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

FORM 10-Q

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended June 30, 2011

OR

 $\hfill\Box$ Transition Report Pursuant to Section 13 or 15(d) of the SECURITIES EXCHANGE ACT OF 1934

For the transition period from

Commission file number: 1-13165

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida (State or other jurisdiction of incorporation or organization)

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

1655 Roberts Boulevard, NW, Kennesaw, Georgia

30144

(Address of principal executive offices)

(Zip Code)

(770) 419-3355

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such the such reports of the such report				
requirements for the past 90 days.	Yes 🗵	No □		
Indicate by check mark whether the registrant has submitted electronically and required to be submitted and posted pursuant to Rule 405 of Regulation S-T during t required to submit and post such files).	1			
required to sublint and post such mes).	Yes ⊠	No □		
Indicate by check mark whether the registrant is a large accelerated filer, an act the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting of the definition of the control of the cont		orting company. See		
Large accelerated filer \square Non-accelerated filer \square (Do not check if a smaller reporting company)	Accelerated filer ⊠ Smaller reporting company □			
Indicate by check mark whether the registrant is a shell company (as defined in	n Rule 12b-2 of the Exchange Act). Yes □	No ⊠		
Indicate the number of shares outstanding of each of the issuer's classes of co	mmon stock, as of the latest practicable date.			
Class	Outstanding at July 21, 201	1		
Common Stock, \$0.01 par value per share	28.108.615 shares	<u> </u>		

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements.

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

	Three Months Ended June 30,				ded		
	 2011		2010		2011	e 30,	2010
	 (Unau	idited)			(Unaı	ıdited))
Revenues:							
Preservation services	\$ 14,688	\$	15,005	\$	30,362	\$	30,588
Products	14,580		14,146		29,009		28,101
Other	 111		112		204		291
Total revenues	 29,379		29,263		59,575		58,980
Cost of preservation services and products:							
Preservation services	8,164		9,013		17,360		18,411
Products	2,162		2,481		4,658		5,008
Total cost of preservation services and products	 10,326		11,494		22,018		23,419
Gross margin	 19,053		17,769		37,557		35,561
Operating expenses:							
General, administrative, and marketing	13,659		11,670		27,950		25,487
Research and development	1,643		1,240		3,409		2,532
Total operating expenses	15,302		12,910		31,359		28,019
Operating income	 3,751		4,859		6,198		7,542
Interest expense	37		65		67		116
Interest income	(3)		(6)		(12)		(10)
Gain on valuation of derivative			(385)				(1,202)
Other (income) expense, net	(62)		111		(171)		231
Income before income taxes	3,779		5,074		6,314		8,407
Income tax expense	 1,959		2,148		2,828		3,547
Net income	\$ 1,820	\$	2,926	\$	3,486	\$	4,860
Income per common share:							
Basic	\$ 0.07	\$	0.10	\$	0.13	\$	0.17
Diluted	\$ 0.07	\$	0.10	\$	0.13	\$	0.17
Weighted-average common shares outstanding:							
Basic	27,385		28,246		27,385		28,240
Diluted	27,745		28,483		27,729		28,513

See accompanying Notes to Summary Consolidated Financial Statements.

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

	J	June 30, 2011		mber 31, 2010
	(U	naudited)		
ASSETS				
Current assets:				
Cash and cash equivalents	\$	19,801	\$	35,497
Restricted securities		5,319		5,309
Receivables, net		15,904		14,313
Deferred preservation costs		29,505		31,570
Inventories		6,220		6,429
Deferred income taxes		7,250		6,096
Prepaid expenses and other current assets		3,576		2,276
Total current assets		87,575		101,490
Property and equipment, net		12,837		13,086
Investment in equity securities		2,594		2,594
Goodwill		4,442		
Patents, net		3,136		3,282
Trademarks and other intangibles, net		17,265		5,601
Deferred income taxes		12,268		9,182
Other long-term assets		2,134		2,203
Total assets	\$	142,251	\$	137,438
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	4,124	\$	4,243
Accrued compensation		3,389		3,357
Accrued procurement fees		3,255		3,081
Accrued expenses and other current liabilities		6,939		6,552
Deferred income		2,152		2,095
Total current liabilities		19,859		19,328
Other long-term liabilities		4,604		4,168
Total liabilities		24,463		23,496
Commitments and contingencies				
Shareholders' equity:				
Preferred stock				
Common stock (issued shares of 30,025 in 2011 and 29,950 in 2010)		300		300
Additional paid-in capital		133,703		133,845
Retained deficit		(4,922)		(8,408)
Accumulated other comprehensive loss		(22)		(32)
Treasury stock at cost (shares of 1,978 in 2011 and 2,049 in 2010)		(11,271)		(11,763)
Total shareholders' equity		117,788		113,942
Total liabilities and shareholders' equity	\$	142,251	\$	137,438

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

Six Months Ended June 30, 2011 2010 (Unaudited) Net cash from operating activities: Net income \$ 3,486 \$ 4,860 Adjustments to reconcile net income to net cash from operating activities: Depreciation and amortization 2,195 1.934 Deferred income taxes 434 1,267 Non-cash compensation 1,444 1,455 Gain on valuation of derivative (1,202)210 292 Other non-cash adjustments to income Changes in operating assets and liabilities: (560)(632)Receivables Deferred preservation costs and inventories 3,114 1,688 Prepaid expenses and other assets (1,028)(1,090)Accounts payable, accrued expenses, and other liabilities (1,403)1,466 Net cash flows provided by operating activities 7,892 10,038 Net cash from investing activities: Acquisition of Cardiogenesis, net of cash acquired (21,062)(1,186)(827) Capital expenditures Purchases of restricted securities and investments (2,703)Other (108)(193)Net cash flows used in investing activities (22,356)(3,723)Net cash from financing activities: (315)Principal payments on debt Proceeds from financing of insurance policies 1,475 Principal payments on short-term notes payable (691)(13)Proceeds from exercise of stock options and issuance of common stock 415 156 (1,449)(1,572)Repurchase of common stock Other (45)521 Net cash flows used in financing activities (1,215)(303)6,012 (Decrease) increase in cash and cash equivalents (15,679)Effect of exchange rate changes on cash (17)8 35<u>,4</u>97 Cash and cash equivalents, beginning of period 30,121 19,801 Cash and cash equivalents, end of period 36,141

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, 2010 has been derived from audited financial statements. The accompanying unaudited summary consolidated financial statements as of and for the three and six months ended June 30, 2011 and 2010 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. Accordingly, such statements do not include all of the information and disclosures required by accounting principles generally accepted in the U.S. for a complete presentation of financial statements. In the opinion of management, all adjustments (including those of a normal, recurring nature) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011. 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, 2010.

2. Financial Instruments

The Company's financial instruments include cash equivalents, marketable securities, restricted securities, accounts receivable, and accounts payable. The Company typically values financial assets and liabilities such as receivables, accounts payable, and debt obligations at their carrying values, which approximate fair value due to their generally short-term duration.

The Company records certain financial instruments at fair value, including: cash equivalents, certain marketable securities, and certain restricted securities. These financial instruments are discussed in further detail in the notes below. The Company may make an irrevocable election to measure other financial instruments at fair value on an instrument-by-instrument basis, although as of June 30, 2011 the Company has not chosen to make any such elections. Fair value financial instruments 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.

The determination of fair value and the assessment of a measurement's placement within the hierarchy require judgment. Although the Company believes that the recorded fair values of its financial instruments are appropriate, these fair values may not be indicative of net realizable value or reflective of future fair values.

A summary of the Company's financial instruments measured at fair value as of June 30, 2011 and December 31, 2010 is as follows (in thousands):

June 30, 2011	Le	Level 1		Level 2		el 3	Total
Cash equivalents:							
U.S. Treasury money market funds	\$		\$	1,517	\$		\$ 1,517
U.S. Treasury debt securities		3,800					3,800
Restricted securities:							
Money market funds				319			319
U.S. Treasury debt securities		5,000					5,000
Total assets	\$	8,800	\$	1,836	\$		\$ 10,636

December 31, 2010	Level 1	Level 2	Level 3	Total
Cash equivalents:			<u></u>	<u> </u>
U.S. Treasury money market funds	\$	\$ 2,056	\$	\$ 2,056
U.S. Treasury debt securities	14,099			14,099
Restricted securities:				
Money market funds		309		309
U.S. Treasury debt securities	5,000			5,000
Total assets	\$ 19,099	\$ 2,365	\$	\$ 21,464

The Company uses prices quoted from its investment management companies to determine the level 2 valuation of its investments in money market funds and securities.

3. Cash Equivalents and Restricted Securities

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

June 30, 2011				Holding		timated Iarket Value
Cash equivalents:	_		·			
U.S. Treasury money market funds	\$	1,517	\$		\$	1,517
U.S. Treasury debt securities		3,800				3,800
Restricted securities:						
Money market funds		319				319
U.S. Treasury debt securities		5,000				5,000
<u>December 31, 2010</u>						
Cash equivalents:						
U.S. Treasury money market funds	\$	2,056	\$		\$	2,056
U.S. Treasury debt securities		14,099				14,099
Restricted securities:						
Money market funds		309				309
U.S. Treasury debt securities		5,000				5,000

As of June 30, 2011 and December 31, 2010 \$319,000 and \$309,000, respectively, of the Company's money market funds were designated as short-term restricted securities due to a contractual commitment to hold the securities as pledged collateral relating to international tax obligations. As of June 30, 2011 and December 31, 2010 \$5.0 million of the Company's U.S. Treasury debt securities 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 10.

There were no material realized gains or losses on sales of available-for-sale securities in the six months ended June 30, 2011 and 2010. At June 30, 2011 \$5.0 million of the Company's restricted securities had a maturity date within three months and \$319,000 of restricted securities had a maturity date of between three months and one year. As of December 31, 2010 \$5.3 million of the Company's restricted securities had a maturity date within three months.

4. Cardiogenesis Acquisition

Overview

On May 17, 2011 CryoLife completed its acquisition of all of the outstanding shares of Cardiogenesis Corporation ("Cardiogenesis") for \$0.457 per share or approximately \$21.7 million. CryoLife used cash on hand to fund the transaction and will operate Cardiogenesis as a wholly owned subsidiary.

Cardiogenesis is a leading developer of surgical products used in the treatment of patients with refractory angina resulting from diffuse coronary artery disease. Cardiogenesis markets the Cardiogenesis Transmyocardial Revascularization ("TMR") Holmium Laser System, which includes the holmium: YAG laser console and single use, fiber-optic handpieces, which are U.S. Food and Drug Administration ("FDA") approved for performing a surgical procedure known as TMR, used for treating patients

with angina that is not responsive to standard medications. Patients undergoing TMR treatment with Cardiogenesis products have been shown to have angina reduction, longer event-free survival, reduction in cardiac related hospitalizations, and increased exercise tolerance. Cardiogenesis has also developed the PHOENIX Handpiece Delivery System, which is intended to provide TMR with concurrent delivery of physician specified fluids. These fluids could include biologics, such as stem cells or growth factors.

Accounting for the Transaction

The Company has recorded a preliminary allocation of the \$21.7 million purchase price to Cardiogenesis' tangible and identifiable intangible assets acquired and liabilities assumed based on their fair values as of May 17, 2011. Goodwill has been recorded based on the amount by which the purchase price exceeds the fair value of the net assets acquired. The preliminary purchase price allocation is as follows (in thousands):

	Bala	ince Sheet
	May	17, 2011
Cash and cash equivalents	\$	650
Receivables		1,055
Inventory		852
Property and equipment		249
Intangible assets		11,900
Goodwill		4,442
Net deferred tax assets		4,674
Other assets		229
Liabilities assumed		(2,339)
Total purchase price	\$	21,712

The preliminary allocation of the purchase price to intangible assets is based on valuations performed to determine the fair value of such assets as of the acquisition date. The Company may adjust the amounts recorded as of June 30, 2011 to reflect any revised evaluations of the assets acquired or liabilities assumed.

CryoLife incurred approximately \$2.0 million in transaction and integration costs related to the acquisition in the six months ended June 30, 2011.

Pro Forma Results

Cardiogenesis' revenues of \$1.2 million from the date of acquisition for the second quarter of 2011 are included in the Summary Consolidated Statement of Operations. Selected unaudited pro forma results of operations for the six months ended June 30, 2011 and 2010, assuming the Cardiogenesis acquisition had occurred as of January 1 of each respective year, are presented for comparative purposes below (in thousands, except per share amounts):

		Six Mont Jun	ths End e 30,	led
	2011			2010
Total revenues	\$	63,900	\$	64,642
Net income		2,534		4,685
Pro forma income per common share—basic	\$	0.09	\$	0.17
Pro forma income per common share—diluted	\$	0.09	\$	0.16

Pro forma results for the six months ended June 30, 2011 include Cardiogenesis acquisition and integration related costs of approximately \$2.0 million, on a pre-tax basis. Pro forma disclosures were calculated using a tax rate of approximately 36%.

5. PerClot Agreements

Overview

On September 28, 2010 CryoLife entered into a worldwide distribution agreement (the "Distribution Agreement") and a license and manufacturing agreement (the "License Agreement") with Starch Medical, Inc. ("SMI") of San Jose, California for

PerClot®, a polysaccharide hemostatic agent used in surgery. PerClot is an absorbable powder hemostat that has CE Mark designation allowing commercial distribution into the European Community and other markets. It is indicated for use in surgical procedures, including cardiac, vascular, orthopaedic, spinal, neurological, gynecological, ENT, and trauma surgery, as an adjunct hemostat when control of bleeding from capillary, venous, or arteriolar vessels by pressure, ligature, and other conventional means is either ineffective or impractical. Under the terms of the agreements, CryoLife received the worldwide rights to commercialize PerClot for all approved surgical indications and a license to manufacture the PerClot product, subject to certain exclusions. CryoLife also received an assignment of the PerClot trademark from SMI as part of the terms of the agreements.

The Distribution Agreement contains certain minimum purchase requirements and has a term of 15 years. CryoLife may begin manufacturing PerClot from plant starch modified by SMI under the terms of the License Agreement, which is anticipated to occur in late 2011 or in 2012. The License Agreement extends for an indefinite period. Following the start of manufacturing and U.S. regulatory approval, CryoLife may terminate the Distribution Agreement and sell PerClot pursuant to the License Agreement. CryoLife will pay royalties to SMI at stated rates on net revenues of products manufactured under the License Agreement. In addition to allowing CryoLife to manufacture PerClot, the License Agreement grants CryoLife a three-year option to purchase certain remaining related technology from SMI. The Company's Distribution Agreement with SMI contains minimum purchase requirements for PerClot through the end of the contract term. Upon FDA approval, the Company may terminate such minimum purchase requirements.

As part of the transaction, CryoLife paid SMI \$6.75 million in cash, which included \$1.5 million in cash for prepaid royalties, and approximately 209,000 shares of restricted CryoLife common stock. CryoLife made an additional contingent payment of \$250,000 in 2011 and will pay additional contingent amounts of up to \$2.5 million to SMI if certain FDA regulatory and other commercial milestones are achieved.

Accounting for the Transaction

CryoLife accounted for the agreements discussed above as an asset acquisition. The initial consideration aggregated approximately \$8.0 million, including: \$6.75 million in cash, restricted common stock valued at approximately \$1.0 million, and direct transaction costs. CryoLife recorded a non-current asset for the \$1.5 million in prepaid royalties, a deferred tax asset of \$145,000, and allocated the remaining consideration to the individual intangible assets acquired based on their relative fair values as determined by a valuation study. As a result, CryoLife recorded intangible assets of \$327,000 for the PerClot trademark, \$2.6 million for the PerClot distribution and manufacturing rights in certain international countries, and \$3.5 million for the PerClot distribution and manufacturing rights in the U.S. and certain other countries which do not have current regulatory approvals. This \$3.5 million was considered in-process research and development as it is dependent upon regulatory approvals which have not yet been obtained. Therefore, CryoLife expensed the \$3.5 million as in-process research and development upon acquisition in the third quarter of 2010. The PerClot trademark acquired by the Company has an indefinite useful life; therefore, that asset will not be amortized, but will instead be subject to annual impairment testing. The \$2.6 million intangible asset will be amortized over its useful life of 15 years. See additional disclosures in Note 8 below.

CryoLife expects to record future contingent payment amounts of up to \$2.5 million initially as research and development expense or, after FDA approval or issuance of a patent, as acquired intangible assets. As of June 30, 2011 CryoLife recorded research and development expense of \$250,000 for the contractual milestone payment due to SMI upon filing of the Investigational Device Exemption.

The common stock issued to SMI will be held by CryoLife until March 31, 2012, when the restricted provisions of the stock lapse.

6. Medafor Matters

Overview

CryoLife began distributing HemoStase in 2008 for Medafor, Inc. ("Medafor") under an Exclusive Distribution Agreement ("EDA"). In November 2009 and in 2010 the Company executed stock purchase agreements to purchase a total of approximately 2.4 million shares of common stock in Medafor for \$4.9 million. The Company's carrying value of this investment included the purchase price and adjustments to record certain of the stock purchase agreements' embedded derivative liabilities at the fair market value on the purchase date, as discussed further below. As Medafor's common stock is not actively traded on any public stock exchange, as Medafor is a non-reporting company for which financial information is not readily available, and as the Company does not exert significant influence over the operations of Medafor, the Company accounted for this investment using the

cost method and recorded it as the long-term asset, investment in equity securities, on the Company's Summary Consolidated Balance Sheets.

HemoStase Inventory

Based on Medafor's final termination of the EDA in late September 2010, the Company performed a review of its HemoStase inventory to determine if the carrying value of the inventory had been impaired. At the time of the termination, CryoLife expected to continue to sell HemoStase for a six-month period following the final termination of the EDA. As a result, the Company determined that the carrying value of the HemoStase inventory was impaired and increased its cost of products by \$1.6 million to write down related finished goods inventory in the third quarter of 2010. After the write-down as of September 30, 2010, the Company believed that the remaining \$1.7 million of HemoStase inventory was recoverable over the six-month selling period following the termination of the EDA. The amount of this write-down reflected management's estimate based on information available at that time. As of June 30, 2011 and December 31, 2010 the Company had zero and \$559,000, respectively, in remaining value of HemoStase inventory on its Summary Consolidated Balance Sheets.

The Company was able to sell more HemoStase than it originally estimated and that had previously been written down; therefore, cost of products in the first six months of 2011 was favorably impacted by approximately \$330,000.

Investment in Medafor Common Stock

During the quarter ended September 30, 2010, the Company reviewed available information to determine if factors indicated that a decrease in value of the investment in Medafor common stock had occurred. CryoLife determined that the available information, particularly Medafor's termination of its largest distributor, indicated that the Company should evaluate its investment in Medafor common stock for impairment.

CryoLife used a market based approach for the valuation, including comparing Medafor to a variety of comparable publicly traded companies, recent merger targets, and company groups. CryoLife considered both qualitative and quantitative factors that could affect the valuation of Medafor's common stock. Based on its analysis, the Company believed that its investment in Medafor was impaired and that this impairment was other than temporary. Therefore, in the third quarter of 2010 CryoLife recorded a non-operating expense, other than temporary investment impairment, of \$3.6 million to write down its investment in Medafor common stock to \$2.6 million. During the six months ended June 30, 2011, 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 further impairment. The carrying value of the Company's 2.4 million shares of Medafor common stock was \$2.6 million or \$1.09 per share as of June 30, 2011 and December 31, 2010.

The Company will continue to evaluate the carrying value of this investment if changes to the factors discussed above or additional factors become known that indicate the Company should evaluate its investment in Medafor common stock for further impairment. If the Company subsequently determines that the value of its Medafor common stock has been impaired further, or if the Company decides to sell its Medafor common stock for less than the carrying value, the resulting impairment charge or realized loss on sale of the investment in Medafor could be material.

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 is required to make a future per share payment (the "Purchase Price Make-Whole Payment") to such sellers. The payment would be equal to the difference between an amount calculated using the average cost of any subsequent shares purchased, as defined in each respective agreement, and the price of the shares purchased pursuant to each applicable stock purchase agreement. The Company was required to account for these Purchase Price Make-Whole Payment provisions as embedded derivatives (collectively the "Medafor Derivative").

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

During the quarter ended March 31, 2010 the Company's estimate of the likelihood of a Triggering Event decreased significantly, largely due to the Company withdrawing its offer to purchase Medafor. As of June 30, 2011 and December 31, 2010 the Company believed that the likelihood of a Triggering Event was remote.

The value of the Medafor Derivative was zero as of both June 30, 2011 and December 31, 2010. The change in the value of derivative recorded on the Summary Consolidated Statements of Operations was zero and a gain of \$385,000 for the three months ended June 30, 2011 and 2010, respectively, and zero and a gain of \$1.2 million for the six months ended June 30, 2011 and 2010, respectively.

Legal Action

As previously reported, CryoLife filed a lawsuit against Medafor in 2009 in the U.S. District Court for the Northern District of Georgia ("Georgia Court"). In 2010 Medafor filed counterclaims against CryoLife, and CryoLife filed a motion to dismiss most of Medafor's counterclaims. On July 8, 2011 the Georgia Court denied CryoLife's motion to dismiss Medafor's counterclaims, merging Medafor's breach of implied duty of good faith and fair dealing claim into Medafor's breach of contract claim. As previously reported, CryoLife and Medafor have both filed motions for partial summary judgment. CryoLife's motion for partial summary judgment is based on its contention that Medafor's termination of the EDA was wrongful, and Medafor's motion for partial summary judgment is based on its contention that CryoLife currently owes Medafor approximately \$1.3 million plus prejudgment interest for product Medafor shipped to CryoLife. On June 30, 2011 the Georgia Court directed both parties to notify the Georgia Court if they will reconsider their position on whether the Georgia Court should withhold ruling on the motions for partial summary judgment as the parties move through the discovery process. The Georgia Court has not set a date for a hearing on any of these motions.

On July 5, 2011 the Georgia Court appointed a Discovery Special Master to manage and supervise discovery in this case pursuant to a Joint Motion for Appointment of Special Master filed by the parties. The parties have exchanged some documents and responses to written discovery, and have subpoenaed documents from some non-parties. No depositions other than a single non-party deposition have been taken. The Georgia Court originally set an eight-month discovery period and in June extended the discovery period by approximately two months, stating that further extensions and scheduling will be reviewed and recommended by the Discovery Special Master. CryoLife expects discovery to continue for a significant period of time. CryoLife believes that the trial will not occur until 2012 or 2013.

On July 14, 2011, following CryoLife's demand made on the Board of Directors of Medafor that it register its common stock under Section 12(g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Medafor filed a lawsuit against CryoLife in the U.S. District Court for the District of Minnesota ("Minnesota Court"). Medafor's lawsuit requests that the Minnesota Court grant a declaratory judgment that Medafor's reverse stock split on December 31, 2010 reduced the number of Medafor shareholders to below 500 and that, therefore, Medafor is not required to comply with the registration requirements of Section 12(g) of the Exchange Act (*i.e.*, not required to register as a public company with the SEC). Medafor's lawsuit also requests that the Minnesota Court award Medafor its costs and expenses in the lawsuit. CryoLife's required response to the lawsuit is due August 5, 2011. CryoLife disputes Medafor's position and will defend itself vigorously in this action. At this time CryoLife is unable to predict the outcome of this matter. The Company believes that the outcome of this matter will not have a material adverse effect on its financial position, result of operations, or cash flow. However, as this matter is ongoing, there is no assurance that this matter will be resolved in the Company's favor.

7. Inventories

Inventories are comprised of the following (in thousands):

		ne 30, 2011	December 31, 2010		
Raw materials	\$	4,333	\$	4,301	
Work-in-process		310		349	
Finished goods		1,577		1,779	
Total inventories	\$	6,220	\$	6,429	

8. Goodwill and Other Intangible Assets

The Company's intangible assets consist of goodwill, patents, trademarks, and other intangible assets, as discussed further below. These assets include goodwill, acquired technology, customer lists, and other intangible assets from the acquisition of Cardiogenesis, as discussed in Note 4 above, and PerClot distribution and manufacturing rights acquired from SMI as discussed in Note 5 above.

Indefinite Lived Intangible Assets

As of June 30, 2011 and December 31, 2010 the carrying values of the Company's indefinite lived intangible assets are as follows (in thousands):

	June 30, 	December 31, 2010
Goodwill	\$ 4,442	\$
Procurement contracts and agreements	2,013	2,013
Trademarks	799	790
Other	250	

Based on its experience with similar agreements, the Company believes that its acquired contracts and procurement agreements have an indefinite useful life, as the Company expects to continue to renew these contracts for the foreseeable future. Accordingly, the Company's indefinite lived intangible assets do not amortize, but are instead subject to periodic impairment testing.

Definite Lived Intangible Assets

The Company generally amortizes its definite lived intangible assets over their expected useful lives using the straight-line method. As of June 30, 2011 and December 31, 2010 gross carrying values, accumulated amortization, and approximate amortization periods of the Company's definite lived intangible assets are as follows (in thousands):

June 30, 2011	Gross Carrying Value		Carrying		Accumulated Amortization		Amortization Period
Acquired technology	\$	9,230	\$	105	11 Years		
Patents		5,820		2,684	17 Years		
Distribution and manufacturing rights		2,559		128	15 Years		
Customer lists		2,370		23	13 Years		
Non-compete agreements		381		172	10 Years		
Other		116		25	2-3 Years		
<u>December 31, 2010</u>							
Patents	\$	5,885	\$	2,603	17 Years		
Distribution and manufacturing rights		2,559		43	15 Years		
Non-compete agreements		381		152	10 Years		
Customer lists		64		11	3 Years		

Amortization Expense

The following is a summary of amortization expense (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2011	2	010	2	2011	2	010	
\$	306	\$	132	\$	481	\$	263	

As of June 30, 2011 scheduled amortization of intangible assets for the next five years is as follows (in thousands):

	Rema	unaer oi					
	2	2011	2012	2013	2014	2015	2016
Amortization expense	\$	873	\$ 1,732	\$ 1,628	\$ 1,529	\$ 1,502	\$ 1,490

9. 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 generates deferred tax assets primarily as a result of write-downs of deferred preservation costs, inventory, and in-process research and development; accruals for tissue processing and product liability claims; asset impairments; and operating losses. The Company acquired significant deferred tax assets from its acquisition of Cardiogenesis in the second quarter of 2011 as discussed below.

As of June 30, 2011 the Company maintained a total of \$2.3 million in valuation allowances against deferred tax assets, related to state net operating loss carryforwards, and a net deferred tax asset of \$19.5 million. As of December 31, 2010 the Company had a total of \$1.8 million in valuation allowances against deferred tax assets and a net deferred tax asset of \$15.3 million.

The increase in the Company's net deferred tax assets is due to the acquisition of Cardiogenesis in the second quarter of 2011, as Cardiogenesis had significant deferred tax assets, primarily due to its net operating loss carryforwards. The Company believes that the realizability of its acquired net operating loss carryforwards will be limited in future periods due to a change in control of its subsidiary Cardiogenesis, as mandated by Section 382 of the Internal Revenue Code of 1986, as amended. The Company believes that its acquisition of Cardiogenesis constitutes a change in control. The deferred tax assets recorded on the Company's Summary Consolidated Balance Sheets do not include amounts that it expects will not be realizable due to this change in control. A portion of the acquired net operating loss carryforwards are related to state income taxes and can only be used by the Company's subsidiary Cardiogenesis. Due to Cardiogenesis' history of losses when operated as a stand-alone company, management believes it is more likely than not that these deferred tax assets will not be realized. Therefore, the Company recorded a valuation allowance against these state net operating loss carryforwards. See also Note 4 for a further discussion of the Company's acquisition of Cardiogenesis.

The Company's effective income tax rate was approximately 52% and 45% for the three and six months ended June 30, 2011, respectively, as compared to 42% for both the three and six months ended June 30, 2010. The significant increase in the Company's effective income tax rate for the three and six months ended June 30, 2011 was due to the unfavorable tax treatment of certain acquisition related expenses, which the Company incurred related to its acquisition of Cardiogenesis.

The Company's tax years 2007 through 2010 generally remain open to examination by the major taxing jurisdictions to which the Company is subject. However, certain returns from years prior to 2007, in which net operating losses and tax credits have arisen, are still open for examination by the tax authorities.

10. Debt

GE Credit Agreement

On March 26, 2008 CryoLife entered into a credit agreement with GE Capital as lender (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 had a one-year initial term and automatically renews for additional one-year periods. On March 2, 2011 the Company amended the GE Credit Agreement to extend the term of the credit facility from March 27, 2011 to June 30, 2011. On June 30, 2011 the Company amended the GE Credit Agreement to further extend the term of the credit facility from June 30, 2011 to August 31, 2011.

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, beginning April 15, 2008 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. These amounts are recorded as restricted securities as of June 30, 2011 and December 31, 2010 on the Company's Summary Consolidated Balance Sheets, as they are restricted for the term of the GE Credit Agreement. Also, the GE Credit Agreement requires that after giving effect to a stock repurchase the Company maintain liquidity, as defined within the agreement, of at least \$20.0 million. The GE Credit Agreement includes customary conditions on incurring new indebtedness and prohibits payments of cash dividends on the Company's common stock. There is no restriction on the payment of stock dividends. Commitment fees are paid based on the unused portion of the facility. As of June 30, 2011 the Company was in compliance with the covenants of the GE Credit Agreement.

Amounts borrowed under the GE Credit Agreement are secured by substantially all of the tangible and intangible assets of CryoLife and its subsidiaries and bear interest at LIBOR, with a minimum rate of 3%, or GE Capital's base rate, with a minimum rate of 4% each, plus the applicable margin. As of June 30, 2011 and December 31, 2010 the outstanding balance of the GE Credit Agreement was zero, the aggregate interest rate was 6.25%, and the remaining availability was \$14.8 million.

Other

Total interest expense was \$37,000 and \$65,000 for the three months ended June 30, 2011 and 2010, respectively, and \$67,000 and \$116,000 for the six months ended June 30, 2011 and 2010, respectively, which included interest on debt, capital leases, and uncertain tax positions.

11. Commitments and Contingencies

Liability Claims

At June 30, 2011 and December 31, 2010 the short-term and long-term portions of the estimated unreported loss liability and any related recoverable insurance amounts are as follows (in thousands):

	ne 30, 2011	mber 31, 2010
Short-term liability	\$ 1,189	\$ 1,310
Long-term liability	 1,040	1,310
Total liability	 2,229	2,620
Short-term recoverable	370	500
Long-term recoverable	 360	550
Total recoverable	 730	1,050
Total net unreported loss liability	\$ 1,499	\$ 1,570

Further analysis indicated that the liability as of June 30, 2011 could be estimated to be as high as \$4.2 million, after including a reasonable margin for statistical fluctuations calculated based on actuarial simulation techniques.

Employment Agreement

The Company has an employment agreement with its Chief Executive Officer ("CEO") that confers benefits which become payable upon a change in control or upon certain termination events. As of both June 30, 2011 and December 31, 2010 the Company has recorded \$2.1 million in accrued expenses and other current liabilities on the Summary Consolidated Balance Sheets representing benefits payable upon the CEO's voluntary retirement.

12. Common Stock Repurchase

On June 1, 2010 the Company announced that its Board of Directors authorized the purchase of up to \$15.0 million of its common stock over the course of the following two years. The purchase of shares may be made from time to time in the open market or through privately negotiated transactions on such terms as management deems appropriate and will be dependent upon various factors, including: price, regulatory requirements, and other market conditions. For the six months ended June 30, 2011 the Company purchased approximately 280,000 shares of its common stock for an aggregate purchase price of \$1.5 million. For

the twelve months ended December 31, 2010 the Company purchased approximately 1.0 million shares of its common stock for an aggregate purchase price of \$5.8 million. These shares were accounted for as part of treasury stock, carried at cost, and reflected as a reduction of shareholders' equity on the Company's Summary Consolidated Balance Sheets.

13. 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 ("RSA"s), restricted stock units ("RSU"s), and options to purchase shares of Company common stock at exercise prices generally equal to the fair values of such stock at the dates of grant. The Company also maintains a shareholder approved Employee Stock Purchase Plan (the "ESPP") for the benefit of its employees. The ESPP allows eligible employees the right to purchase common stock on a regular basis at the lower of 85% of the market price at the beginning or end of each offering period.

Equity Grants

The Compensation Committee of the Company's Board of Directors authorized awards of stock from approved stock incentive plans to non-employee Directors and certain Company officers totaling 360,000 and 215,000 shares of common stock during the six months ended June 30, 2011 and 2010, respectively, which had an aggregate market value of \$1.9 million and \$1.3 million, respectively.

The Compensation Committee of the Company's Board of Directors authorized grants of stock options from approved stock incentive plans to certain Company officers and employees totaling 599,000 and 427,000 shares during the six months ended June 30, 2011 and 2010, respectively, with exercise prices equal to the stock prices on the respective grant dates.

Employees purchased common stock totaling 33,000 and 26,000 shares in the six months ended June 30, 2011 and 2010, respectively, through the Company's ESPP.

Stock Compensation Expense

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

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

		nths Ended 0, 2011	Six Mont June 3	
	Stock Options	ESPP Options	Stock Options	ESPP Options
Expected life of options	4.00 Years	.50 Years	4.00 Years	.50 Years
Expected stock price volatility	.650	.434	.650	.434
Risk-free interest rate	1.35%	0.19%	1.25%	0.19%

	Three Mon	nths Ended	Six Mont	ths Ended
	June 3	0, 2010	June 3	0, 2010
	Stock Options	ESPP Options	Stock Options	ESPP Options
Expected life of options	N/A	.25 Years	3.75 Years	.25 Years
Expected stock price volatility	N/A	.535	.650	.455
Risk-free interest rate	N/A	0.16%	1.29%	0.11%

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

	T	hree Moi Jun	nths E e 30,	nded	Six Mont Jun	hs Ei e 30,	ıded		
	2011		2011		2010		2011		2010
RSA and RSU expense	\$	328	\$	279	\$ 669	\$	552		
Stock option and ESPP option expense		398		533	 882		1,040		
Total stock compensation expense	\$	726	\$	812	\$ 1,551	\$	1,592		

Included in the total stock compensation expense were expenses related to RSAs, RSUs, 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 stock compensation expense and were subject to the Company's normal allocation of expenses to inventory and deferred preservation costs. The Company capitalized \$55,000 and \$78,000 in the three months ended June 30, 2011 and 2010, respectively, and \$107,000 and \$137,000 in the six months ended June 30, 2011 and 2010, respectively, of the stock compensation expense into its deferred preservation costs and inventory costs.

As of June 30, 2011 the Company had a total of \$2.7 million, \$2.4 million, and \$290,000 in unrecognized compensation costs related to unvested stock options, RSAs, and RSUs, respectively, before considering the effect of expected forfeitures. As of June 30, 2011 this expense is expected to be recognized over a weighted-average period of 2.0 years for stock options, 1.9 years for RSAs, and 2.4 years for RSUs.

14. Comprehensive Income

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

	 Three Moi Jun		Inded		Six Mont Jun		ded
	2011	2010		2010 20		2010	
Net income	\$ 1,820	\$	2,926	\$	3,486	\$	4,860
Change in cumulative translation adjustment	 (6)		11		10		7
Comprehensive income	\$ 1,814	\$	2,937	\$	3,496	\$	4,867

The tax effect on the cumulative translation adjustment is zero for each period presented. The accumulated other comprehensive loss of \$22,000 and \$32,000 as of June 30, 2011 and December 31, 2010, respectively, consisted solely of currency translation adjustments.

15. 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):

	Three Months Ended June 30,					Six Months End June 30,			
	2011 2010					2011		2010	
Basic income per common share									
Net income	\$	1,820	\$	2,926	\$	3,486	\$	4,860	
Basic weighted-average common shares outstanding		27,385		28,246		27,385		28,240	
Basic income per common share	\$	0.07	\$	0.10	\$	0.13	\$	0.17	

	Three Months Ended June 30,					Six Mont Jun		
	2011 2010			2010	2011			2010
Diluted income per common share								_
Net income	\$	1,820	\$	2,926	\$	3,486	\$	4,860
Basic weighted-average common shares outstanding		27,385		28,246		27,385		28,240
Effect of dilutive stock options a		143		101		136		129
Effect of dilutive RSAs and RSUs		217		136		208		144
Diluted weighted-average common shares outstanding		27,745		28,483		27,729		28,513
Diluted income per common share	\$	0.07	\$	0.10	\$	0.13	\$	0.17

The Company excluded stock options from the calculation of diluted weighted-average common shares outstanding if the per share value, including the sum of (i) the exercise price of the options and (ii) the amount of the compensation cost attributed to future services and not yet recognized, was greater than the average market price of the shares, because the inclusion of these stock options would be antidilutive to income per common share.

Accordingly, stock options to purchase 1.9 million and 1.6 million shares for the three months ended June 30, 2011 and 2010, respectively, and 1.9 million and 1.4 million for the six months ended June 30, 2011 and 2010, respectively, were excluded from the calculation of diluted weighted-average common shares outstanding.

16. 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. The Medical Devices segment includes external revenues from product sales of BioGlue * Surgical Adhesive ("BioGlue"), BioFoam * Surgical Matrix ("BioFoam"), PerClot, HemoStase, and revascularization technology, as well as sales of other medical devices. 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 services and products, and gross margins for the Company's operating segments (in thousands):

		Three Mo Jun	nths E e 30,	Ended	Six Mont Jun	hs En e 30,	nded
		2011		2010	2011		2010
Revenues:							
Preservation services	\$	14,688	\$	15,005	\$ 30,362	\$	30,588
Medical devices		14,580		14,146	29,009		28,101
Other a		111		112	204		291
Total revenues		29,379		29,263	59,575		58,980
Cost of preservation services and products:							
Preservation services		8,164		9,013	17,360		18,411
Medical devices		2,162		2,481	4,658		5,008
Total cost of preservation services and products	_	10,326		11,494	22,018		23,419
Gross margin:							
Preservation services		6,524		5,992	13,002		12,177
Medical devices		12,418		11,665	24,351		23,093
Other a		111		112	204		291
Total gross margin	\$	19,053	\$	17,769	\$ 37,557	\$	35,561

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

	Three Months Ended June 30,					Six Mont June	ed
		2011 2010		2011		2010	
Preservation services:							
Cardiac tissue	\$	6,691	\$	6,861	\$	13,225	\$ 13,764
Vascular tissue		7,997		8,144		17,137	16,824
Total preservation services	· ·	14,688		15,005		30,362	30,588
Products:							
BioGlue and BioFoam		12,772		12,261		24,746	24,173
PerClot		631				1,291	
HemoStase				1,893		1,795	3,998
Revascularization technology		1,177				1,177	
Other medical devices				(8)			(70)
Total products		14,580		14,146		29,009	28,101
Other a		111		112		204	291
Total revenues	\$	29,379	\$	29,263	\$	59,575	\$ 58,980

^a For the three and six months ended June 30, 2011 and 2010, the "Other" designation includes grant revenue.

17. Equity Investment in ValveXchange, Inc.

In July 2011 CryoLife announced a \$3.5 million equity investment in ValveXchange, Inc. ("ValveXchange"). ValveXchange is a private medical device company that was spun off from Cleveland Clinic to develop a lifetime heart valve replacement technology platform featuring exchangeable bioprosthetic leaflets. Under the agreement, CryoLife will receive an approximate 19% initial equity ownership in ValveXchange and the right of first refusal to acquire ValveXchange during a period that extends through the completion of initial commercialization milestones, and the right to negotiate with ValveXchange for European distribution rights. Further, CryoLife will make available up to \$2.0 million to ValveXchange in additional debt financing through a revolving credit facility.

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 tissues distributed by CryoLife include 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 surgical sealants and hemostats include BioGlue® Surgical Adhesive ("BioGlue"), BioFoam® Surgical Matrix ("BioFoam"), and PerClot®, an absorbable powder hemostat, which the Company distributes for Starch Medical, Inc. ("SMI") in the European Community and other select international markets. CryoLife, through its subsidiary Cardiogenesis Corporation ("Cardiogenesis"), specializes in the treatment of cardiovascular disease using a laser console system and single-use, fiber-optic handpieces that are used to treat severe angina.

During the second quarter of 2011, CryoLife completed its acquisition of all of the outstanding shares of Cardiogenesis, which generated \$1.2 million in revenues during its first one and a half months of operation as a wholly owned subsidiary of CryoLife. Cardiogenesis is a leading developer of surgical products used in the treatment of patients with refractory angina resulting from diffuse coronary artery disease. Cardiogenesis and CryoLife products are both targeted toward cardiovascular surgeons, and this acquisition represents a significant addition to CryoLife's cardiac surgery portfolio. This transaction is described in more detail in "Recent Events" below.

Also during the second quarter of 2011, CryoLife launched its distribution of BioGlue into Japan through its distribution partner Century Medical, Inc. Revenues from BioGlue in Japan exceeded \$500,000 during the quarter.

For the second quarter ended June 30, 2011, CryoLife reported its highest revenues ever in a second quarter and in the first six months of a year, with revenues of \$29.4 million and \$59.6 million, respectively. However, the Company's operating expenses and earnings were negatively impacted by costs and tax expense associated with its acquisition of Cardiogenesis. See the "Results of Operations" section below for additional analysis of the results of operations for the three and six months ended June 30, 2011.

Recent Events

Acquisition of Cardiogenesis

On May 17, 2011 CryoLife completed its acquisition of all of the outstanding shares of Cardiogenesis for \$0.457 per share or approximately \$21.7 million. CryoLife used cash on hand to fund the transaction and will operate Cardiogenesis as a wholly owned subsidiary.

Cardiogenesis is a leading developer of surgical products used in the treatment of patients with refractory angina resulting from diffuse coronary artery disease. Cardiogenesis markets the Cardiogenesis Transmyocardial Revascularization ("TMR") Holmium Laser System, which includes the holmium: YAG laser console and single-use, fiber-optic handpieces, which are U.S. Food and Drug Administration ("FDA") approved for performing a surgical procedure known as TMR, used for treating patients with angina that is not responsive to standard medications. Patients undergoing TMR treatment with Cardiogenesis products have been shown to have angina reduction, longer event-free survival, reduction in cardiac related hospitalizations, and increased exercise tolerance. Cardiogenesis has also developed the PHOENIX Handpiece Delivery System, which is intended to provide TMR with concurrent delivery of physician specified fluids. These fluids could include biologics, such as stem cells or growth factors.

As a result of the acquisition, CryoLife recorded net assets of Cardiogenesis totaling \$21.7 million, including: amounts allocated to acquired intangible assets of \$11.9 million, goodwill of \$4.4 million, and net deferred tax assets of \$4.7 million. CryoLife incurred approximately \$2.0 million in transaction and integration costs related to the acquisition in the six months ended June 30, 2011. CryoLife reported revascularization technology revenues of \$1.2 million in the second quarter of 2011 related to its acquired Cardiogenesis business.

ValveXchange

In July 2011 CryoLife announced a \$3.5 million equity investment in ValveXchange, Inc. ("ValveXchange"). ValveXchange is a private medical device company that was spun off from Cleveland Clinic to develop a lifetime heart valve replacement technology platform featuring exchangeable bioprosthetic leaflets. Under the agreement, CryoLife will receive an approximate 19% initial equity ownership in ValveXchange and the right of first refusal to acquire ValveXchange during a period that extends through the completion of initial commercialization milestones, and the right to negotiate with ValveXchange for European distribution rights. Further, CryoLife will make available up to \$2.0 million to ValveXchange in additional debt financing through a revolving credit facility.

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, 2010. 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 summary 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. Due to the acquisition of Cardiogenesis in the second quarter of 2011, the Company believes one new Critical Accounting Policy change was needed in the quarter ended June 30, 2011. The Company did not experience any significant changes during the quarter ended June 30, 2011 in any of its other Critical Accounting Policies from those contained in the Company's Form 10-K for the year ended December 31, 2010.

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 periodically assesses the recoverability of its deferred tax assets, as necessary, when the Company experiences changes that could materially affect its determination of the recoverability of its deferred tax assets. Management provides a valuation allowance against the deferred tax asset when, as a result of this analysis, management believes it is more likely than not that some portion or all of its deferred tax assets will not be realized.

Assessing the recoverability of deferred tax assets involves a high degree of judgment and complexity. Estimates and judgments used in the determination of the need for a valuation allowance and in calculating the amount of a needed valuation allowance include but are not limited to the following:

- · Projected future operating results,
- Anticipated future state tax apportionment,
- · Timing and amounts of anticipated future taxable income,
- · Timing of the anticipated reversal of book/tax temporary differences,
- · Evaluation of statutory limits regarding usage of certain tax assets, and
- · Evaluation of the statutory periods over which certain tax assets can be utilized.

Significant changes in the factors above, or other factors, could materially adversely impact the Company's ability to use its deferred tax assets. Such changes could have a material adverse impact on the Company's operations, financial condition, and cash flows. The Company will continue to assess the recoverability of its deferred tax assets, as necessary, when the Company experiences changes that could materially affect its prior determination of the recoverability of its deferred tax assets.

The Company believes that the realizability of its deferred tax assets will be limited in future periods due to a change in control of its subsidiary Cardiogenesis, as mandated by Section 382 of the Internal Revenue Code of 1986, as amended, as a result of the Company's acquisition of Cardiogenesis in the second quarter of 2011. The deferred tax assets recorded on the Company's Summary Consolidated Balance Sheets do not include amounts that it expects will not be realizable due to this change in control.

The Company's tax years 2007 through 2010 generally remain open to examination by the major taxing jurisdictions to which the Company is subject. However, certain returns from years prior to 2007, in which net operating losses and tax credits have arisen, are still open for examination by the tax authorities.

New Accounting Pronouncements

There were no new accounting pronouncements relevant to the Company that management anticipates implementing during the year ending December 31, 2011.

Results of Operations (Tables in thousands)

Revenues

		Revenue Three Moi Jun			Revenues as a l Total Revent Three Mont June	ues for the hs Ended
	2011 2010				2011	2010
Preservation services:						
Cardiac tissue	\$	6,691	\$	6,861	23%	23%
Vascular tissue		7,997		8,144	27%	28%
Total preservation services		14,688		15,005	50%	51%
Products:						
BioGlue and BioFoam		12,772		12,261	44%	42%
PerClot		631			2%	%
HemoStase				1,893	%	7%
Revascularization technology		1,177			4%	%
Other medical devices				(8)	%	%
Total products		14,580		14,146	50%	49%
Other		111		112	%	%
Total	\$	29,379	\$	29,263	100%	100%
		Revenue Six Mont Jun			Total Revent Six Month June	s Ended
		2011		2010	2011	2010
Preservation services:						
Cardiac tissue	\$	13,225	\$	13,764	22%	23%
Vascular tissue		17,137		16,824	29%	29%
Total preservation services		30,362		30,588	51%	52%
Products:						
BioGlue and BioFoam		24,746		24,173	42%	41%
PerClot		1,291			2%	%
HemoStase		1,795		3,998	3%	7%
Revascularization technology		1,177			2%	%
Other medical devices				(70)	%	%
Total products		29,009		28,101	49%	48%
Other		204		291	%	%
Total	\$	59,575	\$	58,980	100%	100%

Preservation Services

Preservation service revenues decreased 2% for the three months and 1% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. A detailed discussion of the changes in tissue preservation service revenues for both cardiac and vascular tissues is presented below.

Cardiac Preservation Services

Revenues from cardiac preservation services (consisting of revenues from the distribution of heart valves and cardiac patch tissues) decreased 2% for the three months ended June 30, 2011 as compared to the three months ended June 30, 2010, primarily

due to unfavorable tissue mix, which decreased revenues by 3%, partially offset by an increase in average service fees, which increased revenues by 1%.

Revenues from cardiac preservation services decreased 4% for the six months ended June 30, 2011 as compared to the six months ended June 30, 2010, primarily due to unfavorable tissue mix.

The reduction in revenues from the unfavorable cardiac tissue mix was due to a decrease in volume of cardiac valve shipments; however, this revenue reduction was only partially offset by increases in volume of lower fee cardiac patch tissues. The decrease in volume of cardiac valve shipments was due to decreases in traditionally processed pulmonary and aortic valves, partially offset by an increase in shipments of CryoValve SGPV. This resulted in a decrease in revenues despite a 2% increase in cardiac valve and patch shipments for the three months ended June 30, 2011 and a less than 1% decrease in shipments for the six months ended June 30, 2011. The Company believes that the decrease in unit shipments of cardiac valves was primarily due to increasing pressure from lower cost competitive products and to continuing cost containment practices at certain hospitals.

Revenues from SynerGraft processed tissues, including the CryoValve SGPV and CryoPatch SG, accounted for 36% of total cardiac preservation services revenues for both the three and six months ended June 30, 2011 and 31% and 30% of total cardiac preservation services revenues for the three and six months ended June 30, 2010, respectively. Domestic revenues accounted for 92% and 91% of total cardiac preservation services revenues for the three and six months ended June 30, 2011, respectively, and 93% total cardiac preservation services revenues for both the three and six months ended June 30, 2010.

Vascular Preservation Services

Revenues from vascular preservation services decreased 2% for the three months ended June 30, 2011 as compared to the three months ended June 30, 2010, primarily due to a 1% decrease in unit shipments of vascular tissues, which decreased revenues by 3%, partially offset by an increase in average service fees, which increased revenues by 1%.

Revenues from vascular preservation services increased 2% for the six months ended June 30, 2011 as compared to the six months ended June 30, 2010, due to an increase in average service fees, which increased revenues by 1%, and a 1% increase in unit shipments of vascular tissues.

Products

Revenues from products increased 3% for both the three and six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. These increases were primarily due to revenues from revascularization technology as a result of the Company's acquisition of Cardiogenesis in the second quarter of 2011 and due to an increase in PerClot and BioGlue revenues, partially offset by a decrease in HemoStase revenues. A detailed discussion of the changes in product revenues for BioGlue and BioFoam; PerClot and HemoStase; and revascularization technology is presented below.

BioGlue and BioFoam

Revenues from the sale of surgical sealants, consisting of BioGlue and BioFoam, increased 4% for the three months ended June 30, 2011 as compared to the three months ended June 30, 2010. This increase was primarily due to the favorable impact of foreign exchange rates, which increased revenues by 2%, an increase in average selling prices, which increased revenues by 1%, and a 3% increase in the volume of milliliters sold, which increased revenues by 1%.

Revenues from the sale of BioGlue and BioFoam increased 2% for the six months ended June 30, 2011 as compared to the six months ended June 30, 2010. This increase was primarily due to the favorable impact of foreign exchange rates, which increased revenues by 1%, and an increase in average selling prices, which increased revenues by 1%.

The impact of foreign exchange rates was due to changes in the exchange rates between the U.S. Dollar and both the British Pound and the Euro in both the three and six months ended June 30, 2011 as compared to the respective periods in 2010. The Company's sales of BioGlue and BioFoam through its direct sales force to United Kingdom hospitals are denominated in British Pounds, and its sales to German hospitals and certain distributors are denominated in Euros.

The increase in sales volume for BioGlue and BioFoam for the three and six months ended June 30, 2011 was primarily due to an increase in shipments of BioGlue in certain international markets, primarily Japan and Latin America, largely offset by volume decreases in the Company's more mature European and domestic markets. The Company began shipping BioGlue to Japan in late April 2011, as BioGlue was recently approved in Japan for use in the repair of aortic dissections. Shipments to Japan in the second quarter of 2011 were \$518,000.

Management believes that the decrease in BioGlue shipments in the European and domestic markets is a result of various factors, including: the U.S. market introduction of sealant products with approved indications for use in clinical applications in which BioGlue has been used off label previously; 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 imposing and enforcing contract purchasing requirements for competing non-CryoLife products.

The increase in average selling prices for the three and six months ended June 30, 2011 was primarily due to list price increases on certain BioGlue products that went into effect during 2010 and 2011 and the negotiation of pricing contracts with certain customers.

Sales of BioGlue and BioFoam for the three and six months ended June 30, 2011 included international sales of BioFoam following receipt of the CE Mark approval during the third quarter of 2009. BioFoam sales accounted for less than 1% of total BioGlue and BioFoam sales for the three and six months ended June 30, 2011. Domestic revenues accounted for 62% and 65% of total BioGlue revenues for the three and six months ended June 30, 2010, respectively, and 68% and 69% of total BioGlue revenues for the three and six months ended June 30, 2010, respectively.

BioGlue is a mature product that has experienced increasing competitive pressures. Management believes that as economic conditions begin to improve, BioGlue revenues in future periods will be impacted by price increases and smaller volume increases in international markets. The Company expects BioGlue sales in domestic markets to be impacted by a decrease in usage of BioGlue in off-label surgical procedures, due to increasing competitive pressures.

PerClot and HemoStase

Revenues from the sale of hemostats, consisting of PerClot and HemoStase, decreased 67% for the three months ended June 30, 2011 as compared to the three months ended June 30, 2010. This decrease was primarily due to a 54% decrease in the volume of grams sold, which decreased revenues by 67%.

Revenues from the sale of PerClot and HemoStase decreased 23% for the six months ended June 30, 2011 as compared to the six months ended June 30, 2010. This decrease was primarily due to a 4% decrease in the volume of grams sold, which decreased revenues by 14%, and a decrease in average selling prices, which decreased revenues by 9%.

The decrease in sales volume for the three and six months ended June 30, 2011 was primarily due to the Company's planned discontinuation of sales of HemoStase in late March 2011. Revenues from the sale of PerClot, which the Company began distributing in international markets in the third quarter of 2010, did not fully offset the decline in sales of HemoStase. This decrease was anticipated because PerClot is only approved for sale in certain international markets compared to HemoStase, which the Company was previously able to distribute in both domestic and international markets. The Company anticipates this loss of domestic hemostat sales to result in a decrease in total hemostat sales for the remainder of 2011 when compared to the corresponding 2010 periods.

The decrease in average selling prices for the six months ended June 30, 2011 was primarily due to discounting of HemoStase inventory in an attempt to sell off the Company's remaining inventory balances in the first quarter of 2011.

International hemostat revenues increased 55% for the three months ended June 30, 2011 and 70% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. This increase is primarily due to an increase in international sales of PerClot in the 2011 periods over the international sales of HemoStase in the corresponding 2010 periods.

The Company expects that revenues from the distribution of PerClot will increase in 2011 as the Company transitions its international customers to PerClot and expands distribution into additional international territories. The Company will not be able to sell PerClot in the U.S. in future years until FDA approval is granted. On March 31, 2011 CryoLife filed an Investigational Device Exemption ("IDE") with the FDA seeking approval to begin clinical trials for the purpose of obtaining Premarket Approval to distribute PerClot in the U.S. On April 29, 2011 the FDA disapproved CryoLife's IDE filing with numerous comments and questions. CryoLife is currently addressing those comments and questions and anticipates refiling its IDE for PerClot in the third quarter of 2011.

See also "Cost of Products" below, Part II, Item 1, "Legal Proceedings," and Part II, Item 1A, "Risk Factors."

Revascularization Technology

Revenues from revascularization technology for the three and six months ended June 30, 2011 were a result of the Company's acquisition of Cardiogenesis in the second quarter of 2011. Revascularization technology includes revenues related to the sale of laser consoles, handpieces, and related products. Revascularization technology revenues for the three and six months ended June 30, 2011 consisted primarily of handpiece sales.

The Company expects that revenues from revascularization technology will have a favorable impact on revenues for the remainder of 2011, as revenues in the first half of 2011 consisted only of revenues subsequent to the Company's acquisition of Cardiogenesis in mid-May 2011. See also Part II, Item 1A, "Risk Factors."

Other Revenues

Other revenues for the three and six months ended June 30, 2011 and 2010 included revenues related to funding allocated from U.S. Congress Defense Appropriations Conference Reports in 2005 through 2008, collectively the ("DOD Grants"). As of June 30, 2011 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. At June 30, 2011 CryoLife had \$1.9 million of deferred income on the Company's Summary Consolidated Balance Sheet from the DOD Grants, of which \$1.5 million remains in unspent cash advances recorded as cash and cash equivalents.

Cost of Preservation Services and Products

Cost of Preservation Services

		Three Mor June		nded	Six Montl Jun	hs En e 30,		
	2011 2010			2011		2010		
Cost of preservation services	\$	8,164	\$	9,013	\$ 17,360	\$	18,411	
Cost of preservation services as a percentage of preservation service revenues		56%		60%	57%		60%	

Cost of preservation services decreased 9% for the three months and 6% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. Cost of preservation services includes costs for cardiac and vascular tissue preservation services.

The decrease in cost of preservation services and the decrease in cost of preservation services as a percentage of preservation services revenues in the three and six months ended June 30, 2011 were primarily due to a decrease in the per unit cost of processing tissues. The decrease in the per unit cost of processing tissues in 2011 was largely a result of increased processing and packaging throughput.

Cost of Products

				Six Mon	ths E	ıded
	Three Moi June		nded	Jun	e 30.	
	 2011	,	2010	 2011		2010
Cost of products	\$ 2,162	\$	2,481	\$ 4,658	\$	5,008
Cost of products as a percentage of product revenues	15%		18%	16%		18%

Cost of products decreased 13% for the three months and 7% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. Cost of products in 2011 includes costs related to BioGlue, BioFoam, PerClot, and revascularization technology distributed by CryoLife's subsidiary Cardiogenesis, and includes HemoStase for the year to date period. Cost of products in 2010 includes costs related to BioGlue, BioFoam, and HemoStase.

The decrease in cost of products in the three and six months ended June 30, 2011 was primarily due to a decrease in shipments of HemoStase, partially offset by increased costs due to shipments of PerClot, which the Company began distributing in the third quarter of 2010, and shipments of revascularization technology handpieces, which the Company began distributing in the second quarter of 2011 through Cardiogenesis.

The decrease in cost of products as a percentage of product revenues for the three and six months ended June 30, 2011 was primarily due to decreased revenues from HemoStase, partially offset by increased revenues from PerClot, as both of these products have higher costs as a percentage of revenue than BioGlue and handpieces. The decrease in cost of products as a percentage of product revenues in the six months ended June 30, 2011 was also impacted by the favorable effect of sales of HemoStase inventory that had previously been written down, partially offset by discounts on sales of HemoStase that the Company offered in the first quarter of 2011.

Operating Expenses

General, Administrative, and Marketing Expenses

	Three Mon	nded		ıded			
	2011	2010		2011		2010	
General, administrative, and marketing expenses	\$ 13,659	\$ 11,670	\$	27,950	\$	25,487	
General, administrative, and marketing expenses as a percentage of total revenues	46%	40%		47%		43%	

General, administrative, and marketing expenses increased 17% for the three months and 10% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively.

The increase in general, administrative, and marketing expenses for the three and six months ended June 30, 2011 was primarily due to expenses for business development activities, including transaction and integration expenses related to the Company's acquisition of Cardiogenesis in the second quarter of 2011. The Company's business development expenses were \$1.4 million and \$172,000 for the three months ended June 30, 2011 and 2010, respectively, and \$2.6 million and \$553,000 for the six months ended June 30, 2011 and 2010, respectively. The expenses in the 2011 periods were primarily due to legal, professional, and regulatory fees associated with the acquisition and integration of Cardiogenesis operations. Additionally, during the three and six months ended June 30, 2011, the Company incurred expenses related to personnel and operations of Cardiogenesis.

The Company's general, administrative, and marketing expenses included \$598,000 and \$654,000 for the three months ended June 30, 2011 and 2010, respectively, and \$1.3 million for both the six months ended June 30, 2011 and 2010, respectively, related to the grant of stock options, restricted stock awards, and restricted stock units.

The Company expects that its business development activities and the expenses associated with lawsuits, including lawsuits with Medafor, will continue to have a material impact on the Company's general, administrative, and marketing expenses during 2011. The Company does not anticipate that it will incur significant additional acquisition related expenses in the remainder of 2011 related to the acquisition of Cardiogenesis. The Company may incur additional acquisition related expenses from any future acquisition or other strategic transaction.

Research and Development Expenses

	Three Months Ended June 30.					Six Months Ended June 30,			
		2011	2010		2011		2010		
Research and development expenses	\$	1,643	\$	1,240	\$	3,409	\$	2,532	
Research and development expenses as a percentage of total revenues		6%		4%		6%		4%	

Research and development spending in 2011 was primarily focused on PerClot; the Company's SynerGraft tissues and products, including: CryoValve SGPV, CryoValve SG aortic heart valves, CryoPatch SG, and xenograft SynerGraft tissue products; and the Company's BioGlue family of products, including: BioGlue and BioFoam. Research and development spending in 2010 was primarily focused on the Company's SynerGraft tissues and products and the BioGlue family of products.

Other Income and Expenses

Interest expense was \$37,000 and \$67,000 for the three and six months ended June 30, 2011, respectively, and \$65,000 and \$116,000 for the three and six months ended June 30, 2010 respectively. Interest expense for the three and six months ended June 30, 2011 and 2010 included interest incurred related to the Company's debt, capital leases, and interest related to uncertain tax positions.

Interest income was \$3,000 and \$12,000 for the three and six months ended June 30, 2011, respectively, and \$6,000 and \$10,000 for the three and six months ended June 30, 2010 and 2010 was primarily due to interest earned on the Company's cash and investments.

The gain on valuation of derivative was zero for both the three and six months ended June 30, 2011, respectively, and \$385,000 and \$1.2 million for the three and six months ended June 30, 2010, respectively. The gain on valuation of derivative in the 2010 periods was due to the decrease in the value of embedded derivatives related to Medafor common stock previously purchased by the Company.

Earnings

					Six Mon	ths E	nded
-	Three Mor	ths E	anded				
	June	30,			Jun	e 30 ,	
	2011		2010		2011		2010
\$	3,779	\$	5,074	\$	6,314	\$	8,407
	1,959		2,148		2,828		3,547
\$	1,820	\$	2,926	\$	3,486	\$	4,860
\$	0.07	\$	0.10	\$	0.13	\$	0.17
	27,745		28,483		27,729		28,513
	Φ.	June 2011 \$ 3,779 1,959 \$ 1,820 \$ 0.07	June 30, 2011 \$ 3,779 \$ 1,959 \$ 1,820 \$ \$ 0.07 \$	2011 2010 \$ 3,779 \$ 5,074 1,959 2,148 \$ 1,820 \$ 2,926 \$ 0.07 \$ 0.10	June 30, 2011 2010 \$ 3,779 \$ 5,074 1,959 2,148 \$ 1,820 \$ 2,926 \$ 0.07 \$ 0.10	Three Months Ended June 30, June 2010 2011 2010 2011 \$ 3,779 \$ 5,074 \$ 6,314 1,959 2,148 2,828 \$ 1,820 \$ 2,926 \$ 3,486 \$ 0.07 \$ 0.10 \$ 0.13	Three Months Ended June 30, 2011 2010 2011 \$ 3,779 \$ 5,074 \$ 6,314 \$ 1,959 \$ 1,820 \$ 2,926 \$ 3,486 \$ \$ \$ 0.07 \$ 0.10 \$ 0.13 \$

Income before income taxes decreased 26% for the three months and 25% for the six months ended June 30, 2011 as compared to the three and six months ended June 30, 2010, respectively. Income before income taxes for the three and six months ended June 30, 2011 was primarily impacted by costs related to the acquisition of Cardiogenesis in the second quarter of 2011 and an increase in other costs and expenses as discussed above.

The Company's effective income tax rate was approximately 52% and 45% for the three and six months ended June 30, 2011, respectively, as compared to 42% for both the three and six months ended June 30, 2010. The significant increase in the Company's effective income tax rate for the three and six months ended June 30, 2011 was due to the unfavorable tax treatment of certain acquisition related expenses, which the Company incurred related to its acquisition of Cardiogenesis.

Net income and diluted income per common share for the three and six months ended June 30, 2011 decreased compared to the corresponding periods in 2010 due to the decrease in income before income taxes and the increase in income tax expense as discussed above.

The Company expects that its effective income tax rate will decrease in the second half of 2011 compared to the rate experienced in the second quarter of 2011, unless the Company completes another significant acquisition in 2011. The Company does not anticipate incurring significant additional acquisition costs for Cardiogenesis that are not deductible on the Company's federal and state income tax returns.

Basic and diluted income per common share could be impacted in future periods unfavorably by the issuance of additional shares of common stock and favorably by the Company's repurchase of its common stock. Stock repurchases are impacted by many factors, including: stock price, available funds, and competing demands for such funds, and as a result, may be suspended or discontinued at any time.

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 PerClot will be seasonal. As PerClot 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 PerClot sales may be obscured.

The Company is uncertain whether the demand for revascularization technology will be seasonal.

Liquidity and Capital Resources

Net Working Capital

At June 30, 2011 net working capital (current assets of \$87.6 million less current liabilities of \$19.9 million) was \$67.7 million, with a current ratio (current assets divided by current liabilities) of 4 to 1, compared to net working capital of \$82.2 million and a current ratio of 5 to 1 at December 31, 2010.

Overall Liquidity and Capital Resources

The Company's largest cash requirement for the six months ended June 30, 2011 was the acquisition of all of the outstanding common stock of Cardiogenesis and related transaction costs. On May 17, 2011 CryoLife completed its acquisition of all of the outstanding shares of Cardiogenesis for \$0.457 per share or approximately \$21.7 million. CryoLife used cash on hand to fund the transaction and will operate Cardiogenesis as a wholly owned subsidiary. The Company's other cash requirements included cash for general working capital needs, the payment of legal and professional fees, and repurchases of the Company's common stock. Legal and professional fees during the three and six months ended June 30, 2011 included business development costs, primarily costs associated with the Company's acquisition of Cardiogenesis, other business development activities, and costs associated with the Company's litigation with Medafor. The Company funded its cash requirements primarily through its existing cash reserves and its operating activities, which generated cash during the period.

CryoLife entered into a credit facility with GE Capital in March of 2008, as amended (the "GE Credit Agreement"), which provides for up to \$15.0 million in revolving credit for working capital, acquisitions, and other corporate purposes, of which \$14.8 million was available for borrowing as of June 30, 2011. As of June 30, 2011 the outstanding balance under this agreement was zero. As required under the terms of the GE Credit Agreement, the Company is maintaining cash and cash equivalents of at least \$5.0 million in accounts in which GE Capital has a first priority perfected lien. As a result, these funds will not be available to meet the Company's liquidity needs during the term of the GE Credit Agreement and, as such, have been recorded in restricted securities on the Company's Summary Consolidated Balance Sheets. Also, the GE Credit Agreement requires that after giving effect to a stock repurchase the Company maintain liquidity, as defined in the agreement, of at least \$20.0 million. During the second quarter of 2011, the Company amended the GE Credit Agreement to extend the expiration date of the credit facility to August 31, 2011. CryoLife is currently reviewing its options regarding whether to enter into a new credit agreement or loan with GE Capital or another lender. CryoLife is also considering the possibility of expanding its line of credit capacity to provide liquidity for growth, including potential acquisitions; however, there is no guarantee that a new or extended line of credit can be obtained.

The Company's cash equivalents include advance funding received under the DOD Grants for the continued development of protein hydrogel technology. As of June 30, 2011 \$1.5 million of the Company's cash equivalents were related to these DOD Grants, which must be used for the specified purposes.

In July 2011 CryoLife announced an equity investment in ValveXchange, a private medical device company that was spun off from Cleveland Clinic to develop a lifetime heart valve replacement technology platform featuring exchangeable bioprosthetic leaflets. As a result of this agreement, the Company made a cash payment of \$3.5 million to ValveXchange in the third quarter of 2011. The Company may provide funding of up to \$2.0 million in additional debt financing to ValveXchange through a revolving credit facility. The Company cannot currently anticipate if or when ValveXchange may draw funding from this credit facility.

The Company believes that its anticipated cash from operations and existing cash and cash equivalents will enable the Company to meet its current operational liquidity needs for at least the next twelve months. The Company's future cash requirements may include cash to fund clinical trials, including the PerClot and Cardiogenesis clinical trials, to fund other business development activities, to purchase license agreements, for general working capital needs, to fund the Medafor litigation, to fund the ValveXchange revolving credit facility, to repurchase the Company's common stock, and for other corporate purposes. The Company expects that these items will have a significant impact on its cash flows in the remainder of 2011. The Company expects

to seek additional borrowing capacity to fund additional business development activities or other future cash requirements, and will be required to obtain such funding to finance any significant future business development activities. The Company acquired net operating loss carryforwards from its acquisition of Cardiogenesis that the Company believes will reduce required cash payments for federal income taxes by approximately \$500,000 for the 2011 tax year.

Net Cash from Operating Activities

Net cash provided by operating activities was \$7.9 million for the six months ended June 30, 2011 as compared to \$10.0 million for the six months ended June 30, 2010. The Company uses the indirect method to prepare its cash flow statement and, accordingly, the operating cash flows are based on the Company's net income, which is then adjusted to remove non-cash items and for changes in operating assets and liabilities from the prior year end. For the six months ended June 30, 2011 these non-cash items included a favorable \$2.2 million in depreciation and amortization expense and \$1.4 million in non-cash stock based compensation.

The Company's working capital needs, or changes in operating assets and liabilities, also affected cash from operations. For the six months ended June 30, 2011 these changes included a favorable \$3.1 million due to decreases in deferred preservation costs and inventory balances, partially offset by an unfavorable \$1.4 million due to the timing differences between the recording of accounts payable, accrued expenses, and other current liabilities and the actual payment of cash and \$1.0 million due to the timing difference between making cash payments and the expensing of assets, including prepaid insurance policy premiums.

Net Cash from Investing Activities

Net cash used in investing activities was \$22.4 million for the six months ended June 30, 2011 as compared to \$3.7 million for the six months ended June 30, 2010. The current year cash used was primarily due to the payment of \$21.1 million for the acquisition of Cardiogenesis, net of cash acquired.

Net Cash from Financing Activities

Net cash used in financing activities was \$1.2 million for the six months ended June 30, 2011 as compared to \$303,000 for the six months ended June 30, 2010. The current year cash used was primarily due to \$1.6 million in purchases of treasury stock, largely related to the Company's publicly announced stock repurchase plan.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

Scheduled Contractual Obligations and Future Payments

Scheduled contractual obligations and the related future payments as of June 30, 2011 are as follows (in thousands):

		Re	mainder of									
	Total	2011 2012		2012	2013	2014		2015		Th	ereafter	
Operating leases	\$ 27,455	\$	1,081	\$	2,605	\$ 2,537	\$	2,522	\$	2,525	\$	16,185
Purchase commitments	10,144		1,820		2,643	3,554		2,127				
Research obligations	4,342		815		1,384	589		1,181		373		
PerClot contingent payments	2,000				500			1,500				
Compensation payments	1,985					993		992				
Total contractual obligations	\$ 45,926	\$	3,716	\$	7,132	\$ 7,673	\$	8,322	\$	2,898	\$	16,185

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 purchase commitments include minimum purchase requirements for PerClot related to the Company's transaction with SMI. These minimum purchases are included through 2014, as the Company expects to receive FDA approval for PerClot no later than 2014. Upon FDA approval, the Company may terminate its minimum purchase requirements, which it expects to do. However, if the Company does not terminate this provision, it will have minimum purchase obligations of \$1.75 million per year through the end of the contract term in 2025. The Company's purchase commitments also include obligations from agreements with suppliers and contractual payments for licensing computer software and telecommunication services.

The Company's research obligations represent commitments for ongoing studies and payments to support research and development activities, which will be partially funded by the advances received under the DOD Grants.

The obligation for PerClot contingent payments represents the contingent milestone payments that the Company will pay if certain FDA regulatory approvals and other commercial milestones are achieved. The schedule excludes one contingent milestone payment of \$500,000, as the Company cannot make a reasonably reliable estimate of timing of this future payment.

The Company's compensation payment obligations represent 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 schedule of contractual obligations above excludes (i) obligations for estimated liability claims unless they are due as a result of a pending settlement agreement or other contractual obligation and (ii) any estimated liability for uncertain tax positions and interest and penalties, currently estimated to be \$1.7 million, because the Company cannot 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.

Capital Expenditures

Capital expenditures for the six months ended June 30, 2011 were \$1.2 million compared to \$827,000 for the six months ended June 30, 2010. Capital expenditures in the six months ended June 30, 2011 were primarily related to the routine purchases of tissue processing, manufacturing, computer, and office equipment; computer software; and renovations to the Company's corporate headquarters needed to support the Company's business.

Forward-Looking Statements

This Form 10-Q includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. Forward-looking statements give the Company's current expectations or forecasts of future events. The words "could," "may," "might," "will," "would," "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:

- · Beliefs regarding BioGlue revenues in future periods and the factors that may impact domestic and international BioGlue sales;
- Expectations regarding revenues from PerClot and HemoStase and total hemostat sales for 2011;
- Expectations regarding when CryoLife will commence manufacturing PerClot;
- Expectations regarding revenues from revascularization technology and the resultant impact on CryoLife's revenues for the remainder of 2011;
- · Expectations regarding transaction and integration expenses associated with the acquisition of Cardiogenesis;
- Expectations regarding acquisition related expenses in the remainder of 2011;
- · Expectations regarding the Company's effective income tax rate and the tax treatment of items related to acquisitions;
- Anticipated uses of cash in the remainder of 2011 and the resulting impact on cash flows;
- The adequacy of the Company's financial resources;
- The Company's belief that it may seek additional borrowing capacity;
- The Company's belief that it will have sufficient cash to meet its operational liquidity needs for at least the next twelve months;
- Issues that may impact the Company's future financial performance and cash flows;
- · Expectations regarding net operating loss carryforwards;
- Expectations regarding the timing of future payments to SMI and the accounting treatment of those payments;
- · Plans and costs related to regulatory approval for the distribution of PerClot in the U.S. and international markets;
- · Anticipated timing of CryoLife's refiling of the IDE for PerClot and anticipated timing of obtaining FDA approval of the IDE;
- Expectations regarding minimum purchase requirements related to PerClot;
- The Company's expectations regarding the timing of court rulings in its legal proceedings and the length of various stages of legal proceedings;
- · The Company's estimated future liability for existing tissue processing and product liability lawsuits and for claims incurred but not yet reported;
- · Expectations regarding unreported loss liability and any related recoverable insurance amounts;
- The Company's intentions with respect to lawsuits and the expected impact of current litigation;
- The Company's beliefs regarding the seasonal nature of the demand for some of its preservation services and products;
- · Anticipated impact of changes in interest rates and foreign currency exchange rates;
- · The Company's expectations regarding the renewal of certain contracts;
- Expectations regarding the impact of new accounting pronouncements; and
- Other statements regarding future plans and strategies, anticipated events, or trends.

These statements are based on certain assumptions and analyses made by the Company in light of its experience and its perception of historical trends, current conditions, and expected future developments as well as other factors it believes are appropriate in the circumstances. However, whether actual results and developments will conform with the Company's expectations and predictions is subject to a number of risks and uncertainties which could cause actual results to differ materially from the Company's expectations, including, without limitation, in addition to those specified in the text surrounding such statements, the risk factors set forth below, the risks set forth under Part II, Item 1A of this Form 10-Q, the risks set forth under Part II, Item 1A of the Company's Form 10-Q for the quarter ended March 31, 2011, the risk factors set forth under Part I, Item 1A of the Company's Form 10-K for the year ended December 31, 2010, 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;
- Our tissues and 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, including one currently outstanding product liability lawsuit, and additional regulatory scrutiny as a result;
- · Demand for our tissues and products could decrease in the future, which could have a material adverse impact on our business;
- We are currently involved in significant litigation with Medafor and that litigation cost may have a material adverse impact on our profitability;
- Our investment in Medafor may have been impaired due to Medafor's termination of the EDA, which could have a material adverse impact on our financial condition and profitability;
- Medafor has filed counterclaims against us with respect to our lawsuit against Medafor, and if Medafor is successful in its claims, our revenues and profitability may be materially, adversely impacted;
- 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;
- · Uncertainties related to patents and protection of proprietary technology may adversely impact the value of our intellectual property;
- Intense competition may impact our ability to operate profitably;
- 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;
- · If we are not successful in expanding our business activities in international markets, we may be unable to increase our revenues;
- We are dependent on the availability of sufficient quantities of tissue from human donors;
- The loss of any of our sole-source suppliers could have a material adverse impact on our revenues, financial condition, profitability, and cash flows;
- · We may be unsuccessful in our efforts to market and sell PerClot in the U.S. and internationally;
- Our short-term liquidity and earnings in 2011 will be impacted by our substantial investment in our distribution and license and manufacturing agreements with SMI, and we will not fully realize the benefit of our investment in future years unless we are able to obtain FDA approval for PerClot in the U.S., which will require an additional commitment of funds;
- · Key growth strategies may not generate the anticipated benefits;
- Investments in new technologies and acquisitions of products or distribution rights may not be successful;
- We may expand through acquisitions or licenses of, or investments in, other companies or technologies, which may result in additional dilution to our stockholders and consume resources that may be necessary to sustain our business;
- We may find it difficult to integrate recent acquisitions of technology and potential future acquisitions of technology or business combinations, which
 could disrupt our business, dilute stockholder value, and adversely impact our operating results;
- We may not realize the anticipated benefits from an acquisition;
- Regulatory action outside of the U.S. has affected our business in the past and may affect our business in the future;
- · Extensive government regulation may adversely impact our ability to develop and market services and products;
- · Healthcare policy changes, including recent federal legislation to reform the U.S. healthcare system, may have a material adverse impact on us;
- Consolidation in the healthcare industry could lead to demands for price concessions, limits on the use of our tissues and products, or eliminate our ability to sell to certain of our significant market segments;
- The success of many of our tissues and products depends upon strong relationships with physicians;
- Our CryoValve SGPV post-clearance study may not provide expected results;
- Our existing insurance policies may not be sufficient to cover our actual claims liability;

- We may not be able to obtain adequate insurance at a reasonable cost, if at all;
- We are not insured against all potential losses. Natural disasters or other catastrophes could adversely affect our business, financial condition, and profitability;
- Our credit facility which expires in August of 2011 limits our ability to pursue significant acquisitions;
- Our ability to borrow under our credit facility which expires in August of 2011 may be limited;
- We may not be able to enter into a new credit facility after our current credit facility expires in August 2011;
- · Continued fluctuation of foreign currencies relative to the U.S. Dollar could materially adversely impact our business;
- Rapid technological change could cause our services and products to become obsolete;
- · We are dependent on our key personnel; and
- The integration of Cardiogenesis' business into our business may be slower than expected or unsuccessful, and our revenues and operating expenses may be materially adversely impacted as a result.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

The Company's interest income and interest 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 \$19.8 million and restricted securities of \$5.0 million and interest paid on the Company's variable rate line of credit as of June 30, 2011. A 10% adverse change in interest rates as compared to the rates experienced by the Company in the six months ended June 30, 2011, 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 significant portion of the Company's international BioGlue revenues are denominated in British Pounds and Euros, and a portion of the Company's general, administrative, and marketing expenses are denominated in British Pounds and Euros. These foreign currency transactions are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the U.S. Dollar equivalent of net income from transactions conducted in other currencies. As a result, the Company could recognize a reduction in revenues or an increase in expenses related to a change in exchange rates.

Changes in exchange rates which occurred during the six months ended June 30, 2011, 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. An additional 10% adverse change in exchange rates from the exchange rates in effect on June 30, 2011 affecting the Company's balances denominated in foreign currencies would not have had a material impact on the Company's financial position or cash flows. An additional 10% adverse change in exchange rates from the exchange rates in effect on June 30, 2011 as compared to the weighted-average exchange rates experienced by the Company for the six months ended June 30, 2011 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. Due to 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. The Company's Disclosure Controls have been designed to provide reasonable assurance of achieving their objectives.

Based upon the most recent Disclosure Controls evaluation conducted by management with the participation of the CEO and CFO, as of June 30, 2011 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.

The Securities and Exchange Commission's general guidance permits the exclusion of an assessment of the effectiveness of a registrant's disclosure controls and procedures as they relate to its internal control over financial reporting for an acquired business during the first year following such acquisition if, among other circumstances and factors, there is not adequate time between the acquisition date and the date of assessment. As previously noted in the Form 10-Q, the Company completed the acquisition of Cardiogenesis Corporation ("Cardiogenesis") during the second quarter of 2011. Management's assessment and conclusion on the effectiveness of the Company's disclosure controls and procedures as of June 30, 2011 excludes an assessment of the internal control over financial reporting of Cardiogenesis.

During the quarter ended June 30, 2011, there were no other 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.

Medafor

As previously reported, CryoLife filed a lawsuit against Medafor, Inc. ("Medafor") in 2009 in the U.S. District Court for the Northern District of Georgia ("Georgia Court"). In 2010 Medafor filed counterclaims against CryoLife, and CryoLife filed a motion to dismiss most of Medafor's counterclaims. On July 8, 2011 the Georgia Court denied CryoLife's motion to dismiss Medafor's counterclaims, merging Medafor's breach of implied duty of good faith and fair dealing claim into Medafor's breach of contract claim. As previously reported, CryoLife and Medafor have both filed motions for partial summary judgment. CryoLife's motion for partial summary judgment is based on its contention that Medafor's termination of the Exclusive Distribution Agreement ("EDA") was wrongful, and Medafor's motion for partial summary judgment is based on its contention that CryoLife currently owes Medafor approximately \$1.3 million plus prejudgment interest for product Medafor shipped to CryoLife. On June 30, 2011 the Georgia Court directed both parties to notify the Georgia Court if they will reconsider their position on whether the Georgia Court should withhold ruling on the motions for partial summary judgment as the parties move through the discovery process. The Georgia Court has not set a date for a hearing on any of these motions.

On July 5, 2011 the Georgia Court appointed a Discovery Special Master to manage and supervise discovery in this case pursuant to a Joint Motion for Appointment of Special Master filed by the parties. The parties have exchanged some documents and responses to written discovery, and have subpoenaed documents from some non-parties. No depositions other than a single non-party deposition have been taken. The Georgia Court originally set an eight-month discovery period and in June extended the discovery period by approximately two months, stating that further extensions and scheduling will be reviewed and recommended by the Discovery Special Master. CryoLife expects discovery to continue for a significant period of time. CryoLife believes that the trial will not occur until 2012 or 2013.

On July 14, 2011, following CryoLife's demand made on the Board of Directors of Medafor that it register its common stock under Section 12(g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Medafor filed a lawsuit against CryoLife in the U.S. District Court for the District of Minnesota ("Minnesota Court"). Medafor's lawsuit requests that the Minnesota Court grant a declaratory judgment that Medafor's reverse stock split on December 31, 2010 reduced the number of Medafor shareholders to below 500 and that, therefore, Medafor is not required to comply with the registration requirements of Section 12(g) of the Exchange Act (*i.e.*, not required to register as a public company with the SEC). Medafor's lawsuit also requests that the Minnesota Court award Medafor its costs and expenses in the lawsuit. CryoLife's required response to the lawsuit is due August 5, 2011. CryoLife disputes Medafor's position and will defend itself vigorously in this action. At this time CryoLife is unable to predict the outcome of this matter. The Company believes that the outcome of this matter will not have a material adverse effect on its financial position, result of operations, or cash flow. However, as this matter is ongoing, there is no assurance that this matter will be resolved in the Company's favor.

Cardiogenesis Merger

In conjunction with the announcement by CryoLife of its entering into a Merger Agreement with Cardiogenesis Corporation ("Cardiogenesis"), on April 7, 2011 two plaintiffs filed purported class actions against Cardiogenesis, its directors, and CryoLife

and CryoLife's subsidiary CL Falcon, Inc. in connection with the proposed offer and merger. These suits were filed in California Superior Court for Orange County ("California Court") and alleged that the defendants breached and/or aided and abetted the breach of their fiduciary duties to Cardiogenesis by seeking to sell Cardiogenesis through an allegedly unfair process and for an unfair price and on unfair terms. The suits sought various equitable relief that would delay or enjoin the merger based on allegations regarding the process by which offers or potential offers were evaluated by Cardiogenesis, as well as fees and expenses of the plaintiffs' attorneys and experts.

Court	Filing Date	Case Name	Case Number
Superior Court of California,	April 7, 2011	Patrick J. Grace	30-2011-00464472-CU-SL-CXC
County of Orange		vs. Paul McCormick	
Superior Court of California,	April 7, 2011	Marion William Habiak	30-2011-00464844-CU-SL-CXC
County of Orange		vs. Cardiogenesis Corporation	

On June 13, 2011 the California Court ordered the dismissal of the Grace lawsuit, without prejudice. On July 18, 2011 the California Court ordered the dismissal of the Habiak lawsuit, without prejudice.

CardioFocus

As previously reported by Cardiogenesis, in February 2008 CardioFocus, Inc. ("CardioFocus") filed a complaint (Case No. 1.08-cv-10285) in the U.S. District Court for the District of Massachusetts (the "Massachusetts Court") against Cardiogenesis and a number of other companies. In the complaint, CardioFocus alleges that Cardiogenesis and the other defendants had previously violated patent rights allegedly held by CardioFocus directed to the use of holmium-doped YAG lasers in connection with low-hydroxyl content silica fibers for use in performing surgery. All of the asserted patents have now expired and the Company is the sole remaining defendant in the action. CardioFocus seeks a reasonable royalty pursuant to the Georgia Pacific factors for Cardiogenesis' sales of its accused products, namely, the Solargen, TMR, and New Star lasers and lasers systems, during the period 2002 to 2007.

On June 13, 2008 Cardiogenesis filed requests for reexamination of the patents being asserted against Cardiogenesis with the U.S. Patent and Trademark Office ("USPTO") and asserted that prior art had been identified that raised substantial new issues of patentability with respect to the inventions claimed by CardioFocus' patents. In August 2008 the USPTO granted Cardiogenesis' reexamination requests. Reexamination requests filed by other named defendants were also granted. As a result of those reexamination proceedings, which CardioFocus did not appeal, the USPTO made the following determinations: (a) all asserted claims of CardioFocus' U.S. Patent No. 6,159,203 (the "'203 Patent") are unpatentable; (b) 11 of 14 claims of U.S. Patent No. 6,547,780 (the "'780 Patent") are unpatentable; and (c) 8 of 13 claims of U.S. Patent No. 5,843,073 (the "'073 Patent") are unpatentable. However, three claims being asserted by CardioFocus against the Company, namely, Claim 2 of the '780 Patent and Claims 2 and 7 of the '073 Patent were confirmed by the USPTO.

Thereafter, the Massachusetts Court, at a status conference held on April 22, 2010, issued a scheduling order scheduling dates in connection with the litigation regarding discovery, law and motion practice, a briefing schedule and hearing for patent claim construction proceedings, and other key events. Fact discovery concluded in January 2011 and the parties briefed issues on the construction/interpretation of certain disputed terms of the remaining asserted claims. A claim construction hearing had been set for April 1, 2011 and trial was set to commence on November 7, 2011.

Concurrently with the litigation, Cardiogenesis had also filed four further reexamination requests seeking to invalidate the remaining claims of the '780 Patent and '073 Patent being asserted against Cardiogenesis. Two of the reexamination requests were filed on June 30, 2010, and two others were filed on October 15, 2010. These further reexamination requests were based, in part, on newly identified prior art not previously considered by the USPTO and on March 16, 2011, the USPTO issued Office Actions rejecting the three remaining claims in view of multiple combinations of prior art. In light of the rejection of the three remaining claims being asserted and because a final ruling that such claims are invalid would be potentially dispositive of the entire litigation, the parties requested and the Massachusetts Court granted a stay of the litigation pending the outcome of Cardiogenesis' reexaminations. The stay was ordered in effect on March 24, 2011 and all dates previously set, including the claim construction hearing, had been suspended. The parties were to provide the Massachusetts Court with a Joint Status Report by September 30, 2011.

On June 16 and June 30, 2011 the USPTO confirmed the patentability of the three claims of the '780 Patent and '073 Patent. CryoLife and Cardiogenesis believe that the reinstatement of the claims supports our position of non-infringement and that significant issues concerning the validity of the asserted patents continue to exist. To reach a judicial determination of these matters, the parties have agreed to request that the Massachusetts Court lift the stay ordered in effect last March and reset the dates

for the claim construction hearing, expert discovery, the filing of dispositive motions, and trial. As of July 26, 2011 the Massachusetts Court had not set any of these dates.

The Company intends to defend itself vigorously in this action. At this time, the Company is unable to predict the outcome of this matter and believes that the outcome of this matter will not have a material adverse effect on the Company's financial position, result of operations, or cash flow. However, as this matter is ongoing, there is no assurance that this matter will be resolved favorably by the Company or will not result in a material liability to the Company.

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, 2010, as updated by Part II, Item 1A, "Risk Factors" in our Form 10-Q for the quarter ended March 31, 2011

We Have Inherited Risks And Uncertainties Related To Cardiogenesis' Business.

In May 2011 we acquired Cardiogenesis, and Cardiogenesis is now operating as a subsidiary of CryoLife. We have inherited certain risks and uncertainties related to Cardiogenesis' business. These risks and uncertainties include that:

- Our ability to maintain revenues and achieve growth in revenues from Cardiogenesis' revascularization technology in the future is dependent upon
 physician awareness of this technology as a safe, efficacious, and appropriate treatment for their patients;
- We may not be able to successfully market Cardiogenesis' revascularization technology if third-party reimbursement for the procedures performed with this technology is not available for its health care provider customers;
- Healthcare policy changes, including recent federal legislation to reform the U.S. healthcare system, may have a material adverse effect on Cardiogenesis' revascularization technology;
- If we fail to maintain Cardiogenesis' regulatory approvals and clearances, or are unable to obtain, or experience significant delays in obtaining FDA
 clearances or approvals for its future products or product modifications, our ability to commercially distribute and market these products could
 suffer;
- If suppliers or manufacturers with respect to Cardiogenesis products fail to comply with ongoing FDA or other foreign regulatory authority requirements, our Cardiogenesis business may be negatively impacted;
- · In the future, the FDA could restrict the current uses of Cardiogenesis' TMR System and thereby restrict its ability to generate revenues;
- The use, misuse, or off-label use of Cardiogenesis products may harm its image in the marketplace or result in injuries that lead to product liability suits, which could be costly to us or result in FDA sanctions if we are deemed to have engaged in such promotion;
- We may fail to comply with international regulatory requirements with respect to Cardiogenesis' business and could be subject to regulatory delays, fines, or other penalties;
- Our international operations with respect to Cardiogenesis subject it to certain operating risks, which could adversely impact its net sales, results of
 operations, and financial condition;
- We will continue to purchase some of Cardiogenesis' key product components from single suppliers, and the loss of these suppliers could prevent or delay shipments of its products, delay its clinical trials, or otherwise adversely affect our Cardiogenesis business;
- If Cardiogenesis' independent contract manufacturers fail to timely deliver sufficient quantities of some of Cardiogenesis' products and components in a timely manner, our Cardiogenesis operations may be harmed;
- · Cardiogenesis' contract manufacturers are at locations that may be at risk from earthquakes or other natural disasters;
- If clinical trials of Cardiogenesis' current or future product candidates do not produce results necessary to support regulatory clearance or approval in the U.S. or elsewhere, we will be unable to commercialize these products;
- If the third parties on which Cardiogenesis relies to conduct its clinical trials and to assist it with pre-clinical development do not perform as
 contractually required or expected, we may not be able to obtain regulatory clearance or approval for, or may not be able to commercialize our
 Cardiogenesis products;
- · Cardiogenesis' current third-party distributors or our own distributors may not effectively distribute Cardiogenesis products;

- Third-party intellectual property rights may limit the development and protection of intellectual property acquired from Cardiogenesis, which could
 adversely affect its value to us;
- Cardiogenesis has been named as a defendant in a patent infringement lawsuit and costly litigation may be necessary to protect or defend its intellectual property rights;
- The Cardiogenesis business relies on patent and trade secret laws, which are complex and may be difficult to enforce;
- · We may suffer losses from product liability claims if Cardiogenesis' products cause or have in the past caused harm to patients;
- · Cardiogenesis may have additional pre-existing legal claims, which could adversely affect us; and
- Cardiogenesis' internal control over financial reporting may not have been effective prior to the merger, which could have a significant and adverse
 effect on us.

The Integration Of Cardiogenesis' Business Into Our Business May Be Slower Than Expected Or Unsuccessful, And Our Revenues And Operating Expenses May Be Materially Adversely Impacted As A Result.

Our ability to fully realize the anticipated benefits of our acquisition of Cardiogenesis may be materially adversely impacted if the integration of Cardiogenesis' business with ours is slower than expected or unsuccessful, or if the efforts to integrate Cardiogenesis' business with us distract our management team from the other facets of our business.

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

(c) The following table provides information about purchases by the Company during the quarter ended June 30, 2011 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	ge Price d per	Total Number of Common Shares Purchased as Part of Publicly Announced	Dollar Value of Common Shares That May Yet Be Purchased Under the	
Period	Purchased	on Share	Plans or Programs		s or Programs
04/01/11 - 04/30/11	11,916	\$ 5.74		\$	7,739,911
05/01/11 - 05/31/11					7,739,911
06/01/11 - 06/30/11					7,739,911
Total	11,916	5.74			7,739,911

On June 1, 2010 the Company announced that its Board of Directors authorized the purchase of up to \$15.0 million of its common stock over the course of the following two years. The purchase of shares may be made from time to time in the open market or through privately negotiated transactions, on such terms as management deems appropriate, and will be dependent upon various factors, including price, regulatory requirements, and other market conditions. From June 1, 2010 to June 30, 2011 the Company had purchased a total of 1.3 million shares of its common stock for an aggregate purchase price of \$7.3 million. The remaining common shares shown were tendered to the Company in payment of the exercise price of outstanding options and 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
2.1	Amended and Restated Agreement and Plan of Merger Among CryoLife, Inc., CL Falcon, Inc., and Cardiogenesis Corporation dated April 14, 2011. (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed April 15, 2011.)
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 July 27, 2011.)
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*+	First Amendment to the Distribution Agreement between the Company and Starch Medical, Inc., dated May 18, 2011.
10.2*	First Amendment to Award Agreement between CryoLife and D. Ashley Lee dated May 24, 2011, relating to a Stock Option Grant to D. Ashley
	Lee dated May 4, 2006.
10.3*	First Amendment to Award Agreement between CryoLife and D. Ashley Lee dated May 24, 2011, relating to a Stock Option Grant to D. Ashley Lee dated February 21, 2006.
10.4*	Second Amendment to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, dated May 24, 2011.
10.5*	Sixth Amendment, dated June 30, 2011, 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.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

- ** Furnished herewith. Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fails to comply with the submission requirements. Users of this data are advised that, pursuant to Rule 406T, these interactive data files are deemed not filed and otherwise are not subject to liability.
- + 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

DATE

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

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

July 29, 2011

CRYOLIFE, INC. (Registrant)

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

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.

FIRST AMENDMENT TO DISTRIBUTION AGREEMENT

This **FIRST AMENDMENT TO DISTRIBUTION AGREEMENT** (this "First Amendment") is entered into as of May 18, 2011, by and between (i) STARCH MEDICAL, INC., a Delaware corporation having a principal place of business at 2150 Ringwood Avenue, San Jose, California 95131("SMI"), (ii) CRYOLIFE, INC., a Florida corporation, having a principal place of business at 1655 Roberts Blvd. NW, Kennesaw, Georgia 30144 ("CryoLife") and (iii) CLOTPLUS LIMITED, a limited company of Ireland having a principal place of business at Regus House, Block 4, Harcourt Road, Dublin2, Ireland ("CPL"). This First Amendment amends that certain Distribution Agreement dated September 28, 2010 between SMI and CryoLife (the "Agreement") and adds CPL as a party for the limited purposes set forth in this First Amendment. When used herein, the term Amended Agreement refers to the Agreement as amended by this First Amendment. To the extent any provision of this First Amendment conflicts with a term of the Agreement, the provisions of this First Amendment shall prevail. Defined terms used herein but not defined herein shall have the meaning set forth in the Agreement.

Background

WHEREAS, SMI manufactures Products defined in the Agreement;

WHEREAS, the Agreement appoints CryoLife as exclusive distributor of Products for Permitted Clinical Applications within the Territory;

WHEREAS, CPL has a Certificate of Free Sale from the Irish Medicines Board to manufacture Products for commercial sale (a " Free Sale Certificate") in countries in which a Free Sale Certificate is required for the sale of Products into these countries ("FSC Countries");

WHEREAS, SMI does not currently have a Free Sale Certificate for Products it manufactures:

WHEREAS, SMI and CryoLife desire to authorize SMI to engage CPL to manufacture Product that CryoLife can sell commercially in FSC Countries.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, SMI, CryoLife and CPL hereby agree as follows:

1. Order and Manufacture

- 1.1 <u>Authority and Manufacture</u>. SMI and CryoLife agree that SMI may use CPL to manufacture Products for sale to CryoLife under the Agreement. In connection there with, SMI and CryoLife agree that SMI may grant to CPL a limited license that permits CPL to manufacture Products for Permitted Clinical Applications within the Territory for sale only to CryoLife pursuant to the terms of this Agreement.
- 1.2 <u>General Responsibilities</u>. CPL shall be responsible to CryoLife for all Product manufactured by CPL. SMI shall use all reasonable efforts to cause CPL to fulfill all responsibilities of CPL as manufacturer of record of Products it produces for CryoLife. CPL agrees to comply with all applicable regulatory, quality and specification requirements set forth in the Amended Agreement with respect to Products manufactured by CPL.
- 1.3 <u>Product Order, Delivery and Payment</u>. Orders for Products manufactured by CPL ("<u>CPL Products</u>") shall be placed by CryoLife with SMI and be fulfilled in the manner provided in the Amended Agreement. CryoLife shall place orders as set forth on the attached <u>Schedule 1.3</u>. CryoLife may designate CPL as manufacturer of record on all orders of Products it desires to distribute in FSC Countries and all such Product shall be manufactured by CPL ("<u>FSC Product Orders</u>"). For Products CryoLife designates for manufacture by CPL or for resale into FSC Countries, SMI shall cause such Products to be manufactured by CPL.
- 1.4 <u>Direct Orders with CPL</u>. CryoLife shall place FSC Product Orders directly with CPL or make payment for such orders directly to CPL. Orders placed and payments made to CPL shall, except for the payee, otherwise comply with all requirements of Section 3 (Payment and Product Purchases) of the Amended Agreement and be counted for all purposes of the Amended Agreement as if they were purchased directly from SMI. Any payments made to CPL shall be credited to CryoLife for purposes of the Amended Agreement as if they were made directly to SMI. Inability of CPL to fulfill CryoLife's purchase orders for CPL Products, solely due to manufacturing or production reasons, will be treated as SMI's inability to fulfill purchase orders for Products under Section 3.8.3 of the Amended Agreement. The parties agree that notwithstanding the price and Products available under the Agreement, that the CPL Products shall only be for the configurations and prices set forth on <u>Schedule 1.4</u>, attached hereto. CryoLife agrees that notwithstanding anything contrary contained in the Amended Agreement except for <u>Schedule 1.3</u> it will only order once every calendar year from CPL unless CPL otherwise consents in writing. If requested by CPL it shall reasonably attempt to place its orders for CPL Product in larger quantities to assist CPL in achieving manufacturing scale.
- 1.5 <u>Specifications and Regulatory Compliance</u>. All CPL Products and all procedures employed by CPL in the manufacture of CPL Products shall meet the requirements set forth in the following Agreement sections: Section 4 (Product Specifications and Changes) and Section 5 (Approvals and Compliance). All CPL Products shall be manufactured by CPL in a fully CE Marking certified and functioning manufacturing facility.

2. <u>Distribution and Inventory</u>

2.1 <u>Limitations on CPL Activities</u>. During the term of this Agreement CPL agrees (i) to sell the CPL Products for use in Permitted Clinical Applications within the Territory exclusively to CryoLife, (ii) to refrain from selling or licensing any CPL Products to any Distributor or Third Party for sale or distribution in Permitted Clinical Applications within the Territory, (iii) to refrain from directly or indirectly marketing, promoting, or encouraging any Third Party to market, promote or distribute the CPL

Products for any of the Permitted Clinical Applications within the Territory, (iv) to refrain from licensing or transferring any AMPTM technology to any Third Party within the Territory for the purpose of manufacturing any CPL Products upon terms or conditions that would enable or allow such Third Party to sell any CPL Products for Permitted Clinical Applications within the Territory. In addition, CPL agrees until January 1, 2015 it shall refrain from (A) directly, or indirectly selling, permitting to sell, market, promote or encouraging third parties to sell, permit to sell, market or promote any Competitive Product for any Permitted Clinical Application within the Territory or (B) licensing or transferring to any Third Party technology that would enable or allow any Third Party to manufacture any Competitive Product within the Territory. The foregoing limitations do not apply to sales by SMI or CPL of the Products described on Schedule 2.1 of the Agreement.

- 2.2 <u>Current CPL Distributors</u>. CPL represents and warrants that no Persons have any rights or agreements from or with CPL that entitle them to Distribute any Products for Permitted Clinical Applications within the Territory.
- 2.3 <u>Supply Interruption</u>. CPL will notify CryoLife and SMI immediately in writing upon becoming aware of any supply shortage, or other interruption or potential interruption in the supply of any material, component, or sub-assembly, in each case as it relates to CPL Products, which notice shall include the quantity of such material or component ordered by CPL, name of the distributor and any additional information CPL may have concerning the reasons for the supply interruption and the steps being taken to cure such interruption. In addition, if reasonably requested in writing by CryoLife, CPL agrees to confirm within twenty (20) days that CPL is not aware of any supply shortage, or other interruption or potential interruption in the supply of any material, component, or sub-assembly that impacts CPL. If at any time CPL does not have enough component material to fulfill, or other supply or manufacturing problems prevent CPL from fulfilling on a timely basis, its supply obligations to CryoLife for purchase of CPL Products, CPL shall promptly notify CryoLife of the nature and extent of the impairment to CPL's ability to supply and shall allocate 100% of its full resources to rectifying the impairment to the extent commercially reasonable until such impairment is overcome.
- 2.4 <u>Forecasts, Returns, and Payment.</u> CryoLife agrees to include the name of the anticipated manufacturer of record for all Products in the forecasts it provides pursuant to Section 3.11 (Forecasts) of the Amended Agreement. CPL agrees to accept returns of CPL Product in the same manner and upon the same terms as applies to Products manufactured by SMI under Section 3.13 (Returns) of the Agreement. Payments for orders placed directly with CPL by CryoLife shall be governed by the provisions of Section 3.14 (Payments) of the Amended Agreement as if the term CPL replaced the term SMI each time it appears therein.
- 2.5 <u>Samples</u>. CPL shall provide, at no cost to CryoLife, reasonable quantities of sterile and non-sterile CPL Products that CryoLife may use at its sole discretion for samples and demonstrations. From time to time as CryoLife and CPL may mutually agree is reasonable for the purpose of supporting CryoLife's promotional and sales efforts, CPL shall provide additional sample units to CryoLife at no cost to CryoLife. CryoLife shall certify that all orders for additional sample units are for sample units that were actually used for demonstrations and not sold or otherwise provided as part of the sale of CPL Products. The parties acknowledge that Section 3.15 of the Agreement shall be deemed an appropriate guide to the samples to be provided herein.
 - 3. **Approvals and Compliance**

- 3.1 Regulatory Approvals. CPL represents and warrants to CryoLife that it has applied for and received a Free Sale Certificate from the Irish Medicines Board for CPL Products in the Permitted Clinical Applications within. SMI and CPL jointly and severally represent and warrant that the Free Sale Certificate from the Irish Medicines Board for CPL Products as obtained is in good standing and has never been revoked or suspended for any reason. SMI has no reason to believe that the Free Sale Certificate will be revoked or suspended for any reason. Each of SMI and CPL hereby grant to CryoLife the fully paid-up right to use the Free Sale Certificate as it relates to the CPL Products within the Territory that are owned by or licensed to CPL throughout the Term. All costs and expenses related to obtaining and maintaining the Free Sale Certificate shall be CPL's. CPL shall have the primary responsibility for all communications, submissions and interactions with the Regulatory Authorities for the purpose of obtaining and maintaining the Free Sale Certificate. SMI and CPL each jointly and severally represent that CPL has a fully CE Marking certified and functioning manufacturing source for the CPL Products capable of producing sufficient CPL Product quantities to meet CryoLife's needs for Products to sell to FSC Countries under the Amended Agreement.
- 3.2 CPL Reporting. CPL agrees to provide CryoLife with the same reports respecting all Regulatory Approvals obtained and maintained by CPL that SMI provides to CryoLife, as SMI provides to CryoLife respecting all Products provided to CryoLife under the Amended Agreement.
- 3.3 <u>Regulatory and CPL Products Communications</u>. CPL shall be responsible to Regulatory Authorities throughout the Territory as the manufacturer of the CPL Products. SMI shall ensure that CPL fulfills all of its obligations as manufacturer of the CPL Products.
- 3.3.1 Each of SMI, CPL and CryoLife shall promptly notify the other and provide to the other a copy or transcription, if available, of any communication from any Regulatory Authority relating to the CPL Products, the marketing thereof, or any related matter (including copies of all product approvals) and shall keep the other parties reasonably apprised of regulatory interactions and similar activities with governmental authorities and international bodies in connection with the CPL Products anywhere in the Territory.
- 3.3.2 Each of SMI, CPL and CryoLife shall notify the other immediately by fax or email, with confirming notice via overnight delivery, as soon as it becomes aware of any issue with the CPL Products or their testing, manufacture, labelling, or packaging, including any issue relating to regulatory compliance, safety or efficacy of the CPL Products or breach by such party of the terms of this Agreement. Without limiting the generality of the foregoing, each of SMI, CPL and CryoLife will notify the other immediately if it becomes aware of any death or bodily injury caused by a CPL Product unit (or suspected to be caused by a CPL Product unit) or any malfunction of any of the CPL Products.
- 3.3.3 If any of SMI, CPL and CryoLife receives notice of an actual or threatened inspection, investigation, inquiry, recall, import or export ban, product seizure, enforcement proceeding or similar action by a Regulatory Authority with respect to the CPL Product or a party's activities in connection with the CPL Product, it will notify the other parties within forty-eight (48) hours after its receipt of notice of the action and will promptly deliver to the other parties copies of all relevant documents received from the Regulatory Authority. Any notice respecting a recall or action that in any way restricts the ability of CryoLife to Distribute CPL Products shall be delivered to the other parties promptly upon receipt.

- 3.3.4 Each of SMI, CPL and CryoLife shall cooperate in response to the action, including providing information and documentation as requested by the Regulatory Authority relating to any CPL Product. If the action primarily concerns CryoLife's activities then CryoLife shall have primary responsibility to respond to the Regulatory Authority; otherwise, CPL shall have primary responsibility to respond related to CPL Product. In either case, upon request of the responding party, the other parties shall provide consulting advice and assistance with the response. In addition, each of SMI, CPL and CryoLife shall promptly notify the others and provide to the others a copy or transcription, if available, of any communication from any Regulatory Authority relating to the CPL Products, the marketing thereof, or any related matter and shall keep the other parties reasonably apprised of regulatory interactions and similar activities with Regulatory Authorities in connection with the CPL Products.
- 3.3.5 If SMI, CPL or CryoLife in good faith determines that a removal, correction, recall or other Field Action involving the CPL Product or its labelling is warranted (whether or not required by a Regulatory Authority), such party shall immediately notify the other parties and shall advise such other parties of the reasons underlying its determination that a removal, correction, recall or other Field Action is warranted. The parties shall consult with each other as to any action to be taken in regard to such removal, correction, recall or other Field Action. If, after consultations, any party in good faith believes that such a removal, correction, recall or Field Action should be undertaken with respect to the CPL Products or its labelling, the parties shall cooperate in carrying out the same. CPL shall be responsible for all of CryoLife's reasonable out-of-pocket costs and expenses, including the cost of the CPL Products and the replacement cost of the CPL Products, quality control testing and notification in the event of removals, correction, recall or other Field Action involving the CPL Product or its labelling, provided it copies CryoLife on such notification. In the event of a Field Action of any CPL Products, CPL shall promptly correct noted deficiencies relating to its manufacturing, packaging, labelling, testing and storage or handling of CPL Product, if applicable, or cause the vendor of any material, component, or sub-assembly incorporated into such CPL Product to do likewise with respect to such material, component, or sub-assembly and CryoLife shall correct noted deficiencies related to matters for which it is responsible. If CryoLife is not timely reimbursed as required herein in Section 3.3.5, CryoLife may notify SMI and offset any such unreimbursed costs and expenses against amounts otherwise due or coming due to SMI under the Amended Agreement.
- 3.3.6 In the event of any action by a Regulatory Authority or Field Action that impedes CryoLife's ability to sell CPL Product, the Minimum Annual Purchase Requirements shall be adjusted equitably downward to reflect such impediment.
- 3.4 Compliance with Laws. Each of SMI, CPL and CryoLife will comply with all Applicable Laws in the Territory that pertain to the testing, manufacture, labelling, marketing, distribution, sale, or packaging of the CPL Product and in any other manner pertaining to the performance of its obligations under this Agreement, including the maintenance of ongoing quality assurance and testing procedures to comply with applicable regulatory requirements. Each of SMI, CPL and CryoLife will also comply with Applicable Laws in the Territory pertaining to the import, export, distribution, sales, and marketing of the CPL Product. Without limiting the generality of the foregoing, each of SMI, CPL and CryoLife will, as required by law, (i) report to every applicable Regulatory Authority within any relevant time periods all events that are required to be reported (including any death or serious bodily injury caused by a CPL Product); and (ii) deliver, within the permitted time periods, all annual or other periodic reports required to be delivered to every applicable Regulatory Authority.

- 3.5 Regulatory Audits and QA Assessments. CryoLife shall have the same regulatory audit and QA assessment rights with respect to CPL and CPL Products as it has with respect to SMI and Products under Section 5.8 (Regulatory Audits and QA Assessments) of the Agreement.
- 3.6 <u>Traceability</u>. CPL and CryoLife shall maintain manufacturing and traceability records with respect to the CPL Products, including records by lot number. For seven years after delivery to CryoLife of each CPL Product unit, or such longer period as may be required by applicable Regulatory Laws, SMI shall or shall cause CPL to: (i) maintain traceability for each CPL Product unit including the manufacturing date and lot number of each CPL Product unit and each component and material comprising each CPL Product and (ii) provide CryoLife a copy of such records upon CryoLife's written request.
- 3.7 <u>Product Complaints and Reports.</u> CPL and CryoLife shall each collect and record Product Complaints (and any other events required to be recorded under Applicable Laws) respecting CPL Products in accordance with Applicable Laws and their standard procedures and policies in effect from time to time. CPL and CryoLife shall each provide to the other reports of such complaints or events within seventy-two (72) hours after receipt. CPL shall be responsible for investigating all Product Complaints regarding CPL Products, shall promptly respond to such complaints and shall copy CryoLife on any response made by CPL or SMI. CPL shall be responsible for submitting, or causing to be submitted, to the Regulatory Authorities all required reports and other materials, including annual reports, distribution reports and safety reports.

4. Liability

- 4.1 <u>Indemnification by SMI</u>. SMI agrees that for purposes of SMI's indemnification obligations under Section 6 (Indemnification and Liability) of the Agreement (i) all CPL Products shall be included as and considered to be Products and (ii) all representations and warranties, covenants, or obligations of CPL under this First Amendment shall be deemed to be representations and warranties, covenants, or obligations of SMI under the Amended Agreement.
- 4.2 Insurance. CPL will procure insurance in accordance with Section 6.6 of the agreement for CPL Products with CPL's obligation being satisfied by including CPL Product under its insurance policies provided such inclusion provides CryoLife with full coverage for all CPL Product. It is understood that such insurance shall not be construed to create a limit of each party's liability with respect to its indemnification obligations under Section 6 (Indemnification and Liability) of the Amended Agreement or Section 4.1 of this First Amendment. Each party shall provide the other party with written evidence of such insurance (or financial information that describes the amounts available under any self-insurance facility) upon request. CPL shall provide CryoLife with written notice at least fifteen (15) days prior to the cancellation, non-renewal, or material change in such insurance. SMI may undertake CPL's obligation under this Section 4.1 through its own insurance policy, by adding CryoLife as an additional insured.

5. Confidentiality

5.1 <u>Confidentiality</u>. CryoLife and CPL each agree to be bound by the confidentiality agreement of Section 7 (Confidentiality) of the Agreement with respect to Confidential Information of the other party.

6. <u>Intellectual Property Rights</u>

- 6.1 Intellectual Property Representations. SMI hereby reconfirms its representations, warranties, and covenants contained in Section 10 (Intellectual Property Rights) of the Amended Agreement subject to the following qualification: SMI has granted to CPL, consistent with the authority recognized in Section 1 of this First Amendment, a limited license to manufacture Products for use in Permitted Clinical Applications for sale only to CryoLife for resale in Territory.
- 6.2 <u>Limited License for PerClot Mark</u>. CryoLife hereby grants CPL a non-exclusive, non-transferable license solely to use the PerClot mark in its manufacture of the CPL Products for CryoLife under this First Amendment.

7. Term and Termination

- 7.1 <u>Term and Termination</u>. The term of the Agreement shall not be amended by this First Amendment. References to Parties in the Section 11.2 (Termination) of the Agreement, however, shall be interpreted to refer therein only to CryoLife and SMI.
- 7.2 Effect of Termination. SMI's obligation to fill purchase orders shall include the obligation to cause CPL to fill purchase orders under Section 11.3 (Effect of Termination) of the Amended Agreement.
- 7.3 <u>Length of CPL Commitment</u>. CPL's obligation to manufacture Product hereunder shall terminate two years after CryoLife has received U.S. Regulatory Approval (as such term is defined in that certain License Agreement, dated September 28, 2010, by and between CryoLife and SMI) but not beyond 2016 unless with further approval of the parties.

8. Representations and Warranties

- 8.1 Representations and Warranties
 - 8.1.1 SMI and CPL each hereby jointly and severally represent and warrant that:
- (i) SMI is duly and validly organized and existing corporation in good standing under the laws of the state of Delaware, and that it or its affiliates that may be performing its obligations under this First Amendment are legally qualified to do business in each jurisdiction in which this First Amendment may be performed and where its activities hereunder require such qualification,
- (ii) CPL is a duly and validly organized and existing limited company under the laws of Ireland, and that it or its affiliates that may be performing its obligations under this First Amendment are legally qualified to do business in each jurisdiction in which this First Amendment may be performed and where its activities hereunder require such qualification,
- (iii) the performance of this First Amendment and the consummation of the transactions contemplated herein will not result in any breach, conflict, or violation of any terms or provisions of, or constitute a default under, the Certificate of Incorporation or By-Laws (if any), or other organizational documents, or any material agreement or instrument to which SMI or CPL is a party, by which it or CPL is bound, or to which any property of SMI or CPL is subject,

- (iv) all requisite corporate action has been taken for the due authorization, execution, delivery, and performance of this First Amendment by SMI and CPL, and this Agreement constitutes a legally binding obligation, enforceable against SMI and CPL, in accordance with its terms, except insofar as enforceability may be limited by bankruptcy, insolvency, reorganization, or similar laws affecting the rights of creditors generally,
- (v) neither SMI nor CPL is a party to any litigation relating to, or that could reasonably be expected to affect, its ability to perform its obligations under this First Amendment.
 - 8.1.2 CryoLife hereby represents and warrants that:
- (i) it is a duly and validly organized and existing corporation in good standing under the laws of the state of Florida, and that it or its affiliates that may be performing its obligations under this First Amendment are legally qualified to do business in each jurisdiction in which this First Amendment may be performed and where its activities hereunder require such qualification,
- (ii) the performance of this First Amendment and the consummation of the transactions contemplated herein will not result in any breach or violation of any terms or provisions of, or constitute a default under, its Certificate of Incorporation or By-Laws, or other organizational documents, and
- (iii) all requisite corporate action has been taken for the due authorization, execution, delivery, and performance of this First Amendment by it, and this Agreement constitutes a legally binding obligation, enforceable against such party, in accordance with its terms, except insofar as enforceability may be limited by bankruptcy, insolvency, reorganization, or similar laws affecting the rights of creditors generally.

9. General

- 9.1 Notice. Any notice or other communication required or permitted by this First Amendment or the Amended Agreement must be given in writing and must be delivered by personal delivery (including personal delivery by overnight courier such as Federal Express, DHL, or similar overnight courier), first class mail (registered or certified), telecopy (with a copy sent by personal delivery or first class mail), or email (with a copy sent by personal delivery or first class mail) at the address of the party as set forth herein or such other changed address of the party as to which notice has been given, and will be deemed as having been given when received or delivered. NOTWITHSTANDING ANYTHING TO THE CONTRARY PROVIDED IN THIS FIRST AMENDMENT OR THE AMENDED AGREEMENT, IT SHALL BE SUFFICIENT FOR CRYOLIFE, WHEN PROVIDING NOTICE TO THE OTHER PARTIES, TO PROVIDE SUCH NOTICE ONLY TO SMI. THE PARTIES ACKNOWLEDGE AND AGREE THAT NOTICE GIVEN BY CRYOLIFE TO SMI SHALL BE SUFFICIENT TO ALSO NOTIFY CPL.
- 9.2 <u>Binding</u>; <u>Assignment</u>. This First Amendment and the Amended Agreement shall be binding on CryoLife, SMI, CPL and their respective successors and assigns. No party may assign its obligations under the Amended Agreement or in any way transfer its rights or obligations under the Amended Agreement, directly or indirectly, without the prior written consent of the other party, which consent shall not be unreasonably withheld, except that either party may, without such consent, assign the

Amended Agreement in connection with any sale of substantially all of its assets or stock or pursuant to any merger, reclassification, or reorganization.

- 9.3 Entire Agreement; Modification; Waiver. This First Amendment together with the Agreement contains the entire agreement between the parties with respect to the subject matter of this First Amendment or the Agreement and shall supersede and terminate all prior agreements, commitments, or understandings, whether oral or written, related to the Products, except for the Confidentiality Agreement as modified by Section 7.2. No waiver or modification of any of the provisions of this First Amendment or the Amended Agreement shall be binding unless it is in writing and signed by CryoLife and SMI. CPL EXPRESSLY AGREES THAT THE AMENDED AGREEMENT MAY BE AMENDED BY AGREEMENT OF SMI AND CRYOLIFE AND THAT SMI MAY WAIVE RIGHTS OF CPL UNDER THIS FIRST AMENDMENT AND THE AMENDED AGREEMENT, NOTWITHSTANDING ANY ADVERSE IMPACT SUCH AMENDMENT OR WAIVER MAY HAVE ON CPL, AND ANY AND ALL SUCH AMENDMENTS AND WAIVERS SHALL BE BINDING ON BOTH SMI AND CPL. Any waiver of any condition on any one occasion shall not constitute a waiver on any subsequent occasion. A failure to exercise or a delay in exercising a right or remedy provided by this First Amendment or the Amended Agreement or by law shall not constitute a waiver of that right or remedy.
- 9.4 <u>Arbitration; Governing Law; Jurisdiction</u>. The parties agree that any dispute concerning, relating to, or arising out of this First Amendment or the Amended Agreement shall be resolved by final and binding arbitration in accordance with the procedures set forth in the Agreement as modified herein with CPL being a participant as necessary. Provided, however that, notwithstanding any other provision herein, either SMI or CryoLife, in its sole and exclusive discretion, may apply to any court with jurisdiction over the parties for a temporary restraining order, preliminary or permanent injunction, without submission of such claim for equitable relief to arbitration.
- 9.5 <u>Controlling Language</u>. This First Amendment and the Agreement have been written, and all discussions leading up to this First Amendment and the Agreement have been conducted, in the English language which the parties thoroughly understand. Each party represents that it has read and fully understands this First Amendment and the Agreement.
- 9.6 <u>Independent Contractor</u>. CryoLife shall operate as an independent contractor and nothing contained in the Amended Agreement shall be deemed or construed to recreate an employer/employee, principal/agent, joint venture, partnership, or fiduciary relationship between the parties.
- 9.7 <u>Severability</u>. If any provision of the Amended Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, such provision will be severed from the Amended Agreement without affecting the validity or enforceability of any of the remaining provisions.
- 9.8 <u>Heading and Captions</u>. Headings and captions used herein are for convenience only and are not to be deemed part of this First Amendment or the Amended Agreement.
- 9.9 <u>Inapplicability of UCC</u>. The parties agree that neither the Uniform Commercial Code of Georgia nor any other State of the United States shall apply to this First Amendment or the Amended Agreement or the activities contemplated by this First Amendment or the Amended Agreement. The parties intend that the provisions of this First Amendment or the Amended Agreement, including those relating to purchase of Products and CPL Products and termination, govern their activities exclusively

under this First Amendment or the Amended Agreement where provisions of the Uniform Commercial Code might otherwise provide.

- 9.10 <u>Counterparts/Defined Terms</u>. This First Amendment may be executed in multiple counterparts, each of which shall be an original, and all of which together shall constitute one and the same instrument. Terms defined in the Agreement but not separately defined in this First Amendment shall be given the meanings assigned to them in the Agreement. The use of the term Products includes all CPL Products.
- 9.11 <u>Further Assurances</u>; Force Majeure. Each party covenants and agrees that, subsequent to the execution and delivery of this First Amendment or the Amended Agreement and without any additional consideration, it will execute and deliver any further legal instruments and perform any acts that are or may become reasonably necessary to effectuate the purposes of this First Amendment or the Amended Agreement. Neither SMI nor CryoLife will have any liability for any failure or delay in performing any obligation under this First Amendment or the Amended Agreement (except the obligation to make payments promptly when and as due) if the failure or delay results from force majeure, understood as a cause which is beyond the control of either party and one which could not have been avoided even with the exercise of due care. The party claiming force majeure will give the other parties written notice of the cause within fifteen (15) days after occurrence thereof, and will exercise reasonable diligence to remove the cause and resume performance.
- 9.12 Specific Performance. Each party acknowledges that it will be impossible to measure in money the damage to the other party if a party fails to comply with the confidentiality obligations imposed by the Amended Agreement, and that, in the event of any such failure, the other party will not have an adequate remedy at law or in damages. Accordingly, each party agrees that injunctive relief or other equitable remedy, in addition to remedies at law or damages, is an appropriate remedy for any such failure and will not oppose the granting of such relief on the basis that the other party has an adequate remedy at law. Each party agrees that it will not seek, and agrees to waive any requirement for, the securing or posting of a bond in connection with any other party's seeking or obtaining such equitable relief.
- 9.13 <u>CPL Joinder</u>. The parties acknowledge and agree to the addition and joinder of CPL to this first amendment and amended agreement for the purposes set forth herein. By signing below, CPL agrees to be bound by the provisions of this first amendment and amended agreement.

IN WITNESS WHEREOF, the parties have caused this First Amendment to be executed by their respective duly authorized officers, and have duly delivered and executed this Agreement as of the date first hereinabove set forth.

CRYOLIFE, INC. STARCH MEDICAL, INC.

By:	/s/ D. Ashley Lee	By:	/s/ Xin Ji
Name:	D. Ashley Lee	Name:	Xin Ji
Title:	Executive VP, COO and CFO	Title:	CEO

CLOTPLUS LIMITED

By: /s/ Jason Ji

Name: Jason Ji Title: Director

[***] – 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.

Schedule 1.3

CryoLife places the following order for delivery in October of 2011:

[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Laparoscopic	[***]	[***] Units

In addition, CryoLife anticipates the following orders for 2012 and will notify CPL 6 months prior to the delivery date if it no longer desires these Products in these configurations:

June of 2012:		
[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Laparoscopic	[***]	[***] Units
December of 2012:		
[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Standard	[***]	[***] Boxes of 5 Units
[***] Gram Laparoscopic	- [***]	[***] Units

After 2012, CryoLife may order Products with a four month lead time, or if the date set forth on the purchase order is for a delivery date more than four months from receipt, such date to fulfill such purchase order set forth therein, with the minimum amount of such order no less in units than the order of October 2011.

[***] – 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.

Schedule 1.4

Transfer Prices

FOB Shanghai or Beijing

Type	<u>Price</u>	Equivalent to SMI Product
Standard [***] gram	US\$[***] each; US\$[***] box of 5	[***]
Standard [***] gram	US\$[***] each; US\$[***] box of 5	[***]
Laparoscopic [***] gram	US\$[***] each; sold only individually	[***]

CRYOLIFE, INC. 2004 EMPLOYEE STOCK INCENTIVE PLAN

FIRST AMENDMENT TO AWARD AGREEMENT

THIS FIRST AMENDMENT TO AWARD AGREEMENT (this "Amendment") is entered into as of the 24th day of May, 2011 by and between CryoLife, Inc., a Florida corporation (the "Company") and D. Ashley Lee ("Employee").

WITNESSETH

WHEREAS, the Company and Employee entered into that certain Award Agreement dated as of May 4, 2006 (the "Award Agreement") pursuant to the 2004 Employee Stock Incentive Plan (the "Plan");

WHEREAS, Subsection 2.4(d) of the Plan, as amended, states that, if the Award Agreement so provides, the Exercise Price may be paid via a cashless net exercise in which the optionee provides notice of intent to exercise and the Company withholds shares in order to pay the exercise price; and

WHEREAS, the addition of a net exercise feature to an option represents a modification, thereby effectively creating the grant of a new option, and, accordingly, any option that is subject to this Award Agreement that is an incentive stock option may lose its status as such as a result of this Amendment;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements contained herein and other valuable consideration, the receipt of which is hereby acknowledged, the Company and Employee hereby agree as follows:

- 1. The Award Agreement shall be amended so that Paragraph 3 and Paragraph 11 are deleted in their entirety and replaced with the following:
- 3. Method of Exercise. The option shall be exercised by written notice directed to the Company, 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 Option Exercise Price for the number of Option Shares purchased may be payable in cash or by tendering (by actual delivery of shares) shares of the Company's common stock in accordance with the Plan. To the extent permitted by applicable law, you may elect to pay the Option Exercise Price 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 Exercise Price for the number of Option Shares purchased, including any tax withholding resulting from such exercise. You may also elect to make payment of the Option Exercise Price via a cashless net exercise by providing notice to the Company of your intent to do. If you choose this method of payment, the Company will withhold shares that would otherwise be delivered to you upon exercise in order to pay the Option Exercise Price and 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.

- 11. Payment: Except as set forth below, the Option Exercise Price shall be paid in cash in U.S. Dollars at the time the Option is exercised or in shares of Common Stock of the Company held by the employee for at least six months and having an aggregate value equal to the Option Exercise Price. If the Option Exercise Price is paid by transfer of shares of Common Stock of the Company then the value of such shares will be the fair market value as of the day the shares are tendered, which is the closing sale price of the Stock on that day on the New York Stock Exchange. The Option Exercise Price may be paid by a combination of cash and Common Stock. Notwithstanding the foregoing, to the extent permitted by applicable law, Employee may elect to pay the Option Exercise Price by authorizing a third party to sell shares of stock (or a sufficient portion of the shares) acquired upon exercise of the Option and remit to the Company a sufficient portion of the sale proceeds to pay the entire Option Exercise Price and any tax withholding resulting from such exercise. Employee may also elect to make payment of the Option Exercise Price via a cashless net exercise by providing notice to the Company of the intent to do. If Employee chooses this method of payment, the Company will withhold shares that would otherwise be delivered to Employee upon exercise in order to pay the Option Exercise Price and any tax withholding resulting from such exercise. The value of such shares will be the fair market value as of the day the option is exercised, which is the closing sale price of the Stock on that day on the New York Stock Exchange, and having an aggregate fair market value equal to the aggregate Option Exercise Price.
 - 2. All other terms and conditions of the Award Agreement shall remain in full force and effect as therein contained.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Company has caused this Amendment to be executed by a duly authorized officer of the Company and Employee has executed this agreement as of the day and year first written above.

CRYOLIFE, INC. EMPLOYEE

By: /s/ Steven G. Anderson /s/ D. Ashley Lee

Name: Steven G. Anderson D. Ashley Lee
Title: President and CEO

Date: 5/24/11 Date: 5/24/11

CRYOLIFE, INC. 2004 EMPLOYEE STOCK INCENTIVE PLAN

FIRST AMENDMENT TO AWARD AGREEMENT

THIS FIRST AMENDMENT TO AWARD AGREEMENT (this "Amendment") is entered into as of the 24th day of May, 2011 by and between CryoLife, Inc., a Florida corporation (the "Company") and D. Ashley Lee ("Employee").

WITNESSETH

WHEREAS, the Company and Employee entered into that certain Award Agreement dated as of February 21, 2006 (the "Award Agreement") pursuant to the 2004 Employee Stock Incentive Plan (the "Plan");

WHEREAS, Subsection 2.4(d) of the Plan, as amended, states that, if the Award Agreement so provides, the Exercise Price may be paid via a cashless net exercise in which the optionee provides notice of intent to exercise and the Company withholds shares in order to pay the exercise price; and

WHEREAS, the addition of a net exercise feature to an option represents a modification, thereby effectively creating the grant of a new option, and, accordingly, any option that is subject to this Award Agreement that is an incentive stock option may lose its status as such as a result of this Amendment;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements contained herein and other valuable consideration, the receipt of which is hereby acknowledged, the Company and Employee hereby agree as follows:

- 1. The Award Agreement shall be amended so that Paragraph 3 and Paragraph 11 are deleted in their entirety and replaced with the following:
- 3. Method of Exercise. The option shall be exercised by written notice directed to the Company, 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 Option Exercise Price for the number of Option Shares purchased may be payable in cash or by tendering (by actual delivery of shares) shares of the Company's common stock in accordance with the Plan. To the extent permitted by applicable law, you may elect to pay the Option Exercise Price 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 Exercise Price for the number of Option Shares purchased, including any tax withholding resulting from such exercise. You may also elect to make payment of the Option Exercise Price via a cashless net exercise by providing notice to the Company of your intent to do. If you choose this method of payment, the Company will withhold shares that would otherwise be delivered to you upon exercise in order to pay the Option Exercise Price and 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.

- 11. Payment: Except as set forth below, the Option Exercise Price shall be paid in cash in U.S. Dollars at the time the Option is exercised or in shares of Common Stock of the Company held by the employee for at least six months and having an aggregate value equal to the Option Exercise Price. If the Option Exercise Price is paid by transfer of shares of Common Stock of the Company then the value of such shares will be the fair market value as of the day the shares are tendered, which is the closing sale price of the Stock on that day on the New York Stock Exchange. The Option Exercise Price may be paid by a combination of cash and Common Stock. Notwithstanding the foregoing, to the extent permitted by applicable law, Employee may elect to pay the Option Exercise Price by authorizing a third party to sell shares of stock (or a sufficient portion of the shares) acquired upon exercise of the Option and remit to the Company a sufficient portion of the sale proceeds to pay the entire Option Exercise Price and any tax withholding resulting from such exercise. Employee may also elect to make payment of the Option Exercise Price via a cashless net exercise by providing notice to the Company of the intent to do. If Employee chooses this method of payment, the Company will withhold shares that would otherwise be delivered to Employee upon exercise in order to pay the Option Exercise Price and any tax withholding resulting from such exercise. The value of such shares will be the fair market value as of the day the option is exercised, which is the closing sale price of the Stock on that day on the New York Stock Exchange, and having an aggregate fair market value equal to the aggregate Option Exercise Price.
 - 2. All other terms and conditions of the Award Agreement shall remain in full force and effect as therein contained.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Company has caused this Amendment to be executed by a duly authorized officer of the Company and Employee has executed this agreement as of the day and year first written above.

CRYOLIFE, INC. EMPLOYEE

By: /s/ Steven G. Anderson /s/ D. Ashley Lee

Name: Steven G. Anderson D. Ashley Lee
Title: President and CEO

Date: 5/24/11 Date: 5/24/11

SECOND AMENDMENT TO THE CRYOLIFE, INC. 2004 EMPLOYEE STOCK INCENTIVE PLAN

Section 2.4 of the CryoLife, Inc. 2004 Employee Stock Incentive Plan is hereby amended by deleting it in its entirety and replacing it with the following:

- 2.4 Payment of Option Exercise Price. The payment of the Exercise Price of an Option granted under this Section 2 shall be subject to the following:
- (a) Subject to the following provisions of this subsection 2.4, the full Exercise Price for shares of Stock purchased upon the exercise of any Option shall be paid at the time of such exercise (except that, in the case of an exercise arrangement approved by the Committee and described in paragraph 2.4(c), payment may be made as soon as practicable after the exercise), unless such Exercise Price is paid pursuant to subsection 2.4(d) below.
- (b) Unless the Exercise Price is paid pursuant to subsection 2.4(d) below, the Exercise Price shall be payable in cash or by tendering (by actual delivery of shares) shares of Stock that are acceptable to the Committee, have been held by the participant for at least six months, and were valued at Fair Market Value as of the day the shares are tendered, or in any combination of cash or shares, as determined by the Committee.
- (c) To the extent permitted by applicable law, a Participant may elect to pay the Exercise Price upon the exercise of an Option by irrevocably authorizing a third party to sell shares of Stock (or a sufficient portion of the shares) acquired upon exercise of the Option and remit to the Company a sufficient portion of the sale proceeds to pay the entire Exercise Price and any tax withholding resulting from such exercise.
- (d) If the Award Agreement so provides, the Exercise Price may be paid via a cashless net exercise in which the Participant provides notice of intent to exercise and pay the Exercise Price pursuant to this subsection 2.4(d) and the Company withholds shares of Stock, valued at Fair Market Value as of the day the Option is exercised, and having an aggregate Fair Market Value equal to the aggregate Option Exercise Price.

IN WITNESS WHEREOF, the Company has caused this Second Amendment to be executed effective as of the 24th day of May, 2011.

CRYOLIFE, INC.

By: /s/ D. Ashley Lee

Name: D. Ashley Lee

Title: Executive Vice President, Chief Financial Officer and Chief Operating Officer

SIXTH AMENDMENT TO CREDIT AGREEMENT, PLEDGE AMENDMENT TO GUARANTY AND SECURITY AGREEMENT AND WAIVER

THIS SIXTH AMENDMENT TO CREDIT AGREEMENT, PLEDGE AMENDMENT TO GUARANTY AND SECURITY AGREEMENT AND WAIVER ("Amendment") is entered into as of June 30, 2011, by and among CryoLife, Inc., a Florida corporation ("CrvoLife"), AuraZyme Pharmaceuticals, Inc., a Florida corporation ("AuraZyme"), CryoLife International, Inc., a Florida corporation ("International"), Cardiogenesis Corporation, a Florida corporation (formerly known as CryoLife Acquisition Corporation, a Florida corporation) ("Cardiogenesis") (CryoLife, AuraZyme, International and Cardiogenesis are sometimes referred to herein together as the "Borrowers" and individually as a "Borrower"), CryoLife, as Borrower Representative, the other Credit Parties party hereto, 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, supplemented, revised, restated, replaced or otherwise modified, the "Credit Agreement"). Capitalized terms used in this Amendment without definition shall have the meanings ascribed to such terms in the Credit Agreement and the Guaranty and Security Agreement, as applicable.
- B. The Borrowers, the other Grantors from time to time party thereto, and Agent, as Agent for the Secured Parties referred to therein, are parties to that certain Guaranty and Security Agreement, dated as of March 27, 2008 (as amended, supplemented, revised, restated, replaced or otherwise modified, the "Guaranty and Security Agreement.").
- C. 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

1. Amendment to Section 4.12 Section 4.12 of the Credit Agreement is amended by adding the following sentence to the end of such Section:

Notwithstanding the foregoing, landlord, bailee or mortgagee waivers shall not be required with respect to locations where hospitals and other clients of the Credit Parties store laser consoles which are rented by such hospitals or clients from a Credit Party.

- 2. Amendment to Section 5.4 Section 5.4 of the Credit Agreement is amended by deleting the word "and" at the end of clause (h), replacing the period at the end of clause (i) with "; and", and adding the following new clause (j) to such Section:
 - (j) Investments by any Credit Party to or in ValveXchange, Inc., a Delaware corporation, consisting of (i) up to \$3,500,000 of preferred Stock and (ii) advances, loans and extensions of credit at any time outstanding of up to \$2,500,000.
- 3. Amendment to Section 6.3 Section 6.3 of the Credit Agreement is amended by reducing from \$20,000,000 to 17,500,000 the minimum Adjusted EBITDA requirement set forth therein for June 30, 2011; provided, that the requirement for each Fiscal Quarter thereafter shall remain unchanged at \$20,000,000.
- 4. <u>Amendment to Section 11.1</u> Section 11.1 of the Credit Agreement is amended by replacing the definition of "Revolving Termination Date" in its entirety with the following:

"Revolving Termination Date" means the earlier to occur of: (a) August 31, 2011; and (b) the date on which the Aggregate Revolving Loan Commitment shall terminate in accordance with the provisions of this Agreement.

B. PLEDGE AMENDMENT

Pursuant to Section 8.6 of the Guaranty and Security Agreement, Cardiogenesis hereby agrees that the information set forth in Annex 1 is hereby added to the information set forth in Schedules 1 through 6 to the Guaranty and Security Agreement and that this Amendment may be attached to the Guaranty and Security Agreement and that the Pledged Collateral listed on Annex 1 to this Amendment shall be and become part of the Collateral referred to in the Guaranty and Security Agreement and shall secure all Secured Obligations.

C. WAIVER

The Agent and Lenders hereby waive the requirement set forth under Section 4.13(b) of the Credit Agreement that the Credit Parties cause CGCP Corp., a Delaware corporation ("CGCP") and Compleat, Inc., a California corporation ("Compleat") to become Borrowers under the Credit Agreement, to cross-guaranty the Obligations and to grant to the Agent, for the benefit of the Secured Parties, a security interest in all of CGCP's and Compleat's Property to secure such guaranty; provided, that no later than 60 days after the date hereof the Credit Parties shall have caused CGCP and Compleat to be dissolved and evidence of the same shall have been delivered to the Agent.

D. CONDITIONS TO EFFECTIVENESS

Notwithstanding any other provision of this Amendment and without affecting in any manner the rights of the Lenders hereunder, it is understood and agreed that this Amendment shall not become effective, and the Borrower shall have no rights under this Amendment, until Agent shall have received (a) duly executed signature pages to this Amendment from the Lenders, Borrowers, L/C Issuer, Agent and each Credit Party and (b) an amendment fee in the amount of \$10,000, and (c) a certificate of the secretary or other officer of each Credit Party in charge of maintaining books and records of such Credit Party certifying as to (i) the names and signatures of each officer of such Credit Party authorized to execute and deliver any Loan Document, (ii) the Organization Documents of such Credit Party attached to such certificate are complete and correct copies of such Organization Documents as in effect on the date of such certification and (iii) the resolutions of such Credit Party's board of directors or other appropriate governing body approving and authorizing the execution, delivery and performance of this Amendment.

E. 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; (0 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.
- 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.

F. 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 Loan Documents. 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 Credit Agreement, Guaranty and Security Agreement and each other Loan Document to which such Credit Party 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 and Security Agreement (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 and Security Agreement.
- 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. <u>Effect of Agreement</u>. 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: Executive VP, COO, CFO and Treasurer

AURAZYME PHARMACEUTICALS, INC.

By: /s/ D. A. Lee

Title: VP Finance, CFO and Treasurer

CRYOLIFE INTERNATIONAL, INC.

By: /s/ D. A. Lee

Title: VP, CFO and Treasurer

CARDIOGENESIS CORPORATION

By: /s/ D. A. Lee

Title: Executive VP, COO, CFO and Treasurer

[Signature Page to Sixth Amendment to Credit Agreement]

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 Sixth Amendment to Credit Agreement]

PLEDGED STOCK						
ISSUER	CLASS	CERTIFICATE NO(S).	PAR VALUE	NUMBER OF SHARES, UNITS OR INTERESTS		
	P	LEDGED DEBT INSTRUMEN	NTS			
	_					
IGGLIED	DESCRIPTION	CERTIFICATE	FINAL	PRINCIPAL		
ISSUER	OF DEBT	NO(S).	MATURITY	AMOUNT		

ANNEX I

CERTIFICATIONS

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

Date: July 29, 2011

/s/ STEVEN G. ANDERSON

Chairman, President, and Chief Executive Officer

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

Date: July 29, 2011

/s/ D. ASHLEY LEE

Executive Vice President, Chief Operating Officer, and Chief Financial Officer

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

In connection with the Quarterly Report of CryoLife, Inc. (the "Company") on Form 10-Q for the quarter ending June 30, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of Steven G. Anderson, the Chairman, President, and Chief Executive Officer of the Company, and David Ashley Lee, the Executive Vice President, Chief Operating Officer, and Chief Financial Officer of the Company, hereby certifies, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

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

/s/ STEVEN G. ANDERSON

STEVEN G. ANDERSON Chairman, President, and Chief Executive Officer July 29, 2011 /s/ D. ASHLEY LEE

D. ASHLEY LEE Executive Vice President, Chief Operating Officer, and Chief Financial Officer July 29, 2011