hereof to act as stockholder with respect to any of the Option Shares until payment of the option price and delivery of a share certificate has been made.
- 8. Employee's Representations and Warranties. By execution of this Agreement, Employee represents and warrants to the Company as follows:
 - (a) The entire legal and beneficial interest of the option and the Option Shares are for and will be held for the account of the Employee only and neither in whole nor in part for any other person.

(b) Employee resides at the following address:
(a) English is familian with the Common and its along a matrices and fine will and it in Drivete the accordance

- (c) Employee is familiar with the Company and its plans, operations, and financial condition. Prior to the acceptance of this option, Employee has received all information as he or she deems necessary and appropriate to enable an evaluation of the financial risk inherent in accepting the option and has received satisfactory and complete information concerning the business and financial condition of the Company in response to all inquiries in respect thereof.
- 9. <u>Restricted Securities</u>. Employee recognizes and understands that this option and the Option Shares are currently registered under the Securities Act of 1933, as amended (the "Act"), but may not remain so registered, and are not registered under any state securities law. Any transfer of the option (if otherwise permitted hereunder, and once exercised, the Option Shares) will not be recognized by the Company unless such transfer is registered under the Act, the Georgia Uniform Securities Act of 2008, as amended, (the "Georgia Act") and any other

applicable state securities laws or effected pursuant to an exemption from such registration which may then be available. If the Option Shares are not registered, any share certificates representing the Option Shares may be stamped with legends restricting transfer thereof in accordance with the Company's policy with respect to unregistered shares of its Common Stock issued to employees as a result of exercise of options granted under the Plan. The Company may make a notation in its stock transfer records of the aforementioned restrictions on transfers and legends. Employee recognizes and understands that the Option Shares may be restricted securities within the meaning of Rule 144 promulgated under the Act; that the exemption from registration under Rule 144 may not be available under certain circumstances and that Employee's opportunity to utilize such Rule 144 to sell the Option Shares may be limited or denied. The Company shall be under no obligation to maintain or promote a public trading market for the class of shares for which the option is granted or to make provision for adequate information concerning the Company to be available to the public as contemplated under Rule 144. The Company will be under no obligation to recognize any transfer or sale of any Option Shares pursuant to Rule 144 unless the terms and conditions of Rule 144 are complied with by the Employee. By acceptance hereof, Employee agrees that no permitted disposition of any Option Shares shall be made unless and until (i) there is at the time of exercise of the option in effect a registration statement under the Act, or (ii) Employee shall have notified the Company of a proposed Option disposition and shall have furnished to the Company a detailed statement of the circumstances surrounding such disposition, together with an opinion of counsel acceptable in form and substance to the Company that such disposition will not require registration of the shares so disposed under the Act, the Georgia Act, and any applicable state securities laws. The Company shall be under no obligation to permit such transfer or disposition on its stock transfer books unless counsel for the Company shall concur as to such matters. Employee recognizes and understands that if and for so long as Employee is a designated Section 16 officer of the Company, and for up to six months thereafter, any sales of Option Shares will be subject to Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the regulations promulgated thereunder. Employee also recognizes and understands that any sale of the Option Shares will also be subject to Rule 10b-5 promulgated under the Exchange Act. Employee agrees that any disposition of the Option Shares shall be made only in compliance with the Act, the Exchange Act, and the rules and regulations promulgated thereunder.

- 10. <u>Tax Matters</u>. No later than the date as of which an amount first becomes includable in the gross income of the Employee for federal income tax purposes with respect to the exercise of any option under the Plan, Employee shall pay to the Company, or make arrangements satisfactory to the Committee regarding the payment of, any federal, state, or local taxes of any kind required by law to be withheld with respect to such amount. The obligations of the Company under the Plan are conditional on such payment or arrangements and the Company shall have the right to deduct any such taxes from any payment of any kind otherwise due to Employee.
- 11. Section 409A. This Agreement is intended to comply with, or otherwise be exempt from, Section 409A of the Code. This Agreement shall be administered, interpreted and construed in a manner consistent with such Code section. Should any provision of this Agreement be found not to comply with, or otherwise be exempt from, the provisions of Section

409A of the Code, it shall be modified and given effect, in the sole discretion of the Committee and without requiring your consent, in such manner as the Committee determines to be necessary or appropriate to comply with, or effectuate an exemption from, Section 409A of the Code.

- 12. <u>Binding Effect</u>. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and permissible assigns.
- 13. <u>Miscellaneous</u>. This Agreement shall be governed by and construed under the laws of the State of Georgia. If any term or provision hereof shall be held invalid or unenforceable, the remaining terms and provisions hereof shall continue in full force and effect. Any modification to this Agreement shall not be effective unless the same shall be in writing and such writing shall be signed by authorized representatives of both of the parties hereto. The terms of paragraphs 8 and 9 hereof shall survive exercise of the option by Employee and shall attach to the Option Shares. The option contained in this letter shall not confer upon Employee any right to continued employment with the Company, nor shall it interfere in any way with the right of the Company to terminate the employment of Employee at any time. This letter can be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

[signatures on following page]

Please signify your acceptance of the option and your agreement to be bound by the terms hereof by promptly signing one of the two original letters provided to you and returning the same to the President of the Company.					
	Sincerely,				
(SEAL)	THE COMPANY: CRYOLIFE, INC.				
Attest:	Steven G. Anderson, Chairman, President and CEO				
Suzanne K. Gabbert, Secretary for the Company	EMPLOYEE:				

CONFIDENTIAL TREATMENT REQUESTED

[***] – CONFIDENTIAL PORTIONS OF THIS AGREEMENT WHICH HAVE BEEN REDACTED ARE MARKED WITH BRACKETS ("[***]"). THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION.

THIRD AMENDMENT TO CREDIT AGREEMENT

THIS THIRD AMENDMENT TO CREDIT AGREEMENT ("Amendment") is entered into as of January 12, 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 and as further amended by that certain Second Amendment to Credit Agreement, dated as of November 9, 2009, (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 1.1. Section 1.1 of the Credit Agreement is hereby amended by reducing the dollar amount set forth in subclause (ii) of Section 1.1(b)(i)(A) from \$1,500,000 to \$1,000,000.
- (b) Amendment to Section 1.9. Section 1.9 of the Credit Agreement is amended by replacing clause (b) of such Section in its entirety with the following:

[***] - CONFIDENTIAL PORTIONS OF THIS AGREEMENT WHICH HAVE BEEN REDACTED ARE MARKED WITH BRACKETS ("[***]"). THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION.

- (b) <u>Unused Commitment Fee</u>. The Borrowers shall pay to the Agent, for the ratable benefit of the Revolving Lenders, an unused commitment fee (the "<u>Unused Commitment Fee</u>") for each day that the Commitments are in effect equal to the Unused Commitment Fee Percentage as of 5:00 p.m. (New York time) on such day multiplied by the unused Aggregate Revolving Commitment as of 5:00 p.m. (New York time) on such day. The Unused Commitment Fee shall be calculated daily, shall accrue on a cumulative basis until paid, and shall be payable monthly in arrears on the first day of the month following the date hereof and the first day of each month thereafter. The Unused Commitment Fee provided in this subsection 1.9(b) shall accrue at all times from and after mutual execution and delivery of this Agreement.
- (c) <u>Amendment to Section 5.4</u>. Section 5.4 of the Credit Agreement is amended by replacing clauses (h) and (i) of such Section in their entirety with the following:
 - (h) Investments in the capital stock of Medafor, Inc. (each a "Medafor Investment" and collectively the "Medafor Investments") in an aggregate amount not to exceed \$[***], provided that the Borrowers deliver, as soon as possible, any stock certificates evidencing such capital stock, together with undated stock powers, as required by Section 5.3 of the Guaranty and Security Agreement; and
 - (i) other Investments (excluding Medafor Investments) in an aggregate amount not to exceed \$[***].
- (d) Amendment to Section 11.1. Section 11.1 of the Credit Agreement is amended by replacing the definitions of "Base Rate" and "LIBOR" with the following:

"Base Rate" means, for any day, a rate per annum equal to the highest of (a) the rate last quoted by The Wall Street Journal as the "Prime Rate" in the United States or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by Agent) or any similar release by the Federal Reserve Board (as determined by Agent), (b) the sum of 3.00% per annum and the Federal Funds Rate, (c) the sum of (x) LIBOR calculated for each such day based on an Interest Period of three months determined two (2) Business Days prior to such day, plus (y) the excess of the Applicable Margin for LIBOR Rate Loans over the Applicable Margin for Base Rate Loans, in each instance, as of such day and (d) 4.00% per annum. Any change in the Base Rate due to a change in any of the foregoing shall be effective on the effective date of such change in the Federal Funds Rate or LIBOR for an Interest Period of three months.

"LIBOR" means, for each Interest Period, the higher of (a) the offered rate per annum for deposits of Dollars for the applicable Interest Period that appears on Reuters Screen LIBOR01 as of 11:00 A.M. (London, England time) two (2) Business Days prior to the first day in such Interest Period and (b) 3.00% per annum. If no such offered rate exists, such rate will be the rate of interest per annum, as determined by the Agent (rounded upwards, if necessary, to the nearest 1/100 of 1%) at which deposits of Dollars in immediately available funds are offered at 11:00 A.M. (London, England time) two (2) Business Days prior to the first day in such Interest Period by major financial institutions reasonably satisfactory to the Agent in the London interbank market for such Interest Period for the applicable principal amount on such date of determination.

(e) <u>Amendment to Section 11.1</u>. Section 11.1 of the Credit Agreement is amended by replacing the definitions of "Unused Commitment Fee Percentage" with the following:

"Unused Commitment Fee Percentage" shall mean, at any time, a percentage equal to (i) 0.50% per annum, if the aggregate amount of Revolving Loans and Letter of Credit Obligations outstanding at such time is greater than 50% of the Aggregate Revolving Loan Commitment at such time, and (ii) 0.75% per annum otherwise.

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 duly executed signature pages to this Amendment from the Required Lenders, Borrowers, L/C Issuer, Agent and each Credit Party.

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. <u>Costs and Expenses</u>. 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. <u>Counterparts</u>. 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. <u>Binding Nature</u>. 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: Exec. VP, COO & CFO

CRYOLIFE ACQUISITION CORPORATION

By: /s/ D.A. Lee

Title: VP Finance & Treasurer

AURAZYME PHARMACEUTICALS, INC.

By: /s/ D.A. Lee

Title: VP Finance, CFO & Treasurer

CRYOLIFE INTERNATIONAL, INC.

By: /s/ D.A. Lee

Title: VP, CFO & 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 Third Amendment to Credit Agreement]

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: April 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: April 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 March 31, 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 April 29, 2010 /s/ D. ASHLEY LEE

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