### STERLING FINANCIAL CORP /WA/

Form 4 April 22, 2014

## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

**SECURITIES** 

**OMB** Number:

3235-0287

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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, obligations Section 17(a) of the Public Utility Holding Company Act of 1935 or Section may continue. 30(h) of the Investment Company Act of 1940 See Instruction

1(b).

(Print or Type Responses)

1. Name and Ac DONEGAN	ddress of Reporting Po BOB C	Symbol	Name <b>and</b> Ticker or Tr NG FINANCIAL C TSA]		5. Relationship of Issuer (Che	of Reporting Per	
(Last) 111 N. WAL		3. Date of (Month/Date 04/18/20	•		X Director Officer (giv below)		6 Owner er (specify
	(Street)	4. If Amer	ndment, Date Original		6. Individual or J	Joint/Group Fili	ng(Check
SPOKANE, (City)		7:)	th/Day/Year) e I - Non-Derivative Se	curities Ac	Person	More than One Re	eporting
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		(A) or of (D)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	04/18/2014		D 8,013 I	D <u>(1)</u>	0	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of **SEC 1474** information contained in this form are not (9-02)required to respond unless the form displays a currently valid OMB control number.

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. 5. Number Transaction Derivative Code Securities (Instr. 8) Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercis Expiration Dat (Month/Day/Y	e	7. Title and A Underlying S (Instr. 3 and	Securit
				Code V	(A) (D)	Date Exercisable	Expiration Date	Title	Amo or Num of Share
Non-Qualified Stock Option	\$ 21.76	04/18/2014		D(2)	2,626	04/01/2014	04/29/2023	Common Stock	2,6
Non-Qualified Stock Option	\$ 2,189.22	04/18/2014		D(3)	31	01/31/2008	01/31/2017	Common Stock	3

## **Reporting Owners**

Reporting Owner Name / Address	Relationships							
1 6	Director	10% Owner	Officer	Other				
DONEGAN BOB C 111 N. WALL STREET SPOKANE, WA 99201	X							

## **Signatures**

/s/ Lara L. Hemingway, attorney-in-fact

04/22/2014

\*\*Signature of Reporting Person

Date

## **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- Common stock of Sterling Financial Corporation ("Sterling") disposed of in connection with the merger of Sterling with and into Umpqua Holdings Corporation ("Umpqua") on April 18, 2014 pursuant to the Agreement and Plan of Merger, dated as of September 11, 2013, between Sterling and Umpqua, each share of Sterling's common stock was exchanged for \$2.18 in cash and 1.671 shares of Umpqua
- Nonqualified stock options of Sterling disposed of pursuant to the Agreement and Plan of Merger. Each Sterling stock option will be converted into an option to purchase Umpqua common stock per the equity award exchange ratio as referred to in the Agreement and Plan of Merger.
- This stock option was cancelled pursuant to the Agreement and Plan of Merger. These options carried exercise prices that were significantly in excess of the value of the merger consideration. Sterling received permission from the award recipient to cancel the award prior to the effective date of the merger.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. Notes to Consolidated Financial Statements for further discussion of the Company s investment in Medafor common stock.

Reporting Owners 2

We will continue to evaluate the carrying value of this investment if changes to impairment factors or additional impairment factors become known to us that indicate that we should evaluate our investment in Medafor common stock for further impairment. Also, our investment in Medafor is subject to certain risks, including business and operational risks of Medafor outside of our control that could further impair the value of our investment, including the issuance of shares of Medafor common stock that could dilute our investment in Medafor. If we subsequently determine that the value of our Medafor common stock has been impaired further or if we decide to sell our 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. In addition, if we

prevail in any future patent litigation with Medafor over PerClot, the value of our investment could be materially impaired.
Intense Competition May Impact Our Ability To Operate Profitably.
We face competition from other companies engaged in the following lines of business:
The processing and preservation of human tissue,
The marketing of mechanical, synthetic, and animal-based tissue valves for implantation,
The marketing of surgical adhesives, surgical sealants, and hemostatic agents,
The marketing of revascularization technologies, and
The marketing of products addressing dialysis therapies.  Many of our competitors have greater financial, technical, manufacturing, and marketing resources than we do and are well established in th markets.
We cannot give assurance that our tissues and products will be able to compete successfully. In addition, our competitors may gain competit advantages that may be difficult to overcome. If we fail to compete effectively, this could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.
If We Are Not Successful In Expanding Our Business Activities In International Markets, It Could Have a Material, Adverse Impacton Our Revenues, Financial Condition, Profitability, and Cash Flows.
Our international operations are subject to a number of risks which may vary from the risks we face in the U.S., including:
Difficulties and costs associated with staffing and managing foreign operations, including foreign distributor relationships,
Longer accounts receivable collection cycles in certain foreign countries and additional cost of collection of those receivables,
More limited protection for intellectual property in some countries,
Changes in currency exchange rates, particularly fluctuations in the British Pound and Euro as compared to the U.S. Dollar,

Adverse economic or political changes,

Unexpected changes in regulatory requirements and tariffs,

Potential trade restrictions, exchange controls, and import and export licensing requirements, and

Potentially adverse tax consequences of overlapping tax structures.

Our failure to adequately address these risks could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

#### We Are Dependent On The Availability Of Sufficient Quantities Of Tissue From Human Donors.

The success of our tissue preservation services depends upon, among other factors, the availability of sufficient quantities of tissue from human donors. We rely primarily upon the efforts of third-party procurement organizations, tissue banks, most of which are not-for-profit, and others to educate the public and foster a willingness to donate tissue. If the supply of donated human tissue is materially reduced, this would restrict our growth and could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

Consolidation In The Healthcare Industry Could Continue To Result In Demands For Price Concessions, Limits On The Use Of Our Tissues And Products, And Limitations On Our Ability To Sell To Certain Of Our Significant Market Segments.

The cost of healthcare has risen significantly over the past decade and numerous initiatives and reforms initiated by legislators, regulators, and third-party payors to curb these costs have resulted in a consolidation trend in the medical device industry as well as among our customers, including healthcare providers. This in turn has resulted in greater pricing pressures and limitations on our ability to sell to important market segments, as group purchasing organizations, independent delivery networks, and large single accounts continue to consolidate purchasing decisions for some of our customers. We expect that market demand, government regulation, third-party reimbursement policies, and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances which may exert further downward pressure on the fees charged for our tissues and prices for our products, which could materially, adversely impact our revenues, financial condition, profitability, and cash flows.

#### The Success Of Many Of Our Tissues And Products Depends Upon Strong Relationships With Physicians.

If we fail to maintain our working relationships with physicians, many of our tissues and products may not be developed and marketed to appropriately meet the needs and expectations of the professionals who use and support our tissues and products. The research, development, marketing, and sales of many of our new and improved tissues and products are dependent upon our maintaining working relationships with physicians. We rely on these professionals to provide us with considerable knowledge and experience regarding our tissues and products and their marketing. Physicians assist us as researchers, marketing consultants, product consultants, and public speakers.

Certain states have begun to regulate interactions with physicians and other healthcare professionals. There are existing legislation and regulations that govern interactions with physicians and other healthcare professionals, and there are proposed legislation and regulations that govern interactions with physicians and other healthcare professionals that are currently before state legislatures and the U.S. Congress. For example, beginning in 2014, we will have to disclose payments made after August 2013 to physicians for meals or other services to the Department of Health and Human Services. These existing legislation and regulations currently impact our ability to maintain strong relationships with physicians and, may in the future, further impact our relationships with physicians in the future. If we are unable to maintain our strong relationships with these professionals and do not continue to receive their advice and input, the development and marketing of our products could suffer, which could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

### Our Existing Insurance Policies May Not Be Sufficient, And We May Be Unable To Obtain Insurance In The Future.

Although we have significant insurance for products, tissues, securities, and property, it is possible that:

We could be exposed to tissue processing, product liability, and security claims greater than the amount that we have insured;

Because our insurance is a claims-made policy, we may be unable to obtain future insurance policies in an amount sufficient to cover our anticipated claims at a reasonable cost or at all; or

Because we are not insured against all potential losses, national disasters or other catastrophes could adversely impact our business. Our tissues and products allegedly have caused, and may in the future cause, injury to patients using our tissues or products, and we have been, and may be, exposed to tissue processing and product liability claims. We maintain claims-made insurance policies to mitigate our financial exposure to tissue processing and product liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. In addition, our tissue processing and product liability insurance policies do not include coverage for any punitive damages.

If we are unsuccessful in arranging acceptable settlements of future tissue processing or product liability claims or future securities class action or derivative claims, we may not have sufficient insurance coverage and liquid assets to meet these obligations. If we are unable to obtain satisfactory insurance coverage in the future, we may be subject to additional future exposure from tissue processing, product liability, or securities. Additionally, if one or more claims with respect to which we may become, in the future, a defendant should be tried with a substantial verdict rendered in favor of the plaintiff(s), such verdict(s) could exceed our available insurance coverage and liquid assets. If we are unable to meet required future cash payments to resolve any outstanding or any future claims, this will materially, adversely impact our financial condition, profitability, and cash flows. Further, although we have an estimated reserve for our unreported tissue processing and product liability claims for which we do expect that we will obtain recovery for under our insurance policies, these costs could exceed our current estimates. In addition, insurance rates could be significantly higher than in the past, and insurers may provide less coverage than we have estimated or expected. Finally, our facilities could be materially damaged by tornadoes, flooding, other natural disasters, or catastrophic circumstances, for which we are not fully covered by business interruption and disaster insurance, and, even with such coverage, we could suffer substantial losses in our operational capacity, along with a potential adverse impact on our customers and opportunity costs for which our insurance would not compensate us.

Any of these events could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

### Our Current Plans To Continue To Pay A Quarterly Cash Dividend May Change.

We initiated the payment of a quarterly cash dividend during the third quarter of fiscal 2012, and we anticipate the continued payment of a cash dividend to our shareholders in future quarters. However, the projected timing and amount of any future dividend payments are subject to change based on a variety of factors, including: management s assessment of our overall needs at the time; our ability to generate current and sustained future earnings and cash flows; and financial requirements, including the requirements of our credit agreement.

Management must determine the proper allocation of available resources among operating needs, capital expenditures, research and development spending, acquisitions or other investments in our business, stock repurchases, dividends, and other needs. Our credit agreement imposes limits on our ability to declare cash dividends, including that we may only make dividend payments if, on the date of the dividend payment, no default or event of default under the agreement has occurred and is continuing, and that we are in compliance with certain financial covenants contained in the agreement, including maintenance of our leverage ratio at a certain level and certain liquidity requirements. Our total annual dividend may vary from current expectations based on management decisions regarding the timing and per share value of any future cash dividends, or may be discontinued at any time, due to any of the factors described above, or other factors, as well as due to changes to the number of shares outstanding.

# Our Credit Facility, Which Expires In October Of 2014, Limits Our Ability To Pursue Significant Acquisitions And Also May Limit Our Ability To Borrow.

Our credit facility, which expires in October of 2014, prohibits mergers and acquisitions other than certain permitted acquisitions along with certain affirmative covenants that we must satisfy before we can borrow or enter into a permitted acquisition. Permitted acquisitions include certain stock acquisitions and non-hostile acquisitions that have been approved by the Board of Directors and/or the stockholders of the target company if, after giving effect to the acquisition, there is no event of default under the credit facility and there is still at least \$1.5 million available to be borrowed under the credit facility. The total consideration that we pay, or are obligated to pay, for all acquisitions consummated during the term of the credit facility, less the portion of any such consideration funded by the issuance of common or preferred stock, may not exceed an aggregate of \$15.0 million. Although our lender has modified the credit facility in the past to allow us to make acquisitions that do not affect this aggregate of \$15.0 million, this is no guarantee that they will do so in the future. In addition, we must satisfy specified leverage ratios, and there are also varying levels of adjusted earnings before interest, taxes, depreciation, and amortization under the credit facility that we have covenanted to maintain during the term of the credit facility. Failure to satisfy any of these requirements could limit our borrowing ability and materially, adversely impact our liquidity. Therefore, as a result, our ability to consummate acquisitions and fully realize our growth strategy may be materially, adversely impacted while this credit facility remains in effect. Any credit facility we subsequently enter into may have similar or more stringent restrictions on our ability to pursue significant acquisitions.

#### Continued Fluctuation Of Foreign Currencies Relative To The U.S. Dollar Could Materially, Adversely Impact Our Business.

The majority of our foreign tissue processing and product revenues are denominated in British Pounds and Euros and, as such, are sensitive to changes in exchange rates. In addition, a portion of our dollar-denominated product sales are made to customers in other countries who must convert local currencies into U.S. Dollars in order to purchase these products. We also have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency transactions and balances are sensitive to changes in exchange rates. Fluctuations in exchange rates of British Pounds and Euros or other local currencies in relation to the U.S. Dollar could materially reduce our future revenues as compared to the comparable prior periods. Should this occur, it could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

#### Rapid Technological Change Could Cause Our Services And Products To Become Obsolete.

The technologies underlying our services and products are subject to rapid and profound technological change. Competition intensifies as technical advances in each field are made and become more widely known. We can give no assurance that others will not develop services, products, or processes with significant advantages over the services, products, and processes that we offer or are seeking to develop. Any such occurrence could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

#### We Are Dependent On Our Key Personnel.

Our business and future operating results depend in significant part upon the continued contributions of our key field personnel and senior management, many of whom would be difficult to replace, including our Chief Executive Officer, Steven G. Anderson, whose employment agreement expires in December 2015. Our business and future operating results also depend in significant part upon our ability to attract and retain qualified management, processing, marketing, sales, and support personnel for our operations. Competition for such personnel is intense, and we cannot ensure that we will be successful in attracting and retaining such personnel. We do not have key life insurance policies on any of our key personnel. If we lose any key employees, if any of our key employees fail to perform adequately, or if we are unable to attract and retain skilled employees as needed, this could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

#### **Forward-Looking Statements**

This Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. Forward-looking statements give the Company s current expectations or forecasts of future events. The words could, may, might, will, would, shall, should, pro forma, potential, pending, intend, believe, expect, anticipate, 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-K. 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 Part I. Item 1A. Risk Factors

All sta or anti

defittied in the text surrounding such statements, those identified under Fart I, item 1A. Kisk Factors—and eisewhere in this Form 10-K.
tements, other than statements of historical facts, included herein that address activities, events or developments that the Company expects cipates will or may occur in the future, are forward-looking statements, including statements regarding:
Advantages of the human tissues the Company distributes;
Plans, costs and expected timeline regarding regulatory approval for PerClot, the distribution of PerClot in certain markets after the requisite regulatory approvals are obtained, and the Company s expectation that it will terminate its minimum purchase requirements after regulatory approval of PerClot;
Expectations and efforts to respond to the FDA questioning related to the revised IDE filed for PerClot;
Benefits of TMR treatment and the Phoenix System;
Estimates regarding the addressable market opportunity for TMR;
Plans related to seeking regulatory approval for the Phoenix System;
Anticipated timing of the PEARL 8.0 launch;
Potential benefits of the Company s surgical adhesives, sealants and hemostats;
Plans related to regulatory approval in certain markets for BioFoam, and the subsequent distribution of BioFoam in those markets after approval, plans to conduct a post-market study in Europe on BioFoam, and the Company s intentions to refund unspent DOD funds related to the BioFoam U.S. clinical trial;
The estimated European market opportunity for cardiovascular and parenchymal tissue sealing;
Commercialization plans for ProPatch;
Plans regarding product enhancements of the HeRO Graft;

Estimates regarding the addressable worldwide market opportunity for the HeRO graft, and the Company  $\,$ s intentions to introduce the HeRO graft into the European Union in mid-2013;

The Company s beliefs regarding production levels of the HeRO graft;

The Company s beliefs that the HeRO graft will fit well within the Company s product portfolio and that a significant opportunity exists to introduce and expand the utilization of the HeRO graft in the U.S.;

Expected benefits of the Company s marketing, educational and technical support efforts;

Plans regarding regulatory approval for CryoValve SGPV and CryoValve SGAV, the benefits of related studies, the expected completion date of the CryoValve SGPV study, and the Company s plans to respond to FDA comments related to the HDE application for CryoValve SGAV;

Expected use of the Company s additional laboratory space;

Anticipated payment of quarterly dividends each year;

The Company s expectations regarding the recoverability and realizability of deferred tax assets;

The Company s estimates of unreported loss liabilities, including unreported tissue processing and product liability claims, the assumptions used to establish those estimates, and the Company s belief that those assumptions provide a reasonable basis for the estimates;

The Company s estimates of fair value of acquired assets, and its belief that the estimates are reasonable;

The expectation that the Company will continue to renew certain acquired contracts and procurement agreements for the foreseeable future:

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Expectations regarding the recognition of stock compensation expense; Plans and expectations regarding research and development of new technologies and products; Expectations that research and development spending will increase materially in 2013; Expectations regarding business consolidations in the healthcare industry that could exert downward pressure on fees charged by the Company; Beliefs regarding BioGlue sales, PerClot sales, and handpiece sales and laser console sales, and the factors affecting such sales; The Company s belief that its SynerGraft processed tissues and the majority of its medical devices will be subject to the new excise tax on the sale of medical devices, and the Company s anticipation that it will not pass along the new excise tax to its customers; The anticipation that the Company s 2013 tax rate will be favorably impacted by the research and development tax credit, and the belief that cash payments for federal income taxes will be reduced for the 2013 tax year; Plans related to the debt financing of ValveXchange; The Company s belief that it will be able to address the FDA s observations in the Form 483 and the Warning Letter and that the related issues will not have a material impact on the Company; The Company s beliefs regarding the seasonal nature of the demand for some of its products and services; The adequacy of the Company s financial resources, and its belief that it will have sufficient cash to meet its operational liquidity needs for at least the next twelve months; The Company s expectation that it will not have significant business development costs related to the acquisitions of Hemosphere and Cardiogenesis in 2013; Expectations that general, administrative, and marketing expenses will increase in 2013; Estimates of contingent payments and royalties that may be paid by the Company, and the timing of such payments; The possibility of a patent infringement lawsuit with Medafor and the Company s belief that PerClot will not infringe Medafor s patent;

The impact on cash flows of funding business development activities and the potential need to obtain additional borrowing capacity or

financing:

The Company s expectations regarding the source of any future payments related to any unreported tissue processing or product liability claims;

Anticipated impact of changes in interest rates and foreign currency exchange rates;

Plans regarding acquisition and investment opportunities of complementary product lines and companies;

Plans regarding the licensing of the Company s technology to third parties for non-competing uses;

Issues that may impact the Company s future financial performance and cash flows; 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 discussed in Item 1A of this Form 10-K and other factors, many of which are beyond the control of CryoLife. Consequently, all of the forward-looking statements made in this Form 10-K 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.

#### Item 1B. Unresolved Staff Comments.

The Company has no unresolved written comments received from the staff of the SEC regarding its periodic or current reports under the Securities Exchange Act of 1934 not less than 180 days before December 31, 2012 (the end of the fiscal year to which this Form 10-K relates).

#### Item 2. Properties.

The Company s facilities are located in multiple sites in Atlanta, Georgia, and in Guildford, England. The corporate headquarters in suburban Atlanta (Kennesaw) consists of approximately 200,000 square feet of leased manufacturing, administrative, laboratory, and warehouse space with an additional 14,400 square feet of off-site warehouse space. Approximately 26,000 square feet are dedicated to clean room work areas. The primary facility has seven main laboratory facilities: human tissue preservation, BioGlue and BioFoam manufacturing, research and development, microbiology, pathology, the revascularization technologies laser maintenance and evaluation laboratory, and additional space expected to house a portion of the PerClot manufacturing with availability for manufacturing of other products. Each of these areas consists of a general technician work area and adjoining clean rooms for aseptic processing or testing of human tissue or for aseptic manufacturing and testing of medical devices. The clean rooms are supplied with highly filtered air that provides a near-sterile environment. The human tissue preservation laboratory contains approximately 15,600 square feet with a suite of seven clean rooms. The current processing level is estimated to be at about 35% of total capacity. To increase the current processing levels, the Company could increase the number of employees and expand its second and third shift. The BioGlue and BioFoam manufacturing laboratory contains approximately 13,500 square feet with a suite of six clean rooms. The current processing level is about 5% of total capacity. To produce at full capacity levels, the Company would need to increase the number of employees, add work shifts, and install automated filling and pouching equipment. The research and development laboratory is approximately 10,500 square feet with a suite of five clean rooms. The microbiology laboratory is approximately 8,000 square feet with a suite of five clean rooms. The pathology laboratory is approximately 1,100 square feet. The revascularization technologies laser maintenance and evaluation laboratory is approximately 1,100 square feet. The additional manufacturing laboratory contains approximately 18,900 square feet with a suite of six clean rooms.

An additional combined manufacturing and office space of approximately 9,000 square feet with a suite of eight clean rooms is in a facility located within the city of Atlanta. This space is used for the manufacturing of the HeRO Graft and is expected to be used for a portion of the PerClot manufacturing.

The Europa facility located in Guildford, England contains approximately 3,400 square feet of leased office and warehousing space. In addition, Europa has shared warehousing space utilized by its third-party shipper.

Item 3. Legal Proceedings	egal Proceedin	gs.
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None.

Item 4. Mine Safety Disclosures.

Not applicable.

#### Item 4A. Executive Officers of the Registrant.

The following table lists the executive officers of CryoLife and their ages, positions with CryoLife, and the dates from which they have continually served as executive officers with CryoLife. Each of the executive officers of CryoLife was elected by the Board of Directors to serve until the Board of Directors meeting immediately following the next annual meeting of shareholders or until his earlier removal by the Board of Directors or his resignation.

#### Service as

Name	Executive	Age	Position
Steven G. Anderson	Since 1984	74	President, Chief Executive Officer, and Chairman
Bruce G. Anderson	Since 2012	46	Vice President, U.S. Sales and Marketing
Jeffrey W. Burris	Since 2010	41	Vice President and General Counsel
Scott B. Capps	Since 2007	46	Vice President, Clinical Research
David M. Fronk	Since 1998	49	Vice President, Regulatory Affairs and Quality Assurance
David C. Gale, Ph.D.	Since 2012	45	Vice President, Research and Development
David P. Lang	Since 2012	66	Senior Vice President, International Sales and Marketing
D. Ashley Lee, CPA	Since 2000	48	Executive Vice President, Chief Operating Officer, and

#### Chief Financial Officer

**Steven G. Anderson**, a founder of CryoLife, has served as CryoLife s President, Chief Executive Officer, and Chairman of the Board of Directors since its inception. Mr. Anderson has more than 40 years of experience in the implantable medical device industry. Prior to founding CryoLife, Mr. Anderson was Senior Executive Vice President and Vice President, Marketing, from 1976 until 1983 of Intermedics, Inc. (now Boston Scientific Corp.), a manufacturer and distributor of pacemakers and other medical devices. Mr. Anderson is a graduate of the University of Minnesota.

Bruce G. Anderson was appointed to the position of Vice President, U.S. Sales and Marketing in July 2008. Mr. Anderson joined the Company in May 1994 as a field technical representative in Tennessee. During his time at the Company he has served as a Director and then Senior Director of U.S. Sales and Marketing from November 2002 until July 2008, Director of Global Cardiovascular Marketing from April 2001 until November 2002, and Product Manager and then Senior Product Manager for Cardiac Technologies from January 1997 until April 2001. Mr. Anderson is responsible for developing and implementing the Company s domestic sales and marketing plans and supervising all tissue procurement activities. Prior to joining the Company, Mr. Anderson was an Account Executive at Dun & Bradstreet for four years. Mr. Anderson received his B.A. in History from the University of South Florida.

Jeffrey W. Burris was appointed to the position of Vice President and General Counsel in February 2010. Mr. Burris has been with the Company since February 2008, serving as General Counsel from February of 2008 until February 2010. From 2003 to 2008, Mr. Burris served as Senior Legal Counsel and Legal Counsel for Waste Management, where he was the attorney responsible for acquisitions and divestitures for Waste Management s Southern Group. From 1997 to 2003, Mr. Burris was an associate with the law firm Arnall Golden Gregory, LLP, focusing on biotechnology and mergers and acquisitions. Mr. Burris received his B.A. in History and Economics from the University of Tennessee and his J.D. from the University of Chicago Law School.

Scott B. Capps was appointed to the position of Vice President of Clinical Research in November 2007. Prior to this position, Mr. Capps served as Vice President, General Manager of CryoLife Europa, Ltd. in the U.K. from February 2005 to November 2007 and Director, European Clinical Affairs from April 2003 to January 2005. Mr. Capps joined CryoLife in 1995 as Project Engineer for the allograft heart valve program and was promoted to Director, Clinical Research in 1999. Mr. Capps is responsible for overseeing and implementing clinical trials to achieve FDA and International approval of CryoLife s medical products in cardiac, vascular, and orthopaedic clinical areas. Before joining CryoLife, Mr. Capps was a Research Assistant in the Department of Bioengineering at Clemson University working to develop a computerized database and radiographic image analysis system for total knee replacement. Mr. Capps received his Bachelor of Industrial Engineering from the Georgia Institute of Technology and his M.S. in Bioengineering from Clemson University.

David M. Fronk was appointed to the position of Vice President of Regulatory Affairs and Quality Assurance in April 2005 and has been with the Company since 1992, serving as Vice President of Clinical Research from December 1998 to April 2005 and Director of Clinical Research from December 1997 until December 1998. Mr. Fronk is responsible for developing and implementing improved safety processes and procedures for new and existing medical products. Prior to joining the Company, Mr. Fronk held engineering positions with Zimmer, Inc. from 1986 until 1988 and Baxter Healthcare Corporation from 1988 until 1991. Mr. Fronk served as a market manager with Baxter Healthcare Corporation from 1991 until 1992. Mr. Fronk received his B.S. in Mechanical Engineering from the Ohio State University and his M.S. in Biomedical Engineering from the Ohio State University.

**David C. Gale, Ph.D.** has served as Vice President, Research and Development since January 1, 2012. Dr. Gale joined the Company in August 2009 as the Director, Biomaterials and Product Development. He was promoted to Senior Director, Biomaterials and Device Engineering in April 2011. Prior to joining CryoLife, Dr. Gale was with Sinexus, Inc., a start-up medical device company, from January 2007 to August 2009. He joined Sinexus as their Vice President of Research and was promoted to the position of Vice President, Research and Development in July 2007. Dr. Gale has 17 years of experience in biomaterials and medical device product research and development including roles at Abbott Vascular and Guidant Corporation. Dr. Gale is the inventor or co-inventor on over 30 issued U.S. patents related to the design and manufacture of medical devices. He received his Ph.D. in Materials Science from the University of Alabama at Birmingham, his M.S. in Chemical Engineering from Auburn University and has received both a M.Sc. in Instrumentation and Analysis and a B.Sc. in Chemistry from Manchester University in the U.K.

**David P. Lang** has served as Senior Vice President, International Sales and Marketing since December 2012 and has been with the Company since October 2010 as Vice President, Market Development. Mr. Lang is responsible for developing and implementing the Company s international sales and marketing plans. Prior to joining the Company, Mr. Lang was President and then consultant to Starch Medical, Inc. from 2008 to 2010. From July 2007 until February 2008 he was Director, International Sales of Medafor, Inc. From July 2001 until June 2007 he was Vice President, International Sales of Medafor, Inc. He has over forty years of experience in international medical device sales and marketing, principally beginning as Director of Marketing for Medtronic Europe. His senior management positions included four resident assignments in Paris, Munich, and Shanghai. He was founder of the first Sino-American medical electronics joint venture in China in 1985. Mr. Lang received a B.A. in Economics from Harvard University.

**D.** Ashley Lee, CPA has served as Executive Vice President, Chief Operating Officer, and Chief Financial Officer since November 2004. Mr. Lee has been with the Company since December 1994 serving as Vice President of Finance, Chief Financial Officer, and Treasurer from December 2002 to November 2004; as Vice President, Finance and Chief Financial Officer from April 2000 to December 2002; and as Controller of the Company from December 1994 until April 2000. From 1993 to 1994, Mr. Lee served as the Assistant Director of Finance for Compass Retail, Inc., a wholly owned subsidiary of Equitable Real Estate. From 1987 to 1993, Mr. Lee was employed as a certified public accountant with Ernst & Young, LLP. Mr. Lee received his B.S. in Accounting from the University of Mississippi.

#### PART II

Item 5. Market for Registrant s Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities.

#### **Market Price of Common Stock**

The Company s common stock is traded on the New York Stock Exchange (NYSE) under the symbol CRY. The following table sets forth, for the periods indicated, the intra-day high and low sale prices per share of common stock on the NYSE.

2012	High	Low
First quarter	\$ 6.02	\$ 4.72
Second quarter	5.55	4.19
Third quarter	7.27	4.85
Fourth quarter	6.99	5.52
2011	High	Low
First quarter	\$ 6.11	\$ 5.01
Second quarter	6.17	5.14
Third quarter	6.00	4.35
Fourth quarter	5.02	4.00

As of February 12, 2013 the Company had 401 shareholders of record.

#### Dividends

On August 21, 2012 the Company announced that its Board of Directors had approved the initiation of the first dividend in Company history, a quarterly cash dividend of \$0.025 per share of common stock outstanding. In 2012 cash dividends of \$0.025 per share were paid on September 21, 2012 to all common stockholders of record as of September 14, 2012 and on December 21, 2012 to all common stockholders of record as of December 14, 2012. In February 2013 the Company announced a quarterly cash dividend for the first quarter of 2013 of \$0.025 per share, which will be paid on March 21, 2013 to all common stockholders of record as of March 14, 2013. The Company currently anticipates paying the quarterly dividends in March, June, September, and December of each year, however this may change. See also Part I, Item 1A, Risk Factors Our Current Plans To Continue To Pay A Quarterly Cash Dividend May Change.

In September 2012 the Company amended its credit agreement with General Electric Capital Corporation (GE Capital) to allow the payment of cash dividends up to a maximum of \$3 million per year, subject to satisfaction of specified conditions. If the Company chooses to issue preferred stock, the holders of shares of that preferred stock could have a preference as to the payment of dividends over the holders of common stock.

#### **Issuer Purchases of Equity Securities**

The following table provides information about purchases by the Company during the quarter ended December 31, 2012 of equity securities that are registered by the Company pursuant to Section 12 of the Securities Exchange Act of 1934.

#### **Issuer Purchases of Equity Securities**

#### **Common Stock**

Period 10/01/12 10/31/12 11/01/12 11/30/12	Total Number of Common Shares Purchased	Average Price Paid per Common Share \$	Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Common Shares That May Yet Be Purchased Under the Plans or Programs \$ 10,263,880 10,263,880
12/01/12 12/31/12				

#### Total

On June 1, 2010 the Company announced that its Board of Directors had authorized the purchase of up to \$15.0 million of its common stock over the course of the following two years. On November 1, 2011 the Company announced that its Board of Directors had authorized the Company s purchase of \$15.0 million of its common stock through December 31, 2012, which included approximately \$7.7 million remaining from the June 1, 2010 repurchase program and an additional \$7.3 million, for a total authorization of \$22.3 million. The purchase of shares were made from time to time in the open market or through privately negotiated transactions, on such terms as management deemed appropriate, and were dependent upon various factors, including: price, regulatory requirements, and other market conditions. For the year ended December 31, 2012 the Company purchased approximately 639,000 shares of its common stock for an aggregate purchase price of \$3.3 million. This program expired on December 31, 2012. In February 2013 the Company s Board of Directors authorized the purchase of up to \$15.0 million of its common stock through October 31, 2014.

Under the Company s credit agreement with GE Capital, the Company is required, after giving effect to stock repurchases, to maintain liquidity, as defined within the agreement, of at least \$20.0 million. The Company is entitled to repurchase up to approximately \$10.2 million under the February 2013 authorization without obtaining its lender s consent.

#### Item 6. Selected Financial Data.

The following Selected Financial Data should be read in conjunction with the Company s consolidated financial statements and notes thereto, Management s Discussion and Analysis of Financial Condition and Results of Operations, and other financial information included elsewhere in this report.

### Selected Financial Data

(in thousands, except percentages, current ratio, and per share data)

	December 31,									
		2012		2011	2	2010	2	2009		2008
Operations										
Revenues	\$ 1	31,718	\$ 1	19,626	\$ 1	16,645	\$ 1	11,685	\$ 1	05,059
Operating income		12,612		11,643		9,868		14,496		13,654
Net income		7,946		7,371		3,944		8,679		31,950
Net income applicable to common shareholders - diluted		7,768		7,224		3,894		8,605		31,950
Research and development expense as a percentage of revenues		5.5%		5.8%		5.1%		4.7%		5.1%
Income Per Common Share										
Basic	\$	0.29	\$	0.26	\$	0.14	\$	0.31	\$	1.15
Diluted	\$	0.28	\$	0.26	\$	0.14	\$	0.30	\$	1.13
Year-End Financial Position										
Total assets	\$ 1	57,156	\$ 1	47,864	\$ 1	37,438	\$ 1	33,859	\$ 1	25,037
Working capital		56,073		62,413		82,162		76,312		59,370
Long-term liabilities		7,614		4,869		4,168		4,197		5,672
Shareholders equity	1	28,112	1	21,538	1	13,942	1	10,446		98,368
Current ratio <sup>1</sup>		4:1		4:1		5:1		5:1		4:1

Current assets divided by current liabilities.

#### Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations.

#### Overview

CryoLife, Inc. ( CryoLife, the Company, we, or us ), incorporated in 1984 in Florida, preserves and distributes human tissues for transplantation and develops, manufactures, and commercializes medical devices for cardiac and vascular applications. The cardiac and vascular human tissues distributed by CryoLife include the CryoValve® SG pulmonary heart valve ( CryoValve SGPV ) and the CryoPatcBG pulmonary cardiac patch tissue ( CryoPatch SG ), both processed using CryoLife s proprietary Syner@rafchnology. CryoLife s surgical sealants and hemostats include BioGlue® Surgical Adhesive ( BioGlue ), BioFoarsurgical Matrix ( BioFoam ), and PercPoan absorbable powdered hemostat, which the Company distributes for Starch Medical, Inc. ( SMI ) in the European Community and other select international markets. CryoLife s subsidiary, Cardiogenesis Corporation ( Cardiogenesis ), specializes in the treatment of coronary artery disease using a laser console system and single use, fiber-optic handpieces to treat patients with severe angina. CryoLife and its subsidiary, Hemosphere, Inc. ( Hemosphere ), market the Hemodialysis Reliable Outflow Graft ( HeR® Graft ), which is a solution for end-stage renal disease in certain hemodialysis patients.

For the year ended December 31, 2012 CryoLife had record annual revenues of \$131.7 million. During 2012 CryoLife reported its highest revenues ever for a first, second, third, and fourth quarter, with each quarter exceeding \$32 million in revenues. The Company s acquisition of Hemosphere in May 2012 coupled with its acquisition of Cardiogenesis in May 2011 continued to add revenue generating product lines to the Company s existing tissue services and products portfolio. The Company also reported new record annual revenues for its vascular preservation services and BioGlue. The Company s cash position was strong as the Company generated \$19.0 million in cash flows from operations during 2012. This cash was used to fund the Company s acquisition of Hemosphere, the common stock buyback, and the \$0.025 per share quarterly cash dividend that the Company initiated in the third quarter of 2012. The Company experienced increases in selling, general, and administrative expenses during 2012 due to increased spending on business development activities and additional general, administrative, and marketing costs related to the Company s recent acquisitions of Hemosphere and Cardiogenesis. See the Results of Operations section below for additional analysis of the fourth quarter and full year 2012 results. See Part I, Item 1, Business, for further discussion of the Company s business and activities during 2012.

#### **Recent Events**

On January 30, 2013 CryoLife received a warning letter ( Warning Letter ) dated January 29, 2013 from the U.S. Food and Drug Administration ( FDA ). The Warning Letter followed a Form 483, Notice of Inspectional Observations from the FDA ( Form 483 ) related to the Company s processing, preservation, and distribution of human tissue and the manufacture of medical devices. The Form 483 followed a routine quality system inspection of the Company s facilities by the FDA during the period September 17, 2012 to October 16, 2012. The Warning Letter relates to certain Observations from the Form 483 that the FDA believes were either inadequately addressed by the Company s responses or for which the FDA required further information to fully assess the Company s corrective actions. The Company intends to respond fully to the FDA s requests and believes that it will be able to address the FDA s notice of violations contained in the Warning Letter; however, it is possible that the Company may not be able to do so in a manner satisfactory to the FDA. The Company believes that the Warning Letter and its actions regarding the Warning Letter and Form 483 will not have a material impact on the Company. However, it is possible that actions it may be required to take in response to the Form 483 and Warning Letter could materially, adversely impact the availability of the Company s tissues and products and cost structure, which could impact the Company s revenues, financial condition, profitability, or cash flows. See also Part I, Item 1A, Risk Factors

### **Critical Accounting Policies**

A summary of the Company s significant accounting policies is included in Part II, Item 8, Note 1 of the Notes to Consolidated Financial Statements. Management believes that the consistent application of these policies enables the Company to provide users of the financial statements with useful and reliable information about the Company s operating results and financial condition. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. which require the Company to make estimates and assumptions. The following are accounting policies that management believes are most important to the portrayal of the Company s financial condition and results of operations and may involve a higher degree of judgment and complexity.

#### Fair Value Measurements

The Company records certain financial instruments at fair value, including: cash equivalents, certain marketable securities, certain restricted securities, contingent consideration, and derivative instruments. The Company may make an irrevocable election to measure other financial instruments at fair value on an instrument-by-instrument basis; although as of December 31, 2012 the Company has not chosen to make any such elections. Fair value financial instruments are recorded in accordance with the fair value measurement framework.

The Company also measures certain non-financial assets at fair value on a non-recurring basis. These non-recurring valuations include evaluating assets such as cost method investments, long-lived assets, and non-amortizing intangible assets for impairment; allocating value to assets in an acquired asset group; and applying accounting for business combinations. The Company uses the fair value measurement framework to value these assets and reports these fair values in the periods in which they are recorded or written down.

The fair value measurement framework includes a 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 requires judgment. Level 3 valuations often involve a higher degree of judgment and complexity. Level 3 valuations may require the use of various cost, market, or income valuation methodologies applied to unobservable management estimates and assumptions. Management s assumptions could vary depending on the asset or liability valued and the valuation method used. Such assumptions could include: estimates of prices, earnings, costs, actions of market participants, market factors, or the weighting of various valuation methods. The Company may also engage external advisors to assist it in determining fair value, as appropriate.

Although the Company believes that the recorded fair value of its financial instruments is appropriate, these fair values may not be indicative of net realizable value or reflective of future fair values.

#### **Deferred Preservation Costs**

By federal law, human tissues cannot be bought or sold; therefore, the tissues the Company preserves are not held as inventory. The costs the Company incurs to procure and process cardiac and vascular tissues are accumulated and deferred. Deferred preservation costs are stated at the lower of cost or market value on a first-in, first-out basis and are deferred until revenue is recognized. Upon shipment of the tissue to an implanting facility, revenue is recognized and the related deferred preservation costs are expensed as cost of preservation services. Cost of preservation services also includes, as applicable, lower of cost or market write-downs and impairments for tissues not deemed to be recoverable, and includes, as incurred, idle facility expense, excessive spoilage, extra freight, and rehandling costs.

The calculation of deferred preservation costs involves judgment and complexity and uses the same principles as inventory costing. Donated human tissue is procured from deceased human donors by tissue banks and organ procurement organizations (OTPOs), which consign the tissue to the Company for processing, preservation, and distribution. Deferred preservation costs consist primarily of the procurement fees charged by the OTPOs, direct labor and materials (including salary and fringe benefits, laboratory supplies and expenses, and freight-in charges) and indirect costs (including allocations of costs from support departments and facility allocations). Fixed production overhead costs are allocated based on actual tissue processing levels, to the extent that they are within the range of the facility s normal capacity.

Total deferred preservation costs are then allocated among tissues processed during the period based on cost drivers, such as the number of donors or number of tissues processed. At each balance sheet date, a portion of the deferred preservation costs relates to tissues currently in active processing or held in quarantine pending release to implantable status. The Company applies a yield estimate to all tissues in process and in quarantine to estimate the portion of tissues that will ultimately become implantable. Management estimates quarantine yields based on its experience and reevaluates these estimates periodically. Actual yields could differ significantly from the Company s estimates, which could result in a change

in tissues available for shipment, and could increase or decrease the balance of deferred preservation costs. These changes could result in additional cost of preservation services expense or could increase per tissue preservation costs, which would impact gross margins on tissue preservation services in future periods.

The Company regularly evaluates its deferred preservation costs to determine if the costs are appropriately recorded at the lower of cost or market value. The Company also evaluates its deferred preservation costs for costs not deemed to be recoverable, including tissues not expected to ship prior to the expiration date of their packaging. Lower of cost or market value write-downs are recorded if the tissue processing costs incurred exceed the estimated market value of the tissue services, based on recent average service fees at the time of the evaluation. Impairment write-downs are recorded based on the book value of tissues deemed to be impaired. Actual results may differ from these estimates. Write-downs of deferred preservation costs are expensed as cost of preservation services, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if the Company's estimates change.

#### **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 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 acquired net operating loss carryforwards will be limited in future periods due to a change in control of its subsidiaries Hemosphere and Cardiogenesis, as mandated by Section 382 of the Internal Revenue Code of 1986, as amended. The Company believes that its acquisition of Hemosphere constituted a change in control and that prior to the Company s acquisition, Hemosphere had experienced other equity ownership changes that should be considered a change in control. The Company also believes that its acquisition of Cardiogenesis constituted a change in control. The deferred tax assets recorded on the Company s Consolidated Balance Sheets do not include amounts that it expects will not be realizable due to these changes in control. A portion of the acquired net operating loss carryforwards is related to state income taxes and can only be used by the Company s subsidiaries Hemosphere and Cardiogenesis. Due to the history of losses of these subsidiaries when operated as stand-alone companies, 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.

The Company s tax years 2009 through 2012 generally remain open to examination by the major taxing jurisdictions to which the Company is subject. However, certain returns from years prior to 2009, in which net operating losses and tax credits have arisen, are still open for examination by the tax authorities.

#### Valuation of Acquired Assets or Businesses

As part of its corporate strategy, the Company is seeking to identify and evaluate acquisition opportunities of complementary product lines and companies. The Company evaluates and accounts for acquired patents, licenses, distribution rights, and other tangible or intangible assets as the purchase of an asset group, or as a business combination, as appropriate. The determination of whether the purchase of a group of assets should be accounted for as an asset group or as a business combination requires significant judgment based on the weight of available evidence.

For the purchase of an asset group, the Company allocates the cost of the asset group, including transaction costs, to the individual assets purchased based on their relative estimated fair values. In-process research and development acquired as part of an asset group is expensed upon acquisition. The Company accounts for business combinations by allocating the purchase price to the assets and liabilities acquired at their estimated fair value. Transaction costs related to a business combination are expensed as incurred. In-process research and development acquired as part of a business combination is accounted for as an indefinite-lived intangible asset until the related research and development project gains regulatory approval or is discontinued.

The Company engages external advisors to assist it in determining the fair value of acquired asset groups or business combinations, using cost, market, or income valuation methodologies, as appropriate, including: the excess earnings, the discounted cash flow, or the relief from royalty methods. The determination of fair value requires significant judgments and estimates, including, but not limited to: timing of product life cycles, estimates of future revenues, estimates of profitability for new or acquired products, cost estimates for new or changed manufacturing processes, estimates of the cost or timing of obtaining regulatory approvals, estimates of the success of competitive products, and discount rates. Management, in consultation with its advisor(s), makes these estimates based on its prior experiences and industry knowledge. Management believes that its estimates are reasonable, but actual results could differ significantly from the Company sestimates. A significant change in management sestimates used to value acquired asset groups could result in future write-downs of tangible or intangible assets acquired by the Company and, therefore, could materially impact the Company sestimates for new or changed manufacturing the Company may need to record additional expenses or write-downs in future periods, which could materially impact the Company sestimated position and profitability.

#### **New Accounting Pronouncements**

In January 2012 the Company adopted Accounting Standards Update (ASU) 2011-04, Fair Value Measurement (Topic 820): *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*, which clarifies some existing concepts and expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. The adoption of ASU 2011-04 did not have a material effect on the Company s financial condition, profitability, and cash flows.

In January 2012 the Company adopted ASU 2011-05, Comprehensive Income (Topic 220): *Presentation of Comprehensive Income*, and ASU 2011-12 related to presentation of comprehensive income in interim and annual financial statements.

In January 2012 the Company adopted ASU 2011-08, Intangibles-Goodwill and Other (Topic 350): *Testing Goodwill for Impairment*, which gives entities testing goodwill for impairment the option of performing a qualitative assessment before calculating the fair value of a reporting unit in step 1 of the goodwill impairment test. The adoption of ASU 2011-08 did not have a material effect on the Company s financial condition, profitability, and cash flows.

### **Results of Operations**

(In thousands)

## Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

#### Revenues

	Month Decen	or the Three is Ended iber 31,	Revenues as a Percentage of Total Revenues for the Three Months Ended December 31,		
D	2012	2011	2012	2011	
Preservation services:					
Cardiac tissue	\$ 7,094	\$ 6,629	22%	22%	
Vascular tissue	8,138	8,146	25%	27%	
Total preservation services	15,232	14,775	47%	49%	
Products:					
BioGlue and BioFoam	13,353	12,519	41%	41%	
PerClot	1,009	617	3%	2%	
HemoStase		(96)	%	%	
Revascularization technologies	1,985	2,415	6%	8%	
HeRO Graft	1,106		3%	%	
Total products	17,453	15,455	53%	51%	
Other	115	167	%	%	
Total	\$ 32,800	\$ 30,397	100%	100%	
	Ψ υ Ξ,000	+ - 3,0 > 1	23070	20070	

	Twelve N	nues for the Months Ended ember 31,	Total Reve Twelve Mo	a Percentage of enues for the onths Ended aber 31,
	2012	2011	2012	2011
Preservation services:				
Cardiac tissue	\$ 29,756	\$ 26,618	23%	22%
Vascular tissue	33,847	33,175	26%	28%
Total preservation services Products:	63,603	59,793	49%	50%
BioGlue and BioFoam	53,211	49,455	41%	41%
PerClot	3,078	2,528	2%	2%
HemoStase		1,699	%	2%
Revascularization technologies	8,092	5,705	6%	5%
HeRO Graft	3,115		2%	%
Total products	67,496	59,387	51%	50%
Other	619	446	%	%
Total	\$ 131,718	\$ 119,626	100%	100%

Revenues increased 8% for the three months and 10% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. A detailed discussion of the changes in preservation services revenues, product revenues, and

other revenues for the three and twelve months ended December 31, 2012 is presented below.

#### **Preservation Services**

Revenues from preservation services increased 3% for the three months and 6% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. The increase for the three and twelve months ended December 31, 2012 was primarily due to an increase in cardiac preservation services revenues. See further discussion of cardiac and vascular preservation services revenues below.

#### Cardiac Preservation Services

Revenues from cardiac preservation services (consisting of revenues from the distribution of heart valves and cardiac patch tissues) increased 7% for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011. This increase was primarily due to an increase in average service fees, which increased revenues by 4%, and by the aggregate impact of an increase in volume and tissue mix, which increased revenues by 3%.

Revenues from cardiac preservation services increased 12% for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011. This increase was primarily due to the aggregate impact of an increase in volume and tissue mix, which increased revenues by 9%, and by an increase in average service fees, which increased revenues by 3%.

The increase in revenues from volume and tissue mix for the three months ended December 31, 2012 was primarily due to an increase in cardiac patch shipments, partially offset by a decrease in shipments of pulmonary valves, and the increase for the twelve months ended December 31, 2012 was primarily due to an increase in cardiac valve shipments. Changes in unit shipments of cardiac valves and patches in any one quarter can be impacted by the timing of release of these tissues for shipment, which can vary from quarter to quarter. The Company believes that the increase in unit shipments of cardiac valves for the twelve months ended December 31, 2012 was primarily due to the activities of its expanded cardiac sales staff and the Company s ongoing physician education activities, and may have also benefited from the guidance issued by The Society of Thoracic Surgeons, which indicates that human aortic valves are the ideal replacement in certain cardiac reconstructive procedures involving endocarditis. The Company s cardiac valves are primarily used in cardiac replacement and reconstruction surgeries for patients with congenital heart defects.

Revenues from SynerGraft processed tissues, including the CryoValve SGPV and CryoPatch SG, accounted for 50% and 47% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2012, respectively, and 39% and 40% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2011, respectively. Domestic revenues accounted for 90% of total cardiac preservation services revenues for both the three and twelve months ended December 31, 2012, and 92% and 91% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2011, respectively.

#### Vascular Preservation Services

Revenues from vascular preservation services for the three months ended December 31, 2012 were comparable to revenues for the three months ended December 31, 2011. Revenues from vascular preservation services increased 2% for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011, primarily due to a 3% increase in unit shipments of vascular tissues, which increased revenues by 4%, partially offset by a decrease in average service fees, which decreased revenues by 2%.

The increase in vascular tissue volume for the twelve months ended December 31, 2012 was primarily due to increases in shipments of saphenous veins and aortoiliac grafts, which increased due to improved availability of certain tissues. Saphenous veins are primarily used in peripheral vascular reconstruction surgeries to avoid limb amputations, and aortoiliac grafts are primarily used in surgeries to treat abdominal aortic aneurisms. These tissues are primarily distributed in domestic markets.

The decrease in average service fees for the twelve months ended December 31, 2012 was due in part to a list fee decrease for certain vascular tissues in 2012 and fee differences due to physical characteristics of vascular tissues, partially offset by the routine negotiation of pricing contracts with certain customers.

#### **Products**

Revenues from products increased 13% for the three months and 14% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2012 was primarily due to the addition of HeRO Graft revenues as a result of the Company s acquisition of Hemosphere in the second quarter of 2012, and an increase in BioGlue revenues. The increase for the twelve months ended December 31, 2012 was primarily due to an increase in BioGlue revenues, the addition of HeRO Graft revenues, and an increase in revascularization technologies revenues as a result of the Company s acquisition of Cardiogenesis in the second quarter of 2011, partially offset by a lack of HemoStase revenues as the Company is no longer distributing this product. A detailed discussion of the changes in product revenues for BioGlue and BioFoam; PerClot and HemoStase; revascularization technologies; and HeRO Grafts are presented below.

#### BioGlue and BioFoam

Revenues from the sale of surgical sealants, consisting of BioGlue and BioFoam, increased 7% for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011. This increase was primarily due to a 4% increase in the volume of milliliters sold, which increased revenues by 3%, and by an increase in average sales prices, which increased revenues by 4%.

Revenues from the sale of surgical sealants increased 8% for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011. This increase was primarily due to an 8% increase in the volume of milliliters sold, which increased revenues by 5%, and by an increase in average sales prices, which increased revenues by 4%, partially offset by the unfavorable impact of foreign exchange rates, which decreased revenues by 1%.

The increase in sales volume of surgical sealants for the three and twelve months ended December 31, 2012 was due to an increase in shipments of BioGlue in certain international markets. For the three months ended December 31, 2012 these increases were primarily in Europe, and for the twelve months ended December 31, 2012 these increases were primarily in Japan and Europe. These increases were partially offset by decreases in the volume of milliliters sold in the Company s more mature domestic markets of 2% for the three months and 3% for the twelve months ended December 31, 2012 as compared to the three months and twelve months ended December 31, 2011, respectively. The Company began shipping BioGlue to Japan in late April 2011, following the Japanese approval of BioGlue for use in the repair of aortic dissections. Revenues from shipments to Japan for the three and twelve months ended December 31, 2012 were \$697,000 and \$4.1 million, respectively.

Management believes that the decrease in BioGlue shipments in its domestic markets is a result of various factors, including: poor economic conditions and their constraining effect on hospital budgets, the resulting attempts by hospitals to control costs by reducing spending on consumable items such as BioGlue, the efforts of some large competitors in imposing and enforcing contract purchasing requirements for competing non-CryoLife products, and the U.S. market introduction of sealant products with approved indications for use in clinical applications in which BioGlue has been used off-label previously.

The Company s sales of surgical sealants through its direct sales force to U.K. hospitals are denominated in British Pounds, and its sales to German, Austrian, and Irish hospitals and certain distributors are denominated in Euros and are, therefore, subject to changes in foreign exchange rates. If the exchange rates between the U.S. Dollar and the British Pound or Euro decline materially in the future, this would have a material, adverse impact on the Company s revenues denominated in these currencies.

Domestic revenues accounted for 61% and 60% of total BioGlue revenues for the three and twelve months ended December 31, 2012, respectively, and 63% and 64% of total BioGlue revenues for the three and twelve months ended December 31, 2011, respectively. BioFoam sales accounted for less than 1% of surgical sealant sales for the three and twelve months ended December 31, 2012. BioFoam is currently approved for sale in certain international markets.

BioGlue is a mature product in the U.S. and Europe that has experienced increasing competitive pressures. Management believes that BioGlue sales volume in domestic markets will continue to be impacted by the factors discussed above, and that poor economic conditions in Europe could negatively impact sales in future periods. Management also believes that international BioGlue sales will be positively impacted by increased shipments to Japan in 2013 as compared to the corresponding periods in 2012, although this increase will be less than the increase experienced in 2012 over 2011.

#### PerClot and HemoStase

Revenues from the sale of PerClot increased 63% for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011. This increase was primarily due to a 68% increase in the volume of grams sold, which increased revenues by 71%, partially offset by a decrease in average sales prices and the unfavorable impact of foreign

exchange rates. Revenues during these three month periods were for sales in certain international markets, as PerClot has not yet been approved for domestic distribution or widespread international distribution. This increase was primarily due to increased sales in the Company s markets in Europe and due to the recent approval of PerClot in additional countries. HemoStase was not distributed during the three months ended December 31, 2012 or 2011.

Revenues from the sale of hemostats, consisting of PerClot and HemoStase, decreased 27% for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011. The revenue decrease in the twelve months ended December 31, 2012 was primarily due to a decrease in hemostat sales volume in domestic markets, as discussed further below, and the unfavorable impact of foreign exchange rates, which decreased revenues by 2%.

International hemostat revenues increased 5% for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011. This increase in international hemostat revenues was primarily due to increased PerClot sales into the Company s markets in Europe and due to the recent approval of PerClot in additional countries, partially offset by the unfavorable impact of foreign exchange rates. International PerClot sales for the twelve months ended December 31, 2012 exceeded combined PerClot and HemoStase international sales for the twelve months ended December 31, 2011, which included large HemoStase orders filled in the first quarter of 2011 in anticipation of a disruption in the availability of hemostats to the Company s distributors in these countries beginning in 2011. This disruption was due to the Company s planned March 2011 discontinuance of HemoStase sales subsequent to the termination of its Exclusive Distribution Agreement (EDA) for this product.

The decrease in domestic sales volume for the twelve months ended December 31, 2012 was due to the Company s discontinuation of sales of HemoStase as discussed above. The Company recognized domestic hemostat sales in the first quarter of 2011 and recognized no domestic hemostat sales in the corresponding period in 2012. Domestic hemostat sales ended with the discontinuance of HemoStase sales, as PerClot has not yet been approved for commercial distribution in domestic markets. The Company will not be able to sell PerClot in the U.S. in future years unless and until FDA approval is granted. On March 30, 2012 CryoLife refiled for 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. The FDA responded to the Company s IDE during the second quarter of 2012, and the Company filed a revised IDE in November 2012. CryoLife has received questions from the FDA related to this filing and is currently working to address the questions and expects to respond to the FDA in the first quarter of 2013.

The Company s sales of hemostats through its direct sales force to U.K. hospitals are denominated in British Pounds, and its sales to German, Austrian, and Irish hospitals and certain distributors are denominated in Euros and are, therefore, subject to changes in foreign exchange rates. The unfavorable effect of foreign exchange rates for the three and twelve months ended December 31, 2012 was primarily due to a decline in the value of the Euro when compared to the corresponding periods in 2011. If the exchange rates between the U.S. Dollar and the British Pound or Euro decline materially in future periods, this would have a material, adverse impact on the Company s revenues denominated in these currencies. Changes in exchange rates will have a more material impact on hemostat revenues than the Company s other product lines, as a larger percentage of the Company s hemostat sales are denominated in foreign currencies.

Management believes that competitive pressures and economic conditions in Europe could negatively impact PerClot sales in 2013. Poor economic conditions and their constraining effect on hospital budgets are expected to drive continued pricing pressures, especially due to the many hemostatic agents currently competing for market share in Europe.

### Revascularization Technologies

Revenues from revascularization technologies include revenues related to the sale of handpieces and accessories and, in certain periods, revenues from the sale of laser consoles. Revenues from revascularization technologies decreased 18% for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011. Revenues from the sale of laser consoles were zero and \$541,000 in the three months ended December 31, 2012 and 2011, respectively. Revenues from the sale of handpieces and accessories increased 6% for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011. This increase was primarily due to an increase in average sales prices, which increased revenues by 4%, and an increase in volume, which increased revenues by 2%.

Revenues from revascularization technologies increased for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011, as revascularization technologies were not marketed by the Company for the full twelve month prior year period. The Company began marketing revascularization technologies following its acquisition of Cardiogenesis in May 2011. Revenues from the sale of laser consoles were \$279,000 and \$541,000 in the twelve months ended December 31, 2012 and 2011, respectively.

Revascularization technologies revenues for the twelve months ended December 31, 2012 decreased when compared to the combined pre- and post-acquisition revenues for the twelve months ended December 31, 2011. Revenues from the sale of laser consoles were \$279,000 in the twelve months ended December 31, 2012 and \$1.4 million in the combined pre- and post-acquisition period ended December 31, 2011. Revenues from the sale of handpieces and accessories decreased 10% for the twelve months ended December 31, 2012 when compared to the combined pre- and post-acquisition revenues for the twelve months ended December 31, 2011. These decreases were primarily due to increasing competitive pressures and challenges in selling laser consoles in recent periods, both of which have negatively impacted handpiece revenues. Revenues from laser consoles have been negatively impacted by the current economic environment, which makes hospitals reluctant to invest in large capital purchases.

The Company believes that the effects of competitive pressures and challenges in selling laser consoles may continue to negatively impact handpiece sales and laser console sales into 2013. The amount of revenues from the sale of laser consoles can vary significantly from quarter-to-quarter due to the long lead time required to generate sales of capital equipment and due to the higher selling price of consoles as compared to handpieces. Handpieces and laser consoles are primarily distributed in domestic markets.

#### HeRO Graft

Revenues from HeRO Grafts for the three and twelve months ended December 31, 2012 were a result of the Company s acquisition of Hemosphere in May 2012. Revenues from HeRO Grafts include revenues related to the sale of vascular grafts, venous outflow components, and accessories, which are generally sold together as a kit. HeRO Grafts are primarily distributed in domestic markets.

#### Other Revenues

Other revenues for the three and twelve months ended December 31, 2012 and 2011 included revenues related to funding allocated from U.S. Congress Defense Appropriations Conference Reports in 2005 through 2008, collectively the ( DOD Grants ). As of December 31, 2012 CryoLife had been awarded \$6.1 million and had 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 December 31, 2012 CryoLife had \$1.0 million included in deferred income on the Company s Consolidated Balance Sheet from the DOD Grants, of which \$668,000 remains in unspent cash advances recorded as cash and cash equivalents. In early 2013 the DOD Grants were amended to reduce the total award to \$5.4 million. The Company has discontinued its BioFoam U.S. clinical trial and, after the trial is formally closed out, any remaining unspent funds will be returned to the U.S. Department of Defense ( DOD ).

#### **Cost of Preservation Services and Products**

#### Cost of Preservation Services

	Three Mon	Three Months Ended		Twelve Months Ended	
	Decem	ber 31,	Decem	ber 31,	
	2012	2011	2012	2011	
eservation services	\$ 8.675	\$ 8.631	\$ 35,320	\$ 34.340	

Cost of preservation services increased 1% for the three months and 3% for the twelve months ended December 31, 2012, as compared to the three and twelve months ended December 31, 2011, respectively. Cost of preservation services includes costs for cardiac and vascular tissue preservation services.

The increase in cost of preservation services in the three and twelve months ended December 31, 2012 was primarily due to increased shipments of cardiac and vascular tissues during these periods, partially offset by a decrease in costs. Cost of preservation services for the three and twelve months ended December 31, 2011 included \$674,000 in unusual processing expenses due to certain supplies of processing solutions used in the processing of tissues that did not meet the Company s quality requirements.

#### Cost of Products

		Three Months Ended December 31,		Twelve Months Ended December 31,	
	2012	2011	2012	2011	
Cost of products	\$ 3.080	\$ 2,391	\$ 11.380	\$ 9,442	

Cost of products increased 29% for the three months and 21% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. Cost of products in 2012 includes costs related to BioGlue, BioFoam, PerClot, revascularization technologies, and HeRO Grafts. Cost of products in 2011 includes costs related to BioGlue, BioFoam, PerClot, HemoStase, and revascularization technologies.

The increase in cost of products in the three months ended December 31, 2012 was primarily due to the addition of HeRO Graft revenues. The increase in cost of products in the twelve months ended December 31, 2012 was primarily due to the addition of HeRO Graft and revascularization technologies handpiece revenues, and the increase in BioGlue sales volume, partially offset by the discontinuation of HemoStase sales.

### Gross Margin

		Three Months Ended December 31,		Twelve Months Ended December 31,	
	2012	2011	2012	2011	
Gross margin	\$ 21,045	\$ 19,375	\$ 85,018	\$ 75,844	
Gross margin as a percentage of total revenues	64%	64%	65%	63%	

Gross margin increased 9% for the three months and 12% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. Gross margin increased primarily due to an increase in revenues during the periods. Gross margin as a percentage of total revenues increased in the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011, primarily due to a change in service and product mix as the Company s higher margin medical devices segment made up a larger percentage of its business in 2012.

### **Operating Expenses**

#### General, Administrative, and Marketing Expenses

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2012	2011	2012	2011
General, administrative, and marketing expenses	\$ 16,775	\$ 14,626	\$ 65,149	\$ 57,302
General, administrative, and marketing expenses as a percentage of				
total revenues	51%	48%	49%	48%

General, administrative, and marketing expenses increased 15% for the three months and 14% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively.

General, administrative, and marketing expenses for the twelve months ended December 31, 2012 include a \$4.7 million gain on the settlement of the lawsuit with Medafor, Inc. (Medafor) and a \$4.1 million loss for the settlement of the lawsuit with CardioFocus, Inc. (CardioFocus) related to a claim of patent infringement by the Company s Cardiogenesis laser products. Both of these lawsuits were settled in the second quarter of 2012. Legal fees related to lawsuits, primarily the Medafor and CardioFocus lawsuits, were \$3.9 million for the twelve months ended December 31, 2012, and reductions to legal fees for insurance reimbursements for certain litigation expenses were \$3.4 million for the twelve months ended December 31, 2012.

Business development costs, primarily related to the acquisition and integration of Hemosphere, were \$790,000 and \$2.7 million for the three and twelve months ended December 31, 2012, respectively. Business development costs, primarily related to the acquisition and integration of Cardiogenesis, were \$144,000 and \$4.2 million for the three and twelve months ended December 31, 2011, respectively. The Company does not

anticipate that it will have significant business development costs related to the acquisitions of Hemosphere and Cardiogenesis in 2013.

General, administrative, and marketing expenses for the three and twelve months ended December 31, 2012 also increased due to an increase in marketing expenses, including the costs of the Company s expanded sales staff from its recent acquisitions of Hemosphere and Cardiogenesis and increases in spending on advertising.

The Company expects that its general, administrative, and marketing expenses will increase in 2013 as compared to 2012 due to increased costs related to its acquisition of Hemosphere and due to the 2.3% excise tax on the sale of medical devices in the U.S. that went into effect on January 1, 2013 as part of the Patient Protection and Affordable Care Act passed in 2010. The Company believes that its SynerGraft processed tissues and the majority of its medical devices will be subject to the tax and that its traditionally processed tissues will not be subject to the tax.

#### Research and Development Expenses

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2012	2011	2012	2011
Research and development expenses	\$ 2,065	\$ 1,800	\$ 7,257	\$ 6,899
Research and development expenses as a percentage of total revenues	6%	6%	6%	6%

Research and development expenses increased 15% for the three months and 5% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. Research and development spending for the three and twelve months ended December 31, 2012 was primarily focused on PerClot, HeRO Graft, revascularization technologies, the Company s SynerGraft tissues and products, and BioFoam. The Company expects that research and development spending will increase materially in 2013 due to planned increases in spending on clinical studies related to PerClot.

#### **Earnings**

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2012	2011	2012	2011
Income before income taxes	\$ 2,242	\$ 2,863	\$ 12,052	\$ 11,466
Income tax expense	159	997	4,106	4,095
Net income	\$ 2,083	\$ 1,866	\$ 7,946	\$ 7,371
Diluted income per common share	\$ 0.07	\$ 0.07	\$ 0.28	\$ 0.26
Diluted weighted-average common shares outstanding	27,357	27,745	27,411	27,759

Income before income taxes decreased 22% for the three months and increased 5% for the twelve months ended December 31, 2012 as compared to the three and twelve months ended December 31, 2011, respectively. The decrease in income before income taxes for the three months ended December 31, 2012 was primarily caused by an increase in operating expenses as discussed above, partially offset by an increase in gross margin. The increase in income before income taxes for the twelve months ended December 31, 2012 was primarily caused by an increase in gross margin, partially offset by an increase in operating expenses as discussed above.

The Company s effective income tax rate was approximately 7% for the three months and 34% for the twelve months ended December 31, 2012 as compared to 35% for the three months and 36% for the twelve months ended December 31, 2011. The Company s income tax rates for the three and twelve months ended December 31, 2012 were favorably impacted by \$427,000 in adjustments to valuation allowances on certain of the Company s state net operating loss carryforwards, based on revised estimates of utilization of these carryforwards. Actual usage will be dependent on a variety of factors and could change, although this favorable impact is not expected to recur in future periods. The Company s income tax rates for the three and twelve months ended December 31, 2012 were also impacted by the unfavorable tax treatment of certain acquisition related expenses due to the acquisition of Hemosphere and by the research and development tax credit, which had not been enacted for

the 2012 tax year. The Company s effective income tax rate for the twelve months ended December 31, 2011 was impacted by the discrete and favorable effect of deductions taken on the Company s 2010 federal tax returns, which were filed in the third quarter of 2011. This favorable effect was largely offset by the unfavorable tax treatment, recognized in the second quarter of 2011, of certain acquisition related expenses, which the Company incurred related to its acquisition of Cardiogenesis.

The Company anticipates that its 2013 tax rate will be favorably impacted by the research and development tax credit. As this credit was enacted for the 2012 tax year in January 2013, the Company will record the favorable impact of the full year 2012 credit in the first quarter of 2013.

Net income and diluted income per common share increased for the three months ended December 31, 2012 as compared to the three months ended December 31, 2011, primarily due to the decrease in income tax expense. Net income and diluted income per common share increased for the twelve months ended December 31, 2012 as compared to the twelve months ended December 31, 2011, primarily due to the increase in income before income taxes, as discussed above.

Diluted income per common share could be unfavorably impacted in future periods by the issuance of additional shares of common stock and favorably impacted 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. This program expired on December 31, 2012. In February 2013 the Company s Board of Directors authorized the purchase of up to \$15.0 million of its common stock through October 31, 2014.

#### Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

#### Revenues

	Months	Revenues for the Three Months Ended December 31,		Revenues as a Percentage of Total Revenues for the Three Months Ended December 31,	
	2011	2010	2011	2010	
Preservation services:					
Cardiac tissue	\$ 6,629	\$ 7,044	22%	24%	
Vascular tissue	8,146	6,981	27%	24%	
Total preservation services	14,775	14,025	49%	48%	
Products:					
BioGlue and BioFoam	12,519	12,164	41%	42%	
PerClot	617	264	2%	1%	
HemoStase	(96)	2,666	%	9%	
Revascularization technologies	2,415		8%	%	
Total products	15,455	15,094	51%	52%	
Other	167	103	%	%	
Total	\$ 30,397	\$ 29,222	100%	100%	

	Twelve Mo	Revenues for the Twelve Months Ended December 31,		ercentage of es for the ns Ended r 31,
	2011	2010	2011	2010
Preservation services:				
Cardiac tissue	\$ 26,618	\$ 27,997	22%	24%
Vascular tissue	33,175	31,727	28%	27%
Total preservation services	59,793	59,724	50%	51%
Products:				
BioGlue and BioFoam	49,455	47,383	41%	41%
PerClot	2,528	264	2%	9
HemoStase	1,699	8,793	2%	8%
Revascularization technologies	5,705		5%	97
Other medical devices		(70)	%	9/
Total products	59,387	56,370	50%	49%
Other	446	551	%	97
Total	\$ 119,626	\$ 116,645	100%	100%

Revenues increased 4% for the three months and 3% for the twelve months ended December 31, 2011 as compared to the three and twelve months ended December 31, 2010, respectively. A detailed discussion of the changes in preservation services revenues, product revenues, and other revenues for the three and twelve months ended December 31, 2011 is presented below.

#### **Preservation Services**

Revenues from preservation services increased 5% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010. The increase for the three months ended December 31, 2011 was primarily due to an increase in vascular preservation services revenues. Preservation services revenues for the twelve months ended December 31, 2011 were comparable to revenues for the twelve months ended December 31, 2010. See further discussion of cardiac and vascular preservation services revenues below.

#### Cardiac Preservation Services

Revenues from cardiac preservation services (consisting of revenues from the distribution of heart valves and cardiac patch tissues) decreased 6% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010. This decrease was primarily due to the aggregate impact of a decrease in volume and tissue mix, which decreased revenues by 7%, partially offset by an increase in average service fees, which increased revenues by 1%.

Revenues from cardiac preservation services decreased 5% for the twelve months ended December 31, 2011 as compared to the twelve months ended December 31, 2010. This decrease was primarily due to the aggregate impact of a decrease in volume and tissue mix, which decreased revenues by 6%, partially offset by an increase in average service fees, which increased revenues by 1%.

The reduction in revenues from the decrease in volume and cardiac tissue mix for both the three and twelve months ended December 31, 2011 was primarily due to a decrease in volume of cardiac valve shipments. For the twelve months ended December 31, 2011 this decrease was partially offset by an increase in the volume of lower fee cardiac patch tissues. 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 39% and 40% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2011, respectively, and 40% and 35% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2010, respectively. Domestic revenues accounted for 92% and 91% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2011, respectively, and 91% and 93% of total cardiac preservation services revenues for the three and twelve months ended December 31, 2010, respectively.

#### Vascular Preservation Services

Revenues from vascular preservation services increased 17% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010, primarily due to a 14% increase in unit shipments of vascular tissues, which increased revenues by 16%, and by an increase in average service fees, which increased revenues by 1%.

Revenues from vascular preservation services increased 5% for the twelve months ended December 31, 2011 as compared to the twelve months ended December 31, 2010, primarily due to a 3% increase in unit shipments of vascular tissues, which increased revenues by 4%, and by an increase in average service fees, which increased revenues by 1%.

The increase in vascular tissue volume for the three and twelve months ended December 31, 2011 was primarily due to increases in shipments of saphenous veins, resulting from the strong demand for these tissues in domestic markets, primarily for use in peripheral vascular reconstruction surgeries to avoid limb amputations.

#### **Products**

Revenues from products increased 2% for the three months and 5% for the twelve months ended December 31, 2011 as compared to the three and twelve months ended December 31, 2010, respectively. These increases were primarily due to revenues from revascularization technologies as a result of the Company s acquisition of Cardiogenesis in the second quarter of 2011 and, to a lesser extent, 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 technologies is presented below.

#### BioGlue and BioFoam

Revenues from the sale of surgical sealants, consisting of BioGlue and BioFoam, increased 3% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010. This increase was primarily due to a 2% increase in the volume of milliliters sold, which increased revenues by 2%, and by an increase in average service fees, which increased revenues by 1%.

Revenues from the sale of surgical sealants increased 4% for the twelve months ended December 31, 2011 as compared to the twelve months ended December 31, 2010. This increase was primarily due to a 4% increase in the volume of milliliters sold, which increased revenues by 3%, and the favorable impact of foreign exchange rates, which increased revenues by 1%.

The increase in sales volume of surgical sealants for the three and twelve months ended December 31, 2011 was due to an increase in shipments of BioGlue in certain international markets, primarily Japan. The Company began shipping BioGlue to Japan in late April 2011, following the Japanese approval of BioGlue for use in the repair of aortic dissections. Revenues from shipments to Japan for the three and twelve months ended December 31, 2011 were \$869,000 and \$2.0 million, respectively. These increases were partially offset by volume decreases in the Company s more mature domestic and European markets.

Management believes that the decrease in BioGlue shipments in its 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. Management believes that the decline in European volume may be due to general economic conditions in Europe, specifically in the Euro zone countries.

Domestic revenues accounted for 63% and 64% of total BioGlue revenues for the three and twelve months ended December 31, 2011, respectively, and 67% and 69% of total BioGlue revenues for the three and twelve months ended December 31, 2010, respectively. BioFoam sales accounted for less than 1% of surgical sealant sales for the three and twelve months ended December 31, 2011. BioFoam is currently approved for sale in certain international markets.

#### PerClot and HemoStase

Revenues from the sale of hemostats, consisting of PerClot and HemoStase, decreased 82% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010. Revenues from the sale of hemostats decreased 53% for the twelve months ended December 31, 2011 as compared to the twelve months ended December 31, 2010. The revenue decreases in the three and twelve months ended December 31, 2011 were primarily due to a decrease in hemostat sales volume in domestic markets, as discussed further below. For the twelve months ended December 31, 2011 this decrease was partially offset by an increase in sales volume in international markets in the year to date period.

International hemostat revenues decreased 38% for the three months ended December 31, 2011 as compared to the three months ended December 31, 2010. This decrease was primarily due to a decrease in sales in certain international markets, particularly in Canada and South America due to large orders filled in the fourth quarter of 2010 in anticipation of a disruption in the availability of hemostats to the Company's distributors in these countries beginning in early 2011. This disruption was due to the Company's planned March 2011 discontinuance of HemoStase sales subsequent to the termination of its EDA for this product, discussed further below. International hemostat revenues increased 23% for the twelve months ended December 31, 2011 as compared to the twelve months ended December 31, 2010. 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. Management believes that international PerClot revenues were favorably impacted by the Company's ability to market PerClot for all surgical specialties, expanding the direct European sales force into Austria, and PerClot's product performance when compared to other hemostatic agents.

The decrease in domestic sales volume for the three and twelve months ended December 31, 2011 was due to the Company s planned discontinuation of sales of HemoStase in late March 2011, as a result of Medafor s termination of its EDA with the Company recognized no domestic hemostat sales in the second, third, or fourth quarters of 2011, subsequent to the discontinuance of HemoStase sales, as PerClot has not yet been approved for commercial distribution in domestic markets.

#### Revascularization Technologies

Revenues from revascularization technologies for the three and twelve months ended December 31, 2011 were a result of the Company s acquisition of Cardiogenesis in May 2011. Revascularization technologies includes revenues related to the sale of laser consoles, handpieces, and related products. Revascularization technologies revenues for the three and twelve months ended December 31, 2011 consisted primarily of handpiece sales and, to a lesser extent, laser console sales.

Revenues from the sale of laser consoles accounted for 22% and 9% of total revascularization technologies revenues for the three and twelve months ended December 31, 2011, respectively.

#### Other Revenues

Other revenues for the three and twelve months ended December 31, 2011 and 2010 included revenues related to funding allocated from the DOD Grants. As of December 31, 2011 CryoLife had been awarded \$6.1 million and had 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 December 31, 2011 CryoLife had \$1.6 million included in deferred income on the Company is Consolidated Balance Sheet from the DOD Grants.

#### **Cost of Preservation Services and Products**

#### Cost of Preservation Services

	Three Mon	nths Ended	Twelve Months End	
	Decem	ber 31,	December 31,	
	2011	2010	2011	2010
Cost of preservation services	\$ 8,631	\$ 8,546	\$ 34,340	\$ 35,868

Cost of preservation services increased 1% for the three months and decreased 4% for the twelve months ended December 31, 2011, as compared to the respective periods in 2010. Cost of preservation services includes costs for cardiac and vascular tissue preservation services.

The increase in cost of preservation services for the three months ended December 31, 2011 was primarily due to \$674,000 in unusual processing expenses due to certain supplies of processing solutions used in our processing of tissues that did not meet our quality requirements, partially offset by cost decreases discussed below.

The decrease in cost of preservation services in the twelve months ended December 31, 2011 was 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, as fixed costs were allocated to a greater volume of processed tissues.

#### Cost of Products

	Three Mor	ths Ended	Twelve Mo	onths Ended
	Decem	ber 31,	December 31,	
	2011	2010	2011	2010
Cost of products	\$ 2,391	\$ 3.091	\$ 9,442	\$ 12,409

Cost of products decreased 23% for the three months and 24% for the twelve months ended December 31, 2011 as compared to the three and twelve months ended December 31, 2010, respectively. Cost of products in 2011 included costs related to BioGlue, BioFoam, PerClot, and revascularization technologies, and includes HemoStase for the year to date period. The Company began distributing revascularization technologies products in the second quarter of 2011 through CryoLife s subsidiary Cardiogenesis. Cost of products in 2010 includes costs related to BioGlue, BioFoam, HemoStase, and PerClot.

The decrease in cost of products in the three months ended December 31, 2011 was primarily due to a decrease in shipments of HemoStase, partially offset by costs for revascularization technologies, which the Company began selling in the second quarter of 2011 through Cardiogenesis, and by increased shipments of PerClot, which the Company began distributing in the fourth quarter of 2010.

#### **Operating Expenses**

### General, Administrative, and Marketing Expenses

	Three Months Ended December 31,				
	2011	2010	2011	2010	
General, administrative, and marketing expenses	\$ 14,626	\$ 12,201	\$ 57,302	\$ 49,064	
General, administrative, and marketing expenses as a percentage of					
total revenues	48%	42%	48%	42%	

General, administrative, and marketing expenses increased 20% for the three months and 17% for the twelve months ended December 31, 2011 as compared to the three and twelve months ended December 31, 2010, respectively.

The increase in general, administrative, and marketing expenses for the three months ended December 31, 2011 was primarily due to expenses related to the sales personnel and ongoing operations of Cardiogenesis, which the Company acquired in May 2011. The increase in general, administrative, and marketing expenses for the twelve months ended December 31, 2011 was primarily due to expenses for business development activities and additional expenses related to the sales personnel and ongoing operations of Cardiogenesis. The Company s business development activities included transaction and integration expenses related to the Company s acquisition of Cardiogenesis and additional business development activities. The Company s business development expenses, including: outgoing personnel costs, exit activities, and legal, professional, and regulatory fees, were \$4.2 million and \$1.0 million for the twelve months ended December 31, 2011 and 2010, respectively.

#### Research and Development Expenses

	Three Months Ended Twelve Mont December 31, December			
	2011	2010	2011	2010
Research and development expenses	\$ 1,800	\$ 1,801	\$ 6,899	\$ 5,923
Research and development expenses as a percentage of total revenues	6%	6%	6%	5%

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

#### Acquired In-Process Research and Development

Acquired in-process research and development was \$3.5 million for the twelve months ended December 31, 2010. As part of the consideration paid to SMI in the third quarter of 2010, the Company allocated \$3.5 million to an intangible asset for 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 was dependent upon regulatory approvals, which had not yet been obtained. Therefore, CryoLife expensed the \$3.5 million as in-process research and development upon acquisition.

#### Other Income and Expenses

The gain on valuation of derivative was \$1.3 million for the twelve months ended December 31, 2010. The gain on valuation of derivative was due to the decrease in the value of embedded derivatives related to Medafor common stock previously purchased by the Company.

The other than temporary investment impairment was \$3.6 million for the twelve months ended December 31, 2010. This was due to the impairment in the value of the Company s investment in Medafor common stock during the third quarter of 2010.

#### **Earnings**

	Three Months Ended December 31,		Twelve Months Ende December 31,	
	2011	2010	2011	2010
Income before income taxes	\$ 2,863	\$ 3,458	\$ 11,466	\$ 7,277
Income tax expense	997	1,343	4,095	3,333
Net income	\$ 1,866	\$ 2,115	\$ 7,371	\$ 3,944
Diluted income per common share	\$ 0.07	\$ 0.08	\$ 0.26	\$ 0.14
Diluted weighted-average common shares outstanding	27,745	28,030	27,759	28,274

Income before income taxes decreased 17% for the three months and increased 58% for the twelve months ended December 31, 2011 as compared to the three and twelve months ended December 31, 2010, respectively. Income before income taxes for the three and twelve months ended December 31, 2011 was negatively impacted by increases in general, administrative, and marketing costs, including costs related to the acquisition of Cardiogenesis, other business development costs, and legal costs. Income before income taxes for the twelve months ended December 31, 2010 was negatively impacted primarily by acquired in-process research and development expense, the other than temporary investment impairment, and the write-down of HemoStase inventory, as discussed above. These effects were partially offset by the gain on valuation of derivative for the twelve months ended December 31, 2010.

The Company s effective income tax rate was approximately 35% for the three months and 36% for the twelve months ended December 31, 2011, as compared to 39% for the three months and 46% for the twelve months ended December 31, 2010. The Company s effective income tax rate for the twelve months ended December 31, 2011 was impacted by the discrete and favorable effect of deductions taken on the Company s 2010 federal tax returns, which were filed in the third quarter of 2011. This favorable effect was largely offset by the unfavorable tax treatment, recognized in the second quarter of 2011, 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 twelve months ended December 31, 2011 changed compared to the corresponding periods in 2010 due to the changes in income before income taxes, adjusted by the effect of income tax expense, as discussed above.

#### Seasonality

The Company s demand for its cardiac preservation services has traditionally been 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.

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 a new product and the nature of any seasonal trends in PerClot sales may be obscured.

The Company is uncertain whether the demand for revascularization technologies will be seasonal, as the Company only recently acquired this product line in May 2011, and the historical data does not indicate a significant trend.

The Company is uncertain whether the demand for HeRO Grafts will be seasonal, as the Company only recently acquired this product line in May 2012, and the historical data does not indicate a significant trend.

#### **Liquidity and Capital Resources**

#### Net Working Capital

At December 31, 2012 net working capital (current assets of \$77.5 million less current liabilities of \$21.4 million) was \$56.1 million, with a current ratio (current assets divided by current liabilities) of 4 to 1, compared to net working capital of \$62.4 million and a current ratio of 4 to 1 at December 31, 2011.

### Overall Liquidity and Capital Resources

The Company s largest non-operating cash requirements for the twelve months ended December 31, 2012 were the acquisition of Hemosphere and the related transaction and integration costs. The total acquisition cost, net of cash acquired, was \$17.0 million. CryoLife used cash on hand to fund the acquisition and operates Hemosphere as a wholly owned subsidiary. In addition, during the twelve months ended December 31, 2012 the Company paid \$4.5 million in a settlement to CardioFocus, which was largely offset by \$3.5 million received in a settlement from Medafor. See Liability Claims below for further discussion of these settlements. The Company s other cash requirements included cash for general working capital needs, repurchases of the Company s common stock, and cash dividend payments. The Company funded its cash requirements through its existing cash reserves and its operating activities, which generated cash during the period.

CryoLife s credit agreement with GE Capital (the GE Credit Agreement ) provides revolving credit for working capital, acquisitions, and other corporate purposes. The borrowing capacity under the GE Credit Agreement is \$20.0 million (including a letter of credit subfacility), and the GE Credit Agreement expires on October 28, 2014. The borrowing capacity may be reduced or increased from time to time pursuant to 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 as restricted cash and securities on the

Company s

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. As of December 31, 2012 the outstanding balance under the GE Credit Agreement was zero and \$20.0 million was available for borrowing.

In the twelve months ended December 31, 2012 the Company purchased approximately 639,000 shares of its common stock for an aggregate purchase price of \$3.3 million under the common stock repurchase program previously authorized by the Company s Board of Directors. This program expired on December 31, 2012. In February 2013 the Company s Board of Directors authorized the purchase of up to \$15.0 million of its common stock through October 31, 2014.

The Company s cash equivalents include advance funding received under the DOD Grants for the continued development of protein hydrogel technology. As of December 31, 2012 \$668,000 of the Company s cash equivalents were related to these DOD Grants, which must be used for the specified purposes or repaid to the DOD. The Company has discontinued its BioFoam U.S. clinical trial and, after the trial is formally closed out, any remaining unspent funds will be returned to the DOD.

As of December 31, 2012 approximately 9% of the Company s cash, cash equivalents, and restricted cash and securities were held in foreign jurisdictions.

During the third and fourth quarters of 2012 the Company advanced a total of \$2.0 million in debt financing to ValveXchange, Inc. (ValveXchange) through a revolving credit facility. The Company may decide to allow ValveXchange to issue shares in payment of some or all of the outstanding debt balance in connection with a currently proposed financing or a future round of financing.

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 the PerClot clinical trials, research and development expenditures for revascularization technologies and HeRO Graft, and other business development activities, to purchase license agreements, for general working capital needs, to repurchase the Company s common stock, to fund the cash dividend to common shareholders, and for other corporate purposes. These items may have a significant impact on its cash flows during 2013. The Company may seek additional borrowing capacity or financing pursuant to its shelf registration statement, for general corporate purposes, or to fund other future cash requirements. If the Company undertakes further significant business development activity in 2013, it will likely need to finance such activities by drawing down monies under the GE Credit Agreement, obtaining additional debt financing, or using its shelf registration statement to sell equities.

The Company acquired net operating loss carryforwards from its acquisitions of Hemosphere and Cardiogenesis that the Company believes will reduce required cash payments for federal income taxes by approximately \$1.5 million for the 2013 tax year.

#### Net Cash Flows from Operating Activities

Net cash provided by operating activities was \$19.0 million for the twelve months ended December 31, 2012 as compared to \$16.8 million for the twelve months ended December 31, 2011. The current year cash provided was primarily due to net income generated by the Company during the period and non-cash expenses. In addition, during the twelve months ended December 31, 2012 the Company paid \$4.5 million in a settlement to CardioFocus, which was largely offset by \$3.5 million received in a settlement from Medafor, as discussed above.

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 twelve months ended December 31, 2012 these non-cash items included a favorable \$5.6 million in depreciation and amortization expense, \$3.2 million in non-cash stock based compensation, and \$1.2 million in deferred income taxes.

The Company s working capital needs, or changes in operating assets and liabilities, did not have an overall material impact on cash from operations. However, for the twelve months ended December 31, 2012 the changes to specific working capital items included an unfavorable \$1.6 million due to increases in deferred preservation costs and inventory balances and an unfavorable \$583,000 due to the timing difference between making cash payments and the expensing of assets, including prepaid insurance policy premiums, offset by a favorable \$1.4 million due to the timing difference between recording receivables and the receipt of cash and a favorable \$529,000 due to the timing differences between the recording of accounts payable, accrued expenses, and other liabilities and the actual payment of cash.

#### Net Cash Flows from Investing Activities

Net cash used in investing activities was \$22.9 million for the twelve months ended December 31, 2012 as compared to \$27.7 million for the twelve months ended December 31, 2011. The current year cash used was primarily due to the payment of \$17.0 million for the acquisition of Hemosphere, net of cash acquired, \$3.1 million in capital expenditures, and \$2.0 million in advances to ValveXchange under the revolving credit facility.

#### Net Cash Flows from Financing Activities

Net cash used in financing activities was \$4.7 million for the twelve months ended December 31, 2012 as compared to \$2.8 million for the twelve months ended December 31, 2011. The current year cash used was primarily due to \$3.5 million in purchases of treasury stock, largely related to the Company s publicly announced stock repurchase plan, and \$1.4 million in cash dividends paid on the Company s common stock.

### **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 December 31, 2012 are as follows (in thousands):

	Total	2013	2014	2015	2016	2017	Thereafter
Operating leases	\$ 26,626	\$ 2,674	\$ 2,902	\$ 2,868	\$ 2,852	\$ 2,907	\$ 12,423
Purchase commitments	5,769	3,969	1,800				
Contingent payments	4,500	500		4,000			
Compensation payments	1,985				1,985		
Research obligations	1,927	1,657	270				
Total contractual obligations	\$ 40,807	\$ 8,800	\$ 4,972	\$ 6,868	\$ 4,837	\$ 2,907	\$ 12,423

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 manufacturing, 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 in 2015. 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 contingent payment obligations include obligations related to the Company s acquisition of Hemosphere and transaction with SMI. The contingent payment obligation for Hemosphere represents the payments that the Company will make if certain revenue milestones are achieved. The schedule includes one contingent milestone payment for \$2.5 million that the Company believes it is likely to pay in 2015, although the timing of this payment may change. The schedule excludes one contingent milestone payment of up to \$2.0 million, as the Company cannot make a reasonably reliable estimate of when this future payment may be made, if at all. The contingent payment obligation for PerClot represents the payments that the Company will make 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 an estimated payment for post-employment benefits for the Company s Chief Executive Officer ( CEO ). The timing of the CEO s post-employment benefit payment is based on the December 31, 2015 expiration date of the CEO s new employment agreement. The new agreement, which was signed in October 2012, was used to determine the timing of the payment even though it did not take effect until January 1, 2013, as the prior agreement expired effective December 31, 2012. Payment of the benefit under the new agreement may be accelerated by the voluntary retirement of the CEO or upon certain termination events.

The Company s research obligations represent commitments for ongoing studies and payments to support research and development activities.

The schedule of contractual obligations above excludes (i) obligations for estimated liability claims unless they are due as a result of a settlement agreement or other contractual obligation, (ii) any estimated liability for uncertain tax positions and interest and penalties, currently estimated to be \$2.4 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, and (iii) \$668,000 in unspent funds that the Company will spend during the close out of its BioFoam U.S. clinical trial or will refund to the DOD.

#### Capital Expenditures

Capital expenditures for the twelve months ended December 31, 2012 were \$3.1 million compared to \$2.5 million for the twelve months ended December 31, 2011. Capital expenditures in the twelve months ended December 31, 2012 were primarily related to the routine purchases of tissue processing, manufacturing, computer, and office equipment; laser consoles; computer software; and renovations to the Company s corporate headquarters and manufacturing facilities needed to support the Company s business.

#### Item 7A. 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 \$13.0 million and restricted securities of \$5.0 million and interest paid on the Company s variable rate line of credit as of December 31, 2012. A 10% adverse change in interest rates as compared to the rates experienced by the Company in the twelve months ended December 31, 2012, 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.

An additional 10% adverse change in exchange rates from the exchange rates in effect on December 31, 2012 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 weighted-average exchange rates experienced by the Company for the twelve months ended December 31, 2012 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 8. Financial Statements and Supplementary Data.

Our financial statements and supplementary data required by this item are submitted as a separate section of this annual report on Form 10-K. See Financial Statements commencing on page F-1.

#### Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

#### Item 9A. 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 December 31, 2012 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 this Form 10-K, the Company completed the acquisition of Hemosphere, Inc. (Hemosphere) during the second quarter of 2012. Management s assessment and conclusion on the effectiveness of the Company s disclosure controls and procedures as of December 31, 2012 excludes an assessment of the internal control over financial reporting of Hemosphere. See Part II, Item 8, Note 4, Notes to Consolidated Financial Statements contained in this Form 10-K for a description of the significance of the acquired business to the Company.

During the quarter ended December 31, 2012 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.

The report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to Management s Report on Internal Control over Financial Reporting under Sarbanes-Oxley Section 404 on page F-1 of this report.

The attestation report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to Report of Independent Registered Public Accounting Firm on page F-2 of this report.

Item 9B. Other Information.

None.

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#### **PART III**

#### Item 10. Directors, Executive Officers, and Corporate Governance.

The response to Item 10 is incorporated herein by reference to the information to be set forth in the Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2012, with the exception of information concerning executive officers, which is included in Part I, Item 4A, Executive Officers of the Registrant of this Form 10-K.

#### **Item 11. Executive Compensation.**

The response to Item 11 is incorporated herein by reference to the information to be set forth in the Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2012.

#### Item 12. Security Ownership of Certain Beneficial Owners and Management, and Related Stockholder Matters.

The response to Item 12 is incorporated herein by reference to the information to be set forth in the Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2012.

#### Item 13. Certain Relationships and Related Transactions, and Director Independence.

The response to Item 13 is incorporated herein by reference to the information to be set forth in the Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2012.

#### Item 14. Principal Accounting Fees and Services.

The response to Item 14 is incorporated herein by reference to the information to be set forth in the Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2012.

#### **PART IV**

## Item 15. Exhibits, Financial Statement Schedules.

The following are filed as part of this report:

(a) 1. Consolidated Financial Statements begin on page F-1.

All financial statement schedules are omitted, as the required information is immaterial, not applicable, or the information is presented in the consolidated financial statements or related notes.

(b) Exhibits

The following exhibits are filed herewith or incorporated herein by reference:

#### Exhibit

Number 2.1	Description  Agreement and Plan of Merger Among CryoLife, Inc., CL Falcon, Inc., and Cardiogenesis Corporation dated March 28, 2011.  (Incorporated herein by reference to Exhibit 2.1 to the Registrant s Current Report on Form 8-K filed March 29, 2011.)
2.1(a)	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.)
2.2+	Series A Preferred Stock Purchase Agreement Among CryoLife, Inc., The Cleveland Clinic Foundation, and ValveXchange, Inc. dated July 6, 2011. (Incorporated herein by reference to Exhibit 2.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011.)
2.3	Agreement and Plan of Merger, dated May 14, 2012, by and among CryoLife, Inc., CL Crown, Inc., Hemosphere, Inc. and a Stockholder Representative. (Incorporated herein by reference to Exhibit 2.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.)
3.1	Amended and Restated Articles of Incorporation of the Company. (Incorporated herein by reference to Exhibit 3.1 to the Registrant s Form S-3 filed February 22, 2012.)
3.2	Reserved.
3.3	Reserved.
3.4	Reserved.
3.5	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	Reserved.
4.2	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.)
4.3	Reserved.
4.4	Reserved.
4.5	Reserved.
4.6	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 Reserved.

10.2+ 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. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2008.)

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Exhibit	
Number 10.2(a)	Description  First Amendment, dated May 7, 2009, 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. (Incorporated herein by reference to Exhibit 10.9(a) to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2009.)
10.2(b)+	Second Amendment, dated November 9, 2009, 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. (Incorporated herein by reference to Exhibit 10.9(a) to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2009.)
10.2(c)+	Third Amendment, dated January 12, 2010, to the Credit Agreement by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, General Electric Capital Corporation, as lender, letter of credit issuer, and agent for all lenders, and GE Capital Markets, Inc., as sole lead arranger and bookrunner. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.)
10.2(d)	Fourth Amendment, dated May 28, 2010, to the Credit Agreement by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, General Electric Capital Corporation, as lender, letter of credit issuer, and agent for all lenders, and GE Capital Markets, Inc., as sole lead arranger and bookrunner. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010.)
10.2(e)	Fifth Amendment, dated March 2, 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. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.)
10.2(f)	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. (Incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
10.2(g)	Seventh Amendment, dated August 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. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011.)
10.2(h)+	Amended and Restated Credit Agreement, dated October 28, 2011, to the Credit Agreement by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, General Electric Capital Corporation, as lender, swingline lender, as letter of credit issuer, and as the agent for all lenders, and GE Capital Markets, Inc., as sole lead arranger and bookrunner. (Incorporated herein by reference to Exhibit 10.2(h) to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2011.)
10.2(i)	First Amendment, dated August 20, 2012, to the Amended and Restated Credit Agreement, dated October 28, 2011, by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, General Electric Capital Corporation, as lender, swingline lender, as letter of credit issuer, and as the agent for all lenders, and GE Capital Markets, Inc., as sole lead arranger and bookrunner. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.3	CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
10.3(a)	First Amendment, dated July 24, 2012, to the CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.4	CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Appendix 1 to the Registrant s Definitive Proxy Statement filed with the Securities and Exchange Commission on April 17, 1998.)

Exhibit	
Number 10.5	Description Reserved.
10.6	Reserved.
10.7*	Form of 2012 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan.
10.7(a)	Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2002 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed August 7, 2006.)
10.7(b)	Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
10.8	Form of Incentive Stock Option Grant Agreement under the 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
10.9*	Employment Agreement by and between the Company and Steven G. Anderson dated as of October 23, 2012.
10.9(a)*	Form of Change of Control Agreement (entered into with respect to Jeffrey W. Burris, David M. Fronk and Scott B. Capps).
10.9(b)*	Form of Change of Control Agreement (entered into with respect to D. Ashley Lee).
10.9(c)	Change of Control Agreement, by and between the Company and Gerald B. Seery, dated November 2, 2008. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed November 3, 2008.)
10.10	Form of Secrecy and Noncompete Agreement, by and between the Company and its Officers. (Incorporated herein by reference to Exhibit 10.9 to the Registrant s Registration Statement on Form S-1 (No. 33-56388).)
10.11	Form of Key Employee Secrecy and Noncompete Agreement, by and between the Company and its Officers and Key Employees (Incorporated herein by reference to Exhibit 10.11 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.).
10.12(a)*	Summary of Salaries for Named Executive Officers.
10.12(b)	Reserved.
10.12(c)*	Release and Noncompete Agreement, by and between the Company and Gerald B. Seery.
10.13	Form of Non-Qualified Stock Option Grant Agreement under 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
10.14	Amended and Restated Technology Acquisition Agreement between the Company and Nicholas Kowanko, Ph.D., dated March 14, 1996. (Incorporated herein by reference to Exhibit 10.14 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2004.)
10.15	CryoLife, Inc. Non-Employee Directors Stock Option Plan, as amended. (Incorporated herein by reference to Appendix 2 to the Registrant's Definitive Proxy Statement filed with the Securities and Exchange Commission on April 17, 1998.)
10.16	Lease Agreement between the Company and Amli Land Development I Limited Partnership, dated April 18, 1995. (Incorporated herein by reference to Exhibit 10.16 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2007.)
10.16(a)	First Amendment to Lease Agreement, dated April 18, 1995, between the Company and Amli Land Development I Limited Partnership dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(a) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 1999.)
10.16(b)	Restatement and Amendment to Funding Agreement between the Company and Amli Land Development I Limited Partnership, dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(b) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2000.)

Exhibit	
<b>Number</b> 10.16(c)	Description  Amended and Restated Lease Agreement between the Company and Amli Land Development I Limited Partnership, dated May 10, 2010. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010.)
10.17	CryoLife, Inc. 2008 Non-Employee Directors Omnibus Stock Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.)
10.17(a)	Form of Non-Employee Director Stock Grant Agreement pursuant to the CryoLife, Inc. 2008 Non-Employee Directors Omnibus Stock Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.)
10.18	Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.5 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
10.19	CryoLife, Inc. 2004 Employee Stock Incentive Plan, adopted on June 29, 2004. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2004.)
10.19(a)	First Amendment to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, dated October 27, 2009. (Incorporated herein by reference to Exhibit 10.46 to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2009.)
10.19(b)	Second Amendment to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, dated May 24, 2011. (Incorporated herein by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
10.20	Form of Incentive Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed February 25, 2008.)
10.21	Form of Non-Qualified Employee Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Current Report on Form 8-K filed February 25, 2008.)
10.22	Technology License Agreement between the Company and Colorado State University Research Foundation dated March 28, 1996. (Incorporated herein by reference to Exhibit 10.22 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2007.)
10.23	Form of Non-Qualified Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)
10.24	Form of Incentive Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)
10.25	Form of Section 16 Officer Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Current Report on Form 8-K filed February 27, 2006.)
10.26	Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed February 27, 2006.)
10.27	Grant of Incentive Stock Option to D. Ashley Lee, dated May 4, 2006. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2006.)
10.27(a)	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. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
10.28	Form of Incentive Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.29 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.29	Form of Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.30(a) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)

Exhibit	
Number 10.30	Description  Form of Director Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.30(b) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.31	Form of Non-Employee Directors Stock Option Agreement and Grant pursuant to the Amended and Restated Non-Employee Directors Stock Option Plan. (Incorporated herein by reference to Exhibit 10.31 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.32	Form of Incentive Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.32 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.33	Form of Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.33 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.34	Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.34 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.35	Form of Non-Qualified Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.35 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.36	Form of Grant of Non-Qualified Stock Option to Directors. (Incorporated herein by reference to Exhibit 10.36 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.37	Grant of Incentive Stock Option to Steven G. Anderson, dated May 4, 2006. (Incorporated herein by reference to Exhibit 10.37 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
10.38	International Distribution Agreement, dated September 17, 1998, between the Company and Century Medical, Inc. (Incorporated by reference to Exhibit 10.37 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2000.)
10.39	CryoLife, Inc. 2004 Non-Employee Directors Stock Option Plan, as amended, adopted on June 29, 2004. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2004.)
10.40	Form of Directors Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Non-Employee Directors Stock Option Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)
10.41	CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.)
10.42	Settlement and Release Agreement, dated August 2, 2002, by and between Colorado State University Research Foundation, the Company, and Dr. E. Christopher Orton. (Incorporated by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2002.)
10.43	Settlement Agreement and Release, dated September 25, 2006, by and between CryoLife, Inc. and St. Paul Mercury Insurance Company. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2006.)
10.44*	Summary of Compensation Arrangements with Non-Employee Directors.
10.45	CryoLife, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2009.)
10.46	Reserved.
10.47*	Form of 2011 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan.
10.48	Reserved.
10.49	Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan entered into with each Named Executive Officer. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.)

Exhibit	
<b>Number</b> 10.50+	Description  Distribution Agreement between the Company and Starch Medical, Inc., dated September 28, 2010. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed January 18, 2012.)
10.50(a)+	First Amendment to the Distribution Agreement between the Company and Starch Medical, Inc., dated May 18, 2011. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 30, 2012.)
10.51+	License Agreement between the Company and Starch Medical, Inc., dated September 28, 2010. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Current Report on Form 8-K filed January 18, 2012.)
10.52	CryoLife, Inc. Executive Deferred Compensation Plan. (Incorporated herein by reference to Exhibit 10.52 to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2010.)
10.53	Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.)
10.54	Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.)
10.55	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. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
10.56+	Loan and Security Agreement by and between ValveXchange, Inc., and CryoLife, Inc. dated July 6, 2011. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011.)
10.56(a)	First Amendment to Loan and Security Agreement by and between ValveXchange, Inc., and CryoLife, Inc. dated September 6, 2011. (Incorporated herein by reference to Exhibit 10.56(a) to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2011.)
10.56(b)	Second Amendment, dated July 18, 2012, to the Loan and Security Agreement by and between ValveXchange, Inc. and CryoLife, Inc. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.57	Form of Indemnification Agreement entered into with each of the Registrant s directors, except Harvey Morgan, and its Executive Vice President, Chief Operating Officer and Chief Financial Officer. (Incorporated herein by reference to Exhibit 99.1 to the Form S-3/A filed by Registrant on January 4, 2005.)
10.58	Form of Indemnification Agreement entered into with Harvey Morgan. (Incorporated herein by reference to Exhibit 99.2 to the Form S-3 filed by Registrant on November 21, 2008.)
10.59	Form of Performance Share Agreement with Named Executive Officers. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed March 22, 2012.)
10.59(a)	First Amendment, dated July 23, 2012, to the 2012 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.60	Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 99.1 to the Registrant s Form S-8 filed June 22, 2012.)
10.60(a)	First Amendment, dated July 24, 2012, to the Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.61	Waiver Agreement, dated May 14, 2012, by and among CryoLife, Inc. and certain of its subsidiaries, as borrowers, and General Electric Capital Corporation, as lender and administrative agent for all lenders, under the Amended and Restated Credit Agreement between the parties, dated October 28, 2011. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.)
10.62	Final Settlement Agreement, dated June 28, 2012, by and among CryoLife, Inc. and Medafor, Inc. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.)

Exhibit	
Number 10.63	Description  Settlement Agreement, dated June 14, 2012, by and among CryoLife, Inc. and CardioFocus, Inc. (Incorporated herein by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012.)
21.1*	Subsidiaries of CryoLife, Inc.
23.1*	Consent of Deloitte & Touche LLP.
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.DEF**	XBRL Taxonomy Extension Definition Linkbase
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 fail 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.

- 3. B. Executive Compensation Plans and Arrangements.
- 1. Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2002 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed August 7, 2006.)
- 2. \*Employment Agreement by and between the Company and Steven G. Anderson dated as of October 23, 2012.
- 3. \*Form of Change of Control Agreement (entered into with respect to Jeffrey W. Burris, David M. Fronk, and Scott B. Capps).
- 4. \*Form of Change of Control Agreement (entered into with respect to D. Ashley Lee).
- 5. Change of Control Agreement, by and between the Company and Gerald B. Seery, dated November 2, 2008. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed November 3, 2008.)
- 6. Form of Secrecy and Noncompete Agreement, by and between the Company and its Officers. (Incorporated herein by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form S-1 (No. 33-56388).)
- 7. Form of Key Employee Secrecy and Noncompete Agreement, by and between the Company and its Officers and Key Employees.

  (Incorporated herein by reference to Exhibit 10.11 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 8. CryoLife, Inc. Non-Employee Directors Stock Option Plan, as amended. (Incorporated herein by reference to Appendix 2 to the Registrant s Definitive Proxy Statement filed with the Securities and Exchange Commission on April 17, 1998.)
- 9. CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Appendix 1 to the Registrant s Definitive Proxy Statement filed with the Securities and Exchange Commission on April 17, 1998.)
- 10. CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.)
- 11. CryoLife, Inc. 2004 Employee Stock Incentive Plan, adopted on June 29, 2004. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2004.)
- 12. CryoLife, Inc. 2004 Non-Employee Directors Stock Option Plan, as amended, adopted on June 29, 2004. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2004.)
- 13. CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)

- 14. Form of Directors Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Non-Employee Directors Stock Option Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)
- 15. Form of Non-Qualified Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)
- 16. Form of Incentive Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.)

- 17. Form of Section 16 Officer Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Current Report on Form 8-K filed February 27, 2006.)
- 18. Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed February 27, 2006.)
- 19. Grant of Incentive Stock Option to D. Ashley Lee, dated May 4, 2006. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2006.)
- 20. 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. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
- 21. \*Summary of Salaries for Named Executive Officers.
- 22. Form of Incentive Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.29 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 23. Form of Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.30(a) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 24. Form of Director Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.30(b) to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 25. Form of Non-Employee Directors Stock Option Agreement and Grant pursuant to the Amended and Restated Non-Employee Directors Stock Option Plan. (Incorporated herein by reference to Exhibit 10.31 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 26. Form of Incentive Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.32 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 27. Form of Non-Qualified Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.33 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 28. Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.34 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 29. Form of Non-Qualified Employee Stock Option Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.35 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)

- 30. Form of Grant of Non-Qualified Stock Option to Directors. (Incorporated herein by reference to Exhibit 10.36 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 31. Grant of Incentive Stock Option to Steven G. Anderson, dated May 4, 2006. (Incorporated herein by reference to Exhibit 10.37 to the Registrant s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.)
- 32. \*Form of 2011 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan.

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- 33. Form of Incentive Stock Option Grant Agreement under the 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
- 34. Form of Non-Qualified Stock Option Grant Agreement under 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
- 35. Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 1998 Long-Term Incentive Plan. (Incorporated herein by reference to Exhibit 10.5 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
- 36. \*Summary of Compensation Arrangements with Non-Employee Directors.
- 37. Form of Restricted Stock Award Agreement and Grant pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.6 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.)
- 38. CryoLife, Inc. 2008 Non-Employee Directors Omnibus Stock Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.)
- 39. Form of Non-Employee Director Stock Grant Agreement pursuant to the CryoLife, Inc. 2008 Non-Employee Directors Omnibus Stock Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2008.)
- 40. Form of Incentive Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed February 25, 2008.)
- 41. CryoLife, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2009.)
- 42. First Amendment to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, dated October 27, 2009. (Incorporated herein by reference to Exhibit 10.46 to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2009.)
- 43. \*Form of 2012 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan.
- 44. First Amendment, dated July 24, 2012, to the CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
- 45. Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan entered into with each Named Executive Officer. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.)
- 46. CryoLife, Inc. Executive Deferred Compensation Plan. (Incorporated herein by reference to Exhibit 10.52 to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2010.)

- 47. Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2002 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.)
- 48. Form of Restricted Stock Award Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.)

49.	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. (Incorporated herein by reference to Exhibit 10.3 to the Registrant s Quarterly Report on Form 10-for the quarter ended June 30, 2011.)
50.	*Release and Noncompete Agreement, by and between the Company and Gerald B. Seery.
51.	Second Amendment to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, dated May 24, 2011. (Incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011.)
52.	Form of Non-Qualified Employee Stock Option Agreement pursuant to the CryoLife, Inc. 2004 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant s Current Report on Form 8-K filed February 25, 2008.)
53.	Form of Indemnification Agreement entered into with each of the Registrant s directors, except Harvey Morgan, and its Executive Vice President, Chief Operating Officer and Chief Financial Officer. (Incorporated herein by reference to Exhibit 99.1 to the Form S-3/A filed by Registrant on January 4, 2005.)
54.	Form of Indemnification Agreement entered into with Harvey Morgan. (Incorporated herein by reference to Exhibit 99.2 to the Form S-3 filed by Registrant on November 21, 2008.)
55.	Form of Performance Share Agreement with Named Executive Officers. (Incorporated herein by reference to Exhibit 10.1 to the Registrant s Current Report on Form 8-K filed March 22, 2012.)
56.	First Amendment, dated July 23, 2012, to the 2012 Grant Agreement to Executive Officers pursuant to the CryoLife, Inc. 2007 Executive Incentive Plan. (Incorporated herein by reference to Exhibit 10.4 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
57.	Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 99.1 to the Registrant s Form S-8 filed June 22, 2012.)
58.	First Amendment, dated July 24, 2012, to the Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.5 to the Registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
* Fi	iled herewith.
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#### **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CRYOLIFE, INC.

February 15, 2013

By: /s/ Steven G. Anderson

Steven G. Anderson

President, Chief Executive Officer, and

Chairman of the Board of Directors

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Steven G. Anderson	President, Chief Executive Officer, and Chairman of the Board of Directors	February 15, 2013
Steven G. Anderson	(Principal Executive Officer)	
/s/ D. Ashley Lee	Executive Vice President,	February 15, 2013
D. Ashley Lee	Chief Operating Officer, and	
	Chief Financial Officer	
	(Principal Financial Officer)	
/s/ Amy D. Horton	Chief Accounting Officer	February 15, 2013
Amy D. Horton	(Principal Accounting Officer)	
/s/ Thomas F. Ackerman	Director	February 15, 2013
Thomas F. Ackerman		
/s/ James S. Benson	Director	February 15, 2013
James S. Benson		
/s/ Daniel J. Bevevino	Director	February 15, 2013
Daniel J. Bevevino		
/s/ RONALD C. ELKINS, M.D.	Director	February 15, 2013
Ronald C. Elkins, M.D.		
/s/ Ronald D. McCall	Director	February 15, 2013

## Ronald D. McCall

/s/ Harvey Morgan Director February 15, 2013

**Harvey Morgan** 

/s/ Jon W. Salveson Director February 15, 2013

Jon W. Salveson

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#### Management s Report on Internal Control over Financial Reporting under Sarbanes-Oxley Section 404.

The management of CryoLife, Inc. and subsidiaries ( CryoLife or we ) is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. CryoLife s internal control system was designed to provide reasonable assurance to CryoLife s management and Board of Directors regarding the preparation and fair presentation of published financial statements.

On May 16, 2012 we completed the acquisition of 100% of the outstanding equity of Hemosphere, Inc. (Hemosphere), a privately held company. As permitted by SEC guidance, we excluded Hemosphere from management s assessment of internal control over financial reporting as of December 31, 2012. Hemosphere s revenues constituted approximately 2% of CryoLife s total revenues for the year ended December 31, 2012. Hemosphere will be included in management s assessment of the internal control over financial reporting as of December 31, 2013.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

CryoLife management assessed the effectiveness of CryoLife s internal control over financial reporting as of December 31, 2012. In making this assessment, we used the criteria set forth in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment, we believe that, as of December 31, 2012, the company s internal control over financial reporting was effective based on those criteria.

CryoLife s independent registered public accounting firm, Deloitte and Touche, LLP, has issued an audit report on the effectiveness of CryoLife s internal control over financial reporting as of December 31, 2012.

CryoLife, Inc.

February 15, 2013

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

CryoLife, Inc.

Kennesaw, Georgia

We have audited the internal control over financial reporting of CryoLife, Inc. and subsidiaries (the Company) as of December 31, 2012, based on criteria established in *Internal Control* Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. As described in Management s Report on Internal Control over Financial Reporting under Sarbanes-Oxley Section 404, management excluded from its assessment the internal control over financial reporting at Hemosphere, which was acquired on May 16, 2012 and whose financial statements constitute 2% of total revenues of the consolidated financial statement amounts for the year ended December 31, 2012. Accordingly, our audit did not include the internal control over financial reporting at Hemosphere. The Company s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Report on Internal Control over Financial Reporting under Sarbanes-Oxley Section 404. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed by, or under the supervision of, the company s principal executive and principal financial officers, or persons performing similar functions, and effected by the company s board of directors, management, and other personnel 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. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2012 of the Company and our report dated February 15, 2013 expressed an unqualified opinion on those financial statements.

DELOITTE & TOUCHE LLP

Atlanta, Georgia

February 15, 2013

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

CryoLife, Inc.

Kennesaw, Georgia

We have audited the accompanying consolidated balance sheets of CryoLife, Inc. and subsidiaries (the Company) as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive income, shareholders equity, and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of CryoLife, Inc. and subsidiaries at December 31, 2012 and 2011, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company s internal control over financial reporting as of December 31, 2012 based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 15, 2013 expressed an unqualified opinion on the Company s internal control over financial reporting.

DELOITTE & TOUCHE LLP

Atlanta, Georgia

February 15, 2013

# CONSOLIDATED BALANCE SHEETS

(in thousands)

	Decem 2012	ber 31, 2011
ASSETS	2012	2011
Current assets:		
Cash and cash equivalents	\$ 13,009	\$ 21,705
Restricted securities	323	312
Receivables:		
Trade accounts, net	15,941	15,767
Other	579	1,738
Total receivables	16,520	17,505
Deferred preservation costs	27,954	29,039
Inventories	10,557	7,320
Deferred income taxes	6,100	5,247
Prepaid expenses and other	3,040	2,742
Total current assets	77,503	83,870
Property and equipment:		
Equipment and software	24,007	21,664
Furniture and fixtures	4,339	4,163
Leasehold improvements	29,440	29,348
Total property and equipment	57,786	55,175
Less accumulated depreciation and amortization	46,119	42,867
Net property and equipment	11,667	12,308
Other assets:		
Investment in equity securities	5,908	6,248
Restricted cash and securities	5,000	5,000
Goodwill	11,365	4,220
Patents, less accumulated amortization of \$2,530 in 2012 and \$2,871 in 2011	2,114	2,739
Trademarks and other intangibles, less accumulated amortization of \$2,886 in 2012 and \$1,300 in 2011	21,968	17,656
Notes receivable	2,000	
Deferred income taxes	16,564	13,265
Other	3,067	2,558
Total assets	\$ 157,156	\$ 147,864

See accompanying Notes to Consolidated Financial Statements.

# CONSOLIDATED BALANCE SHEETS

(in thousands, except per share data)

	Decem 2012	ber 31, 2011
LIABILITIES AND SHAREHOLDERS EQUITY	2012	2011
Current liabilities:		
Accounts payable	\$ 3,775	\$ 4,370
Accrued compensation	5,055	3,946
Accrued procurement fees	4,762	3,982
Accrued expenses	4,205	5,131
Deferred income	1,401	1,890
Other	2,232	2,138
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Total current liabilities	21,430	21,457
Contingent consideration liability	1,912	
Other	5,702	4,869
Total liabilities	29,044	26,326
Commitments and contingencies		
Shareholders equity:		
Preferred stock \$0.01 par value per share, 5,000 shares authorized, no shares issued:		
Series A Junior Participating Preferred Stock, 2,000 shares authorized, no shares issued		
Convertible preferred stock, 460 shares authorized, no shares issued		
Common stock \$0.01 par value per share, 75,000 shares authorized, 27,486 shares issued in 2012 and 30,067 shares		
issued in 2011	275	301
Additional paid-in capital	122,414	135,003
Retained earnings (deficit)	5,536	(1,037)
Accumulated other comprehensive loss	(39)	(6)
Treasury stock at cost, 14 shares in 2012 and 2,265 shares in 2011	(74)	(12,723)
Total shareholders equity	128,112	121,538
Total liabilities and shareholders equity	\$ 157,156	\$ 147,864

See accompanying Notes to Consolidated Financial Statements.

# CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME

(in thousands, except per share data)

Interest income (6) (14) (23) Gain on valuation of derivative (1,345)		Y	Year Ended December 31,			
Preservation services         \$ 63,603         \$ 5,9738         \$ 5,9738         \$ 5,0730         \$ 50,370         \$ 50,380         \$ 50,380         \$ 35,380         \$ 50,380         \$ 50,380         \$ 50,380         \$ 50,380         \$ 50,380         \$ 50,380         \$ 50,480         \$ 20,241         \$ 20,277         \$ 20,241         \$ 20,277         \$ 20,241		2012	2011	2010		
Products         67,496         59,387         56,370           Other         619         446         551           Total revenues         131,718         119,626         116,645           Cost of preservation services and products:         Treservation services         35,320         34,340         35,868           Products         311,880         9,442         12,409           Total cost of preservation services and products         46,700         43,782         48,277           Gross margin         85,018         75,844         68,368           Operating expenses:         66,149         57,302         49,064           Research and development         7,257         6,899         5,933           Acquired in-process research and development         7,2406         64,201         58,500           Operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         1.79         1.42         180           Interest sincome         (6)         (1)         12           Gain on valuation of derivative         (1)         (2)         14           Other than temporary investment impairment         340<						
Other         619         446         551           Total revenues         131,718         119,626         116,645           Cost of preservation services and products         ****         ****           Preservation services and products         35,320         34,340         35,868           Products         35,330         34,340         35,868           Total cost of preservation services and products         46,700         43,782         48,277           Gross margin         85,018         75,844         68,368           Operating expenses:         ***         ***         ***         49,064           Research and development         72,277         6,899         5,932           Acquired in-process research and development         72,276         6,899         5,932           Acquired in-process research and development         12,612         11,643         9,868           Interest expense         17,240         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest expense         179         142         180           Interest expense         179         142         <						
Cost of preservation services and products:         Incompted to the preservation services and products.         Incompted to the preservation services.         Incompted to the preservation s						
Preservation services and products:   Preservation services   35,320   34,340   35,868   Products   11,380   9,442   12,409   11,380   9,442   12,409   11,380   11,380   9,442   12,409   11,380   11,380   9,442   12,409   11,380   11,3	Other	619	9 44	6 551		
Preservation services         35,320         34,340         35,868           Products         11,380         9,442         12,409           Total cost of preservation services and products         46,700         43,782         48,277           Gross margin         85,018         75,844         68,368           Operating expenses:         ————————————————————————————————————	Total revenues	131,71	8 119,62	6 116,645		
Products         11,380         9,442         12,409           Total cost of preservation services and products         46,700         43,782         48,277           Gross margin         85,018         75,844         68,368           Operating expenses:         Second, administrative, and marketing         65,149         57,302         49,064           Research and development         7,257         6,899         5,923         Acquired in-process research and development         3,513           Total operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23           Gain on valuation of derivative         (6)         (14)         (23           Other than temporary investment impairment         340         3,638           Other expense, net         12,052         11,466         7,277           Income before income taxes         12,052         11,466         7,277           Income per common share:         8,029         9,026         9,014           Dividends declared per share         9,050         \$         \$	Cost of preservation services and products:					
Total cost of preservation services and products	Preservation services	35,320	34,34	0 35,868		
Gross margin         85,018         75,844         68,368           Operating expenses:         66,149         57,302         49,064           Research and development         7,257         6,899         59,203           Acquirred in-process research and development         72,406         64,201         58,500           Total operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23)           Gain on valuation of derivative         (6)         (14)         (23)           Other tan temporary investment impairment         340         3,638           Other expense, net         47         49         141           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$ 0,28         \$ 0,26         \$ 0,14           Dividends declared per share         \$ 0,29         \$ 0,26         \$ 0,14           Dividends declared per share         \$ 0,050         \$ \$           Wei	Products	11,380	9,44	2 12,409		
Operating expenses:           General, administrative, and marketing         65,149         57,302         49,064           Research and development         7,257         6,899         5,923           Acquired in-process research and development         72,406         64,201         58,500           Total operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23           Gain on valuation of derivative         (6)         (14)         (23           Other than temporary investment impairment         340         3,638           Other expense, net         47         49         141           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$ 7,946         \$ 7,371         3,944           Dividends declared per share         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.050         \$ \$           Weighted-average common shares         27,411	Total cost of preservation services and products	46,70	0 43,78	2 48,277		
General, administrative, and marketing         65,149         57,302         49,064           Research and development         7,257         6,899         5,923           Acquired in-process research and development         3,513         3,513           Total operating expenses         72,406         64,201         58,500           Operating income         179         142         180           Interest expense         179         142         180           Interest income         (6)         (14)         (23)           Gain on valuation of derivative         (1,345)         (1,345)           Other than temporary investment impairment         340         3,638           Other expense, net         12,052         11,466         7,277           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$7,946         \$7,371         \$3,944           Income per common share:         \$0.29         \$0.26         \$0.14           Diuted         \$0.28         \$0.26         \$0.14           Dividends declared per share         \$0.80         \$0.26         \$0.14           Diuted	Gross margin	85,01	8 75,84	4 68,368		
Research and development         7,257         6,899         5,923           Acquired in-process research and development         7,2406         64,201         58,500           Total operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23)           Gain on valuation of derivative         (6)         (14)         (23)           Other than temporary investment impairment         340         3,638           Other expense, net         12,052         11,466         7,277           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$ 7,946         \$ 7,371         \$ 3,944           Income per common share:         \$ 0.29         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26	Operating expenses:					
Research and development         7,257         6,899         5,923           Acquired in-process research and development         7,2406         64,201         58,500           Total operating expenses         72,406         64,201         58,500           Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23)           Gain on valuation of derivative         (6)         (14)         (23)           Other than temporary investment impairment         340         3,638           Other expense, net         12,052         11,466         7,277           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$ 7,946         \$ 7,371         \$ 3,944           Income per common share:         \$ 0.29         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.50         \$ 0.26		65,14	9 57,30	2 49,064		
Total operating expenses   72,406   64,201   58,500     Operating income   12,612   11,643   9,868     Interest expense   179   142   180     Interest income   (6   0.14)   (2.3     Gain on valuation of derivative   (1,345)     Other than temporary investment impairment   340   3,638     Other expense, net   47   49   141     Income before income taxes   12,052   11,466   7,277     Income before income taxes   4,106   4,095   3,333     Net income   7,946   7,371   3,944     Income per common share:         Basic   26,967   27,441   27,987     Diluted   27,411   27,759   28,274     Net income   27,946   7,371   3,944     Operating income   7,946   7,371   3,944     Operating income   2,050   2,244   27,987     Operating income   2,050   2,244   2,288     Operating income   2,050   2,244   2,288     Operating income   2,050   2,244   2,288     Operating income   2,050   2,244     Operating income	Research and development	7,25	7 6,89	9 5,923		
Operating income         12,612         11,643         9,868           Interest expense         179         142         180           Interest income         (6)         (14)         (23           Gain on valuation of derivative         (1,345)         (1,345)           Other than temporary investment impairment         340         3,638           Other expense, net         47         49         141           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         7,946         7,371         \$ 3,944           Income per common share:         8         0.29         \$ 0.26         \$ 0.14           Diluted         \$ 0.28         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.050         \$ \$           Weighted-average common shares outstanding:         26,967         27,441         27,987           Diluted         27,411         27,759         28,274           Net income         7,946         7,371         3,944	Acquired in-process research and development			3,513		
Interest expense	Total operating expenses	72,40	6 64,20	1 58,500		
Interest income         (6)         (14)         (23)           Gain on valuation of derivative         (1,345)	Operating income	12,61	2 11,64	3 9,868		
Gain on valuation of derivative       (1,345)         Other than temporary investment impairment       340       3,638         Other expense, net       47       49       141         Income before income taxes       12,052       11,466       7,277         Income tax expense       4,106       4,095       3,333         Net income       7,946       7,371       3,944         Income per common share:       Secondary of the common share:       Secondary of the common share:       Secondary of the common share:         Dividends declared per share       \$0.050       \$       \$         Weighted-average common shares outstanding:       Secondary of the common shares outstanding:       26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       7,946       7,371       3,944	Interest expense	17	9 14	2 180		
Other than temporary investment impairment         340         3,638           Other expense, net         47         49         141           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         7,946         7,371         3,944           Income per common share:         8         0.29         0.26         0.14           Diluted         \$ 0.28         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.050         \$ \$           Weighted-average common shares outstanding:         \$ 26,967         27,441         27,987           Diluted         27,411         27,759         28,274           Net income         7,946         7,371         3,944	Interest income	(1	6) (1-	4) (23)		
Other expense, net         47         49         141           Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$7,946         \$7,371         \$3,944           Income per common share:         \$0.29         \$0.26         \$0.14           Diluted         \$0.28         \$0.26         \$0.14           Dividends declared per share         \$0.050         \$         \$           Weighted-average common shares outstanding:         \$         <	Gain on valuation of derivative			(1,345)		
Income before income taxes         12,052         11,466         7,277           Income tax expense         4,106         4,095         3,333           Net income         \$ 7,946         \$ 7,371         \$ 3,944           Income per common share:         Basic         \$ 0.29         \$ 0.26         \$ 0.14           Diluted         \$ 0.28         \$ 0.26         \$ 0.14           Dividends declared per share         \$ 0.050         \$ \$           Weighted-average common shares outstanding:         \$ 26,967         27,441         27,987           Diluted         27,411         27,759         28,274           Net income         \$ 7,946         \$ 7,371         \$ 3,944	Other than temporary investment impairment	34	0	3,638		
Income tax expense       4,106       4,095       3,333         Net income       \$ 7,946       \$ 7,371       \$ 3,944         Income per common share:       Basic         Diluted       \$ 0.29       \$ 0.26       \$ 0.14         Dividends declared per share       \$ 0.050       \$ \$         Weighted-average common shares outstanding:       \$ 26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944	Other expense, net	4	7 4	9 141		
Net income       \$ 7,946       \$ 7,371       \$ 3,944         Income per common share:       Basic       \$ 0.29       \$ 0.26       \$ 0.14         Diluted       \$ 0.28       \$ 0.26       \$ 0.14         Dividends declared per share       \$ 0.050       \$         Weighted-average common shares outstanding:         Basic       26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944	Income before income taxes	12,05	2 11,46	6 7,277		
Income per common share:         Basic       \$ 0.29       \$ 0.26       \$ 0.14         Diluted       \$ 0.28       \$ 0.26       \$ 0.14         Dividends declared per share       \$ 0.050       \$       \$         Weighted-average common shares outstanding:       \$ 26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944	Income tax expense	4,10	6 4,09	5 3,333		
Basic       \$ 0.29       \$ 0.26       \$ 0.14         Diluted       \$ 0.28       \$ 0.26       \$ 0.14         Dividends declared per share       \$ 0.050       \$ \$         Weighted-average common shares outstanding:       \$ 26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944	Net income	\$ 7,94	6 \$ 7,37	1 \$ 3,944		
Diluted       \$ 0.28       \$ 0.26       \$ 0.14         Dividends declared per share       \$ 0.050       \$ \$         Weighted-average common shares outstanding:       \$ 26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944						
Dividends declared per share         \$ 0.050         \$         \$           Weighted-average common shares outstanding:         26,967         27,441         27,987           Diluted         27,411         27,759         28,274           Net income         7,946         7,371         3,944	Basic	\$ 0.29	9 \$ 0.2	6 \$ 0.14		
Weighted-average common shares outstanding:       Basic     26,967     27,441     27,987       Diluted     27,411     27,759     28,274       Net income     7,946     7,371     3,944	Diluted	\$ 0.2	8 \$ 0.2	6 \$ 0.14		
Weighted-average common shares outstanding:       Basic     26,967     27,441     27,987       Diluted     27,411     27,759     28,274       Net income     7,946     7,371     3,944	Dividends declared per share	\$ 0.05	0 \$	\$		
Basic       26,967       27,441       27,987         Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944		\$ 0.03	Ψ	Ψ		
Diluted       27,411       27,759       28,274         Net income       \$ 7,946       \$ 7,371       \$ 3,944		26.96	7 27.44	1 27 987		
Net income \$ 7,946 \$ 7,371 \$ 3,944						

Comprehensive income \$ 7,913 \$ 7,397 \$ 3,950

See accompanying Notes to Consolidated Financial Statements.

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# CONSOLIDATED STATEMENT OF CASH FLOWS

(in thousands)

	Year Ended December 31, 2012 2011 2010		
Net cash flows from operating activities:			
Net income	\$ 7,946	\$ 7,371	\$ 3,944
Adjustments to reconcile net income to net cash from operating activities:			
Depreciation and amortization	5,633	4,960	3,937
Non-cash compensation	3,162	2,790	2,621
Deferred income taxes	1,227	1,767	(1,509)
Excess tax shortfall (benefit) from stock based compensation	143	445	(1,275)
Write-down of deferred preservation costs and inventories	288	270	2,093
Write-down of intangible asset	327	255	921
Other than temporary investment impairment	340		3,638
Acquired in-process research and development expense			3,513
Gain on valuation of derivative			(1,345)
Other non-cash adjustments to income	213	67	185
Changes in operating assets and liabilities:			
Receivables	1,363	(2,230)	179
Deferred preservation costs and inventories	(1,598)	2,445	3,098
Prepaid expenses and other assets	(583)	(617)	(1,539)
Accounts payable, accrued expenses, and other liabilities	529	(772)	2,376
recounts payable, accrack expenses, and only mainties	32)	(7,72)	2,570
Net cash flows provided by operating activities	18,990	16,751	20,837
Net cash flows from investing activities:			
Acquisition of Hemosphere, net of cash acquired	(17,040)		
Acquisition of Cardiogenesis, net of cash acquired	( , , , , , ,	(21,062)	
Acquisition of PerClot intangible assets		(==,===)	(5,411)
Advances under notes receivable	(2,000)		(=,:==)
Capital expenditures	(3,070)	(2,538)	(2,121)
Purchases of restricted securities and investments	(2,0.0)	(3,569)	(2,705)
Other	(810)	(547)	(497)
Net cash flows used in investing activities	(22,920)	(27,716)	(10,734)
Net cash flows from financing activities:			
Cash dividends paid	(1,373)		
Proceeds from financing insurance policies			1,179
Principal payments on capital leases and short-term notes payable		(31)	(1,537)
Proceeds from exercise of stock options and issuance of common stock	330	694	239
Repurchases of common stock	(3,529)	(3,064)	(5,877)
Excess tax (shortfall) benefit from stock based compensation	(143)	(445)	1,275
Net cash flows used in financing activities	(4,715)	(2,846)	(4,721)
(Decrease) increase in cash and cash equivalents	(8,645)	(13,811)	5,382
Effect of evolungs gets changes on each	(51)	10	
Effect of exchange rate changes on cash	(51)	19	(6)
Cash and cash equivalents, beginning of year	21,705	35,497	30,121
Cash and cash equivalents, end of year	\$ 13,009	\$ 21,705	\$ 35,497

See accompanying Notes to Consolidated Financial Statements.

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# CONSOLIDATED STATEMENT OF SHAREHOLDERS EQUITY

(in thousands)

	Comi		Additional Paid In		Retained	Comp Ir	llated Other orehensive ncome		asury	Total Shareholders
	Stores		Capital	(Defic	cit) Earning	<b>s</b> (.	Loss)		ock	Equity
Balance at December 31,	Shares	Amount						Shares	Amount	
2009	29,475	\$ 295	\$ 128,427	\$	(12,352)	\$	(38)	(1,000)	\$ (5,886)	\$ 110,446
	,,	Ť	<b>,</b> ,		(,)		(==)	(-,)	+ (=,===)	,,
Net income					3,944					3,944
Other comprehensive income					-,,		6			6
•										
Comprehensive income										3,950
Equity compensation	219	2	2,918					(18)	(117)	2,803
Exercise of options	4		18							18
Employee stock purchase plan	43	1	220							221
Excess tax benefit			1,275							1,275
Repurchase of common stock								(1,031)	(5,760)	(5,760)
Stock issued for SMI	200	2	007							000
transaction	209	2	987							989
Dalamas at Dasamban 21										
Balance at December 31, 2010	29,950	\$ 300	\$ 133,845	\$	(8,408)	\$	(32)	(2,049)	\$ (11,763)	\$ 113,942
2010	29,930	\$ 300	ф 133,043	Φ	(0,400)	Ф	(32)	(2,049)	\$ (11,703)	<b>ў</b> 113,942
Net income					7,371					7,371
Other comprehensive income					7,371		26			26
Ciner comprehensive meanic							20			20
Comprehensive income										7,397
Equity commencation	(21)		937					360	2,077	3,014
Equity compensation Exercise of options	(31)	1	380					37	2,077	408
Employee stock purchase plan	64	1	286					31	21	286
Excess tax shortfall	0.1		(445)							(445)
Repurchase of common stock			(1.12)					(613)	(3,064)	(3,064)
•										
Balance at December 31,										
2011	30,067	\$ 301	\$ 135,003	\$	(1,037)	\$	(6)	(2,265)	\$ (12,723)	\$ 121,538
Net income					7,946					7,946
Other comprehensive loss							(33)			(33)
Comprehensive income										7,913
Cash dividends paid (\$0.050										
per share)					(1,373)					(1,373)
Equity compensation	26		2,344		,			229	1,032	3,376
Exercise of options	8		37							37
Employee stock purchase plan	72	1	292							293
Excess tax shortfall			(143)							(143)

Repurchase of common stock						(665)	(	(3,529)	(	(3,529)
Shares retired	(2,687)	(27)	(15,119)			2,687	1	5,146		
Balance at December 31,										
2012	27,486	\$ 275	\$ 122,414	\$ 5,536	\$ (39)	(14)	\$	(74)	\$ 12	28,112

See accompanying Notes to Consolidated Financial Statements.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 1. Summary of Significant Accounting Policies

#### Nature of Business

CryoLife, Inc. ( CryoLife, the Company, we, or us ) preserves and distributes human tissues for transplantation and develops, manufactures, and commercializes medical devices for cardiac and vascular applications. The cardiac and vascular human tissues distributed by CryoLife include the CryoValve® SG pulmonary heart valve ( CryoValve SGPV ) and the CryoPatchSG 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 ), BioFoanSurgical Matrix ( BioFoam ), and PerCloan absorbable powdered hemostat, which the Company distributes for Starch Medical, Inc. ( SMI ) in the European Community and other select international markets. CryoLife s subsidiary, Cardiogenesis Corporation ( Cardiogenesis ), specializes in the treatment of coronary artery disease using a laser console system and single use, fiber-optic handpieces to treat patients with severe angina. CryoLife and its subsidiary, Hemosphere, Inc. ( Hemosphere ), market the Hemodialysis Reliable Outflow Graft ( HeR® Graft ), which is a solution for end-stage renal disease ( ESRD ) in certain hemodialysis patients.

## **Principles of Consolidation**

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant inter-company accounts and transactions have been eliminated in consolidation.

## Translation of Foreign Currencies

The Company s revenues and expenses transacted in foreign currencies are translated as they occur at exchange rates in effect at the time of each transaction. Realized gains and losses on foreign currency transactions are recorded as a component of other (income) expense, net on the Company s Consolidated Statement of Operations and Comprehensive Income. Assets and liabilities of the Company denominated in foreign currencies are translated at the exchange rate in effect as of the balance sheet date and are recorded as a separate component of accumulated other comprehensive income (loss) in the shareholders equity section of the Company s Consolidated Balance Sheets.

## Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Estimates and assumptions are used when accounting for investments, allowance for doubtful accounts, deferred preservation costs, acquired assets or businesses, long-lived tangible and intangible assets, deferred income taxes, commitments and contingencies (including tissue processing and product liability claims, claims incurred but not reported, and amounts recoverable from insurance companies), stock based compensation, certain accrued liabilities (including accrued procurement fees, income taxes, and financial instruments), and other items as appropriate.

## Revenue Recognition

The Company recognizes revenues for preservation services when services are completed and tissue is shipped to the customer. Revenues for products, including: BioGlue, BioFoam, PerClot, HemoStase, revascularization technologies handpieces and accessories, HeRO Grafts, and other medical devices, are recognized at the time the product is shipped, at which time title passes to the customer, and there are no further performance obligations. Revenues from research grants are recognized in the period the associated costs are incurred. Revenues from upfront licensing agreements are recognized ratably over the period the Company expects to fulfill its obligations.

Revenues from the sale of laser consoles are considered multiple element arrangements, and such revenues are allocated to the elements of the sale. The Company allocates revenues based primarily on the revenue these individual elements would generate if sold separately. Revenues from domestic laser consoles sales are recognized when the laser is installed at a customer site and all materials for the laser console s use are delivered. Revenues from the sales of laser consoles to international distributors are evaluated individually based on the terms of the sale and collectability to determine when revenue has been earned and can be recognized.

#### Shipping and Handling Charges

Fees charged to customers for shipping and handling of tissues and products are included in preservation services revenues and product revenues, respectively. The costs for shipping and handling of tissues and products are included as a component of cost of preservation services and cost of products, respectively.

## **Advertising Costs**

The costs to develop, produce, and communicate the Company s advertising are expensed as incurred and are classified as general, administrative, and marketing expenses. The Company records the cost to print or copy certain sales materials as a prepaid expense and amortizes these costs as an advertising expense over the period they are expected to be used, typically six months to one year. The total amount of advertising expense included in the Company s Consolidated Statements of Operations and Comprehensive Income was \$1.5 million, \$948,000, and \$846,000 for the years ended December 31, 2012, 2011, and 2010, respectively.

## **Stock-Based Compensation**

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), performance stock units (PSU s), and options to purchase shares of CryoLife 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. The stock options, RSAs, RSUs, and PSU s granted by the Company typically vest over a one to three-year period. The stock options granted by the Company typically expire within seven years of the grant date.

The Company values its RSAs, RSUs, and PSUs based on the stock price on the date of grant. The Company expenses the related compensation cost of RSAs and RSUs using the straight-line method over the vesting period. The Company similarly expenses the related compensation cost of PSUs based on the number of shares expected to be issued if achievement of the performance component is probable. The amount of compensation costs expensed related to PSUs is adjusted as needed if the Company deems that achievement of the performance component is no longer probable, or if the Company s expectation of the number of shares to be issued changes. 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 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 fair value of stock options and ESPP options is determined on the grant date using assumptions for the expected term, volatility, dividend yield, and the risk-free interest rate. The expected term is primarily based on the contractual term of the option and Company data related to historic exercise and post-vesting forfeiture patterns, which is adjusted based on management s expectations of future results. The expected term is determined separately for options issued to the Company s directors and to employees. The Company s anticipated volatility level is primarily based on the historic volatility of the Company s common stock, adjusted to remove the effects of certain periods of unusual volatility not expected to recur, and adjusted based on management s expectations of future volatility, for the life of the option or option group. The Company s model includes a zero dividend yield assumption in all periods, as the Company has not issued stock options subsequent to its initiation of a quarterly dividend in the third quarter of 2012. The risk-free interest rate is based on recent U.S. Treasury note auction results with a similar life to that of the option. The Company s model does not include a discount for post-vesting restrictions, as the Company has not issued awards with such restrictions.

## Income Per Common Share

Income per common share is computed using the two class method which requires the Company to include unvested RSAs that contain non-forfeitable rights to dividends (whether paid or unpaid) as participating securities in the income per common share calculation.

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Under the two class method, net income is allocated to the weighted-average number of common shares outstanding during the period and the weighted-average participating securities outstanding during the period. The portion of net income that is allocated to the participating securities is excluded from basic and dilutive net income per common share. Diluted net income per share is computed using the weighted-average number of common shares outstanding plus the dilutive effects of outstanding stock options and awards and other dilutive instruments as appropriate.

#### Dividends

During 2012 the Company announced that its Board of Directors had approved the initiation of a quarterly cash dividend of \$0.025 per share of common stock outstanding. The Company currently anticipates paying the quarterly dividends in March, June, September, and December of each year from cash on hand and will record the dividend payment as a reduction to retained earnings on the Company s Consolidated Balance Sheet.

#### Financial Instruments

The Company s financial instruments include cash equivalents, marketable securities, restricted securities, accounts receivable, notes receivable, accounts payable, and contingent consideration. 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.

#### Fair Value Measurements

The Company records certain financial instruments at fair value, including: cash equivalents, certain marketable securities, certain restricted securities, contingent consideration, and derivative instruments. The Company may make an irrevocable election to measure other financial instruments at fair value on an instrument-by-instrument basis; although as of December 31, 2012 the Company has not chosen to make any such elections. Fair value financial instruments are recorded in accordance with the fair value measurement framework.

The Company also measures certain non-financial assets at fair value on a non-recurring basis. These non-recurring valuations include evaluating assets such as cost method investments, long-lived assets, and non-amortizing intangible assets for impairment; allocating value to assets in an acquired asset group; and applying accounting for business combinations. The Company uses the fair value measurement framework to value these assets and reports these fair values in the periods in which they are recorded or written down.

The fair value measurement framework includes a 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 requires judgment. Level 3 valuations often involve a higher degree of judgment and complexity. Level 3 valuations may require the use of various cost, market, or income valuation methodologies applied to unobservable management estimates and assumptions. Management s assumptions could vary depending on the asset or liability valued and the valuation method used. Such assumptions could include: estimates of prices, earnings, costs, actions of market participants, market factors, or the weighting of various valuation methods. The Company may also engage external advisors to assist it in determining fair value, as appropriate.

Although the Company believes that the recorded fair value of its financial instruments is appropriate, these fair values may not be indicative of net realizable value or reflective of future fair values.

## Cash and Cash Equivalents

Cash equivalents consist primarily of highly liquid investments with maturity dates of three months or less at the time of acquisition. The carrying value of cash equivalents approximates fair value.

The Company s cash equivalents include advance funding received under the U.S. Congress Defense Appropriations Conference Reports in 2005 through 2008, collectively the ( DOD Grants ), for the continued development of protein hydrogel technology. The advance funding is accounted for as deferred income on the Company s Consolidated Balance Sheets. Such revenue is recognized as expenses are incurred related to these grants. As of December 31, 2012 and 2011 \$668,000 and \$1.2 million, respectively, of cash equivalents were related to these grants. These funds must be used for the specified purposes or repaid to the U.S. Department of Defense ( DOD ). The Company currently plans to discontinue its BioFoam U.S. clinical trial and, after the cessation of the U.S. clinical trial, any remaining unspent funds will be returned to the DOD.

## Cash Flow Supplemental Disclosures

Supplemental disclosures of cash flow information for the years ended December 31 (in thousands):

	2012	2011	2010
Cash paid during the year for:			
Interest	\$ 22	\$ 89	\$ 143
Income taxes	1,263	3,564	2,502
Non-cash investing and financing activities			
Issuance of common stock for acquisition of PerClot intangible assets	\$	\$	\$ 989
Initial value of derivative issued			620

#### Marketable Securities and Other Investments

The Company typically invests its excess cash for short-term periods in large, well-capitalized financial institutions, and the Company s policy excludes investment in any securities rated less than investment-grade by national rating services, unless specifically approved by the Board of Directors. The Company sometimes makes longer term strategic investments in medical device companies, and these investments must be approved by the Board of Directors.

The Company determines the classification of its investments as trading, available-for-sale, or held-to-maturity at the time of purchase and reevaluates such designations quarterly. Trading securities are securities that are acquired principally for the purpose of generating a profit from short-term fluctuations in price. Debt securities are classified as held-to-maturity when the Company has the intent and ability to hold the securities to maturity. Any securities not designated as trading or held-to-maturity are considered available-for-sale.

The Company typically states its investments at their fair values; however, for held-to-maturity securities or when current fair value information is not readily available, investments are recorded using the cost method. The cost of securities sold is based on the specific identification method.

Under the fair value method, the Company adjusts each investment to its market price and records the unrealized gains or losses in other (income) expense, net for trading securities, or accumulated other comprehensive income (loss), for available-for-sale securities. Interest, dividends, realized gains and losses, and declines in value judged to be other than temporary are included in other (income) expense, net.

Under the cost method, each investment is recorded at cost. Subsequent dividends received are recognized as income, and the investment is reviewed for impairment if factors indicate that a decrease in the value of the investment has occurred.

#### Accounts Receivable and Allowance for Doubtful Accounts

The Company s accounts receivable are primarily from hospitals and distributors that either use or distribute the Company s tissues and products. The Company assesses the likelihood of collection based on a number of factors, including past transaction history with the customer and the credit worthiness of the customer, as well as increased risks related to international customers and large distributors. The accounts receivable balances were reported net of allowance for doubtful accounts of \$528,000 and \$412,000 as of December 31, 2012 and 2011, respectively.

#### **Deferred Preservation Costs**

By federal law, human tissues cannot be bought or sold, therefore, the tissues the Company preserves are not held as inventory. The costs the Company incurs to procure and process cardiac and vascular tissues are instead accumulated and deferred. Deferred preservation costs are stated at the lower of cost or market value on a first-in, first-out basis and are deferred until revenue is recognized. Upon shipment of the tissue to an implanting facility, revenue is recognized and the related deferred preservation costs are expensed as cost of preservation services. Cost of preservation services also includes, as applicable, lower of cost or market write-downs and impairments for tissues not deemed to be recoverable, and includes, as incurred, idle facility expense, excessive spoilage, extra freight, and rehandling costs.

The calculation of deferred preservation costs involves judgment and complexity and uses the same principles as inventory costing. Donated human tissue is procured from deceased human donors by tissue banks and organ procurement organizations (OTPOs), which consign the tissue to the Company for processing, preservation, and distribution. Deferred preservation costs consist primarily of the procurement fees charged by the OTPOs, direct labor and materials (including salary and fringe benefits, laboratory supplies and expenses, and freight-in charges), and indirect costs (including allocations of costs from support departments and facility allocations). Fixed production overhead costs are allocated based on actual tissue processing levels, to the extent that they are within the range of the facility s normal capacity.

Total deferred preservation costs are then allocated among tissues processed during the period based on cost drivers, such as the number of donors or number of tissues processed. At each balance sheet date, a portion of the deferred preservation costs relates to tissues currently in active processing or held in quarantine pending release to implantable status. The Company applies a yield estimate to all tissues in process and in quarantine to estimate the portion of tissues that will ultimately become implantable. Management estimates quarantine yields based on its experience and reevaluates these estimates periodically. Actual yields could differ significantly from the Company s estimates, which could result in a change in tissues available for shipment, and could increase or decrease the balance of deferred preservation costs. These changes could result in additional cost of preservation services expense or could increase per tissue preservation costs, which would impact gross margins on tissues preservation services in future periods.

The Company regularly evaluates its deferred preservation costs to determine if the costs are appropriately recorded at the lower of cost or market value. The Company also evaluates its deferred preservation costs for costs not deemed to be recoverable, including tissues not expected to ship prior to the expiration date of their packaging. Lower of cost or market value write-downs are recorded if the tissue processing costs incurred exceed the estimated market value of the tissue services, based on recent average service fees at the time of the evaluation. Impairment write-downs are recorded based on the book value of tissues deemed to be impaired. Actual results may differ from these estimates. Write-downs of deferred preservation costs are expensed as cost of preservation services, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if the Company s estimates change.

The Company recorded write-downs to its deferred preservation costs totaling \$195,000, \$270,000, and \$187,000 for the years ended December 31, 2012, 2011, and 2010, respectively.

### **Inventories**

Inventories are valued at the lower of cost or market on a first-in, first-out basis and the costs are recognized as cost of products upon shipment of the product. Inventories are comprised of BioGlue; BioFoam; PerClot; revascularization technologies lasers, handpieces, and accessories; HeRO Grafts; other medical devices; supplies; and raw materials. Cost of products also includes, as incurred, idle facility expense, excessive spoilage, extra freight, and rehandling costs.

Inventory costs for manufactured products consist primarily of direct labor and materials (including salary and fringe benefits, raw materials, and supplies) and indirect costs (including allocations of costs from departments that support manufacturing activities and facility allocations). The allocation of fixed production overhead costs is based on actual production levels, to the extent that they are within the range of the facility s normal capacity. Inventory costs for products purchased for resale or contract manufactured consist primarily of the purchase cost, freight-in charges, and indirect costs as appropriate.

The Company regularly evaluates its inventory to determine if the costs are appropriately recorded at the lower of cost or market value. The Company also evaluates its inventory for costs not deemed to be recoverable, including inventory not expected to ship prior to its expiration. Lower of cost or market value write-downs are recorded if the book value exceeds the estimated market value of the inventory, based on recent sales prices at the time of the evaluation. Impairment write-downs are recorded based on the book value of inventory deemed to be impaired. Actual results may differ from these estimates. Write-downs of inventory are expensed as cost of products, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if the Company s estimates change.

The Company recorded write-downs to its inventory totaling \$77,000, zero, and \$1.9 million for the years ended December 31, 2012, 2011, and 2010, respectively. The 2010 amount was primarily due to a \$1.6 million write-down of HemoStase inventory as discussed in Note 8.

#### **Property and Equipment**

Property and equipment is stated at cost. Depreciation is provided over the estimated useful lives of the assets, generally three to ten years, on a straight-line basis. Leasehold improvements are amortized on a straight-line basis over the remaining lease term at the time the assets are capitalized or the estimated useful lives of the assets, whichever is shorter.

Depreciation expense for the years ended December 31 is as follows (in thousands):

	2012	2011	2010
Depreciation expense	\$ 3,662	\$ 3,590	\$ 3,366

## Goodwill and Other Intangible Assets

The Company s intangible assets consist of goodwill, patents, trademarks, and other intangible assets, as discussed in Note 10. These assets include intangible assets from the acquisition of Hemosphere, as discussed in Note 4, assets acquired from Cardiogenesis, as discussed in Note 6, and PerClot assets acquired from SMI, as discussed in Note 7.

The Company amortizes its definite lived intangible assets over their expected useful lives using the straight-line method, which the Company believes approximates the period of economic benefits of the related assets. The Company s indefinite lived intangible assets do not amortize, but are instead subject to periodic impairment testing as discussed in Impairments of Long-Lived Assets and Non-Amortizing Intangible Assets below.

#### Impairments of Long-Lived Assets and Non-Amortizing Intangible Assets

The Company assesses the potential impairment of its long-lived assets to be held and used whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment review include the following:

Significant underperformance relative to expected historical or projected future operating results,

Significant negative industry or economic trends,

Significant decline in the Company s stock price for a sustained period, or

Significant decline in the Company s market capitalization relative to net book value.

If CryoLife determines that an impairment review is necessary, the Company will evaluate its assets or asset groups by comparing their carrying values to the sum of the undiscounted future cash flows expected to result from their use and eventual disposition. If the carrying values exceed the future cash flows, then the asset or asset group is considered impaired, and the Company will write down the value of the asset or asset group. For the years ended December 31, 2012, 2011, and 2010 the Company did not experience any factors that indicated that an impairment review of its long-lived assets was warranted.

CryoLife evaluates its goodwill and other non-amortizing intangible assets for impairment on an annual basis as of October 31 and, if necessary, during interim periods if factors indicate that an impairment review is warranted. As of October 31, 2012 the Company s non-amortizing intangible assets consisted of goodwill, acquired procurement contracts and agreements, trademarks, and other acquired technology. The Company performed an analysis of its non-amortizing intangible assets as of October 31, 2012 and 2011, and determined that the fair value of the assets and the fair value of the reporting unit exceeded their associated carrying values and were, therefore, not impaired. Management will continue to evaluate the recoverability of these non-amortizing intangible assets.

#### Accrued Procurement Fees

Donated tissue is procured from deceased human donors by OTPOs, which consign the tissue to the Company for processing, preservation, and distribution. The Company reimburses the OTPOs for their costs to recover the tissue and passes these costs on to the customer when the tissue is shipped and the performance of the service is complete. The Company accrues estimated procurement fees due to the OTPOs at the time tissues are received based on contractual agreements between the Company and the OTPOs.

#### Leases

The Company has operating lease obligations resulting from the lease of land and buildings that comprise the Company s corporate headquarters and manufacturing facilities, leases related to additional manufacturing, office, and warehouse space, leases on Company vehicles, and leases on a variety of office equipment as discussed in Note 13. Certain of the Company s leases contain escalation clauses, rent concessions, and renewal options for additional periods. Rent expense is computed on the straight-line method over the lease term.

#### Liability Claims

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

The Company engages external advisors to assist it in estimating its liability and any related recoverable under the Company s insurance policies as of each balance sheet date. The Company uses a frequency-severity approach to estimate its unreported tissue processing and product liability claims, whereby, projected losses are calculated by multiplying the estimated number of claims by the estimated average cost per claim. The estimated claims are determined based on the reported claim development method and the Bornhuetter-Ferguson method using a blend of the Company s historical claim experience and industry data. The estimated cost per claim is calculated using a lognormal claims model blending the Company s historical average cost per claim with industry claims data. The Company uses a number of assumptions in order to estimate the unreported loss liability including: the future claim reporting time lag, the frequency of reported claims, the average cost per claim, and the maximum liability per claim. The Company believes that the assumptions it uses provide a reasonable basis for its calculation. However, the accuracy of the estimates is limited by the general uncertainty that exists for any estimate of future activity due to uncertainties surrounding the assumptions used and due to Company specific conditions and the scarcity of industry data directly relevant to the Company s business activities. Due to these factors, actual results may differ significantly from the assumptions used and amounts accrued.

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

#### Legal Contingencies

The Company accrues losses from a legal contingency when the loss is both probable and reasonably estimable. The accuracy of the Company s estimates of losses for legal contingencies is limited by uncertainties surrounding litigation. Therefore, actual results may differ significantly from the amounts accrued, if any. The Company accrues for legal contingencies as a component of accrued expenses and other long-term liabilities. Gains from legal contingencies are recorded when the contingency is resolved.

#### Legal Fees

The Company expenses the costs of legal services, including legal services related to tissue processing and product liability claims and legal contingencies, as they are incurred. Reimbursement of legal fees by an insurance company or other third-party is recorded as a reduction to legal expense.

#### **Uncertain Tax Positions**

The Company periodically assesses its uncertain tax positions and recognizes tax benefits if they are more-likely-than-not to be upheld upon review by the appropriate taxing authority. The Company measures the tax benefit by determining the maximum amount that has a greater than 50 percent likelihood of ultimately being realized. The Company reverses previously accrued liabilities for uncertain tax positions when audits are concluded, statutes expire, administrative practices dictate that a liability is no longer warranted, or in other circumstances as deemed necessary. These assessments can be complex and the Company often obtains assistance from external advisors to make these assessments. The Company recognizes interest and penalties related to uncertain tax positions in other (income) expense, net on its Consolidated Statement of Operations and Comprehensive Income. See Note 11 for further discussion of the Company s liabilities for uncertain tax positions.

## **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 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 acquired net operating loss carryforwards will be limited in future periods due to a change in control of its subsidiaries Hemosphere and Cardiogenesis, as mandated by Section 382 of the Internal Revenue Code of 1986, as amended. The Company believes that its acquisition of Hemosphere constituted a change in control and that prior to the Company s acquisition, Hemosphere had experienced other equity ownership changes that should be considered a change in control. The Company also believes that its acquisition of Cardiogenesis constituted a change in control. The deferred tax assets recorded on the Company s Consolidated Balance Sheets do not include amounts that it expects will not be realizable due to these changes in control. A portion of the acquired net operating loss carryforwards is related to state income taxes and can only be used by the Company s subsidiaries Hemosphere and Cardiogenesis. Due to the history of losses of these subsidiaries when operated as stand-alone companies, 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.

Valuation of Acquired Assets or Businesses

As part of its corporate strategy, the Company is seeking to identify and evaluate acquisition opportunities of complementary product lines and companies. The Company evaluates and accounts for acquired patents, licenses, distribution rights, and other tangible or intangible assets as the purchase of an asset group, or as a business combination, as appropriate. The determination of whether the purchase of a group of assets should be accounted for as an asset group or as a business combination requires significant judgment based on the weight of available evidence.

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For the purchase of an asset group, the Company allocates the cost of the asset group, including transaction costs, to the individual assets purchased based on their relative estimated fair values. In-process research and development acquired as part of an asset group is expensed upon acquisition. The Company accounts for business combinations by allocating the purchase price to the assets and liabilities acquired at their estimated fair value. Transaction costs related to a business combination are expensed as incurred. In-process research and development acquired as part of a business combination is accounted for as an indefinite-lived intangible asset until the related research and development project gains regulatory approval or is discontinued.

The Company typically engages external advisors to assist it in determining the fair value of acquired asset groups or business combinations, using valuation methodologies such as: the excess earnings, the discounted cash flow, or the relief from royalty methods. The determination of fair value in accordance with the fair value measurement framework requires significant judgments and estimates, including, but not limited to: timing of product life cycles, estimates of future revenues, estimates of profitability for new or acquired products, cost estimates for new or changed manufacturing processes, estimates of the cost or timing of obtaining regulatory approvals, estimates of the success of competitive products, and discount rates. Management, in consultation with its advisor(s), makes these estimates based on its prior experiences and industry knowledge. Management believes that its estimates are reasonable, but actual results could differ significantly from the Company s estimates. A significant change in management s estimates used to value acquired asset groups or business combinations could result in future write-downs of tangible or intangible assets acquired by the Company and, therefore, could materially impact the Company s financial position and profitability. If the value of the liabilities assumed by the Company, including contingent liabilities, is determined to be significantly different from the amounts previously recorded in purchase accounting, the Company may need to record additional expenses or write-downs in future periods, which could materially impact the Company s financial position and profitability.

#### **Derivative Instruments**

The Company determines the fair value of its stand-alone and embedded derivative instruments at issuance and records any resulting asset or liability on the Company s Consolidated Balance Sheets. Changes in the fair value of the derivative instruments are recognized in the line item change in valuation of derivative on the Company s Consolidated Statements of Operations and Comprehensive Income.

#### New Accounting Pronouncements

In January 2012 the Company adopted Accounting Standards Update (ASU) 2011-04, Fair Value Measurement (Topic 820): *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*, which clarifies some existing concepts and expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. The adoption of ASU 2011-04 did not have a material effect on the Company s financial condition, profitability, and cash flows.

In January 2012 the Company adopted ASU 2011-05, Comprehensive Income (Topic 220): *Presentation of Comprehensive Income*, and ASU 2011-12 related to presentation of comprehensive income in interim and annual financial statements.

In January 2012 the Company adopted ASU 2011-08, Intangibles-Goodwill and Other (Topic 350): *Testing Goodwill for Impairment*, which gives entities testing goodwill for impairment the option of performing a qualitative assessment before calculating the fair value of a reporting unit in step 1 of the goodwill impairment test. The adoption of ASU 2011-08 did not have a material effect on the Company s financial condition, profitability, and cash flows.

#### 2. Financial Instruments

A summary of financial instruments measured at fair value as of December 31, 2012 and 2011 is as follows (in thousands):

December 31, 2012	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	\$	\$ 1,319	\$	\$ 1,319
Restricted securities:				
Money market funds		323		323
Total assets		1,642		1,642
Long-term liabilities:				
Contingent consideration			(1,912)	(1,912)
Total liabilities			(1,912)	(1,912)
Net assets (liabilities)	\$	\$ 1,642	\$ (1,912)	\$ (270)
December 31, 2011	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	\$	\$ 7,334	\$	\$ 7,334
Restricted securities:				
Money market funds		5,312		5,312
Total assets	\$	\$ 12,646	\$	\$ 12,646

The Company used prices quoted from its investment management companies to determine the Level 2 valuation of its investments in money market funds and securities. The Company recorded contingent consideration liability, classified as Level 3, as a result of its acquisition of Hemosphere in May 2012. Refer to Note 4 for further discussion of the Level 3 contingent consideration liability. Changes in fair value of Level 3 liabilities are listed below (in thousands):

	itingent ideration
Balance as of December 31, 2011	\$
Discounted value of contingent consideration at acquisition	1,840
Loss on remeasurement of contingent consideration	72
Balance as of December 31, 2012	\$ 1,912

## 3. Cash Equivalents and Restricted Cash and Securities

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

	Cost	Unrealized Holding	Estimated Market
December 31, 2012	Basis	Gains	Value
Cash equivalents:			
Money market funds	\$ 1,319	\$	\$ 1,319
Restricted cash and securities:			

Cash	5,000	5,000
Money market funds	323	323
December 31, 2011		
Cash equivalents:		
Money market funds	\$ 7,334 \$	\$ 7,334
Restricted securities:		
Money market funds	5,312	5,312

As of December 31, 2012 and 2011 \$323,000 and \$312,000, 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 December 31, 2012 \$5.0 million of the Company s cash was designated as restricted cash and securities due to a financial covenant requirement under the Company s credit agreement with General Electric Capital Corporation (GE Capital) as discussed in Note 12. As of December 31, 2011 \$5.0 million of the Company s money market funds were designated as restricted securities under the same covenant. This restriction lapses upon expiration of the credit agreement with GE Capital on October 28, 2014.

There were no gross realized gains or losses on cash equivalents or restricted securities for the years ended December 31, 2012, 2011, and 2010. At December 31, 2012 and 2011 \$5.0 million of the Company s restricted cash and securities had no maturity date. At December 31, 2012 and 2011 \$323,000 and \$312,000, respectively, of the Company s restricted securities had a maturity date within three months.

#### 4. Hemosphere Acquisition

#### Overview

On May 16, 2012 CryoLife completed its acquisition of 100% of the outstanding equity of Hemosphere, a privately held company, for \$17.0 million in cash, an additional \$3.2 million paid for cash acquired, and contingent consideration with a fair value estimated to be approximately \$1.8 million at acquisition, for a total purchase price of approximately \$22.0 million. CryoLife used cash on hand to fund the transaction and operates Hemosphere as a wholly owned subsidiary.

Hemosphere is the developer and marketer of the HeRO® Graft, a proprietary graft-based solution for ESRD hemodialysis patients with limited access options and central venous obstruction. CryoLife believes that the HeRO Graft will fit well into its product portfolio of medical devices for cardiac and vascular surgery and believes there is a significant opportunity for CryoLife s sales team to leverage their strong relationships with vascular surgeons to introduce and to expand utilization of the HeRO Graft in the U.S.

## **Contingent Consideration**

As of the acquisition date, CryoLife recorded a contingent consideration liability of \$1.8 million in long-term liabilities on its Consolidated Balance Sheet, representing the estimated fair value of the contingent consideration expected to be paid to the former shareholders of Hemosphere upon the achievement of certain revenue-based milestones. The acquisition agreement provides for a maximum of \$4.5 million in future consideration payments through December 2015 based on specified sales targets.

The fair value of the contingent consideration liability was estimated by discounting to present value the contingent payments expected to be made based on a probability-weighted scenario approach. The Company applied a risk-based estimate of the probability of achieving each scenario and then applied a cost of debt based discount rate of 8%. This fair value measurement is based on unobservable inputs, including management estimates and assumptions about future revenues, and is, therefore, classified as Level 3 within the fair value hierarchy presented in Note 2. The Company will remeasure this liability at each reporting date and will record changes in the fair value of the contingent consideration in other (income) expense on the Company s Consolidated Statement of Operations and Comprehensive Income. Increases or decreases in the fair value of the contingent consideration liability can result from changes in discount periods and rates, as well as changes in the timing and amount of Company revenue estimates.

The Company recorded a loss of \$72,000 for the year ended December 31, 2012 on the remeasurement of the contingent consideration liability. The balance of the contingent consideration liability was \$1.9 million as of December 31, 2012.

## Accounting for the Transaction

The Company has recorded an allocation of the \$22.0 million purchase price to Hemosphere stangible and identifiable intangible assets acquired and liabilities assumed based on their fair values as of May 16, 2012. Goodwill has been recorded based on the amount by which the purchase price exceeds the fair value of the net assets acquired and is not deductible for tax purposes. Goodwill from this transaction has been allocated to the Company s medical devices segment. The purchase price allocation as of December 31, 2012 is as follows (in thousands):

	Opening Balance Sheet	
Cash and cash equivalents	\$ 3,155	
Receivables	653	
Inventories	554	
Intangible assets	5,790	
Goodwill	7,145	
Deferred tax assets, net	5,379	
Other assets	331	
Liabilities assumed	(972)	
Total purchase price	\$ 22,035	

CryoLife incurred transaction and integration costs related to the acquisition of approximately \$2.4 million for the year ended December 31, 2012. These costs were expensed as incurred and were primarily recorded as general, administrative, and marketing expenses on the Company s Consolidated Statement of Operations and Comprehensive Income.

#### Pro Forma Results

Hemosphere s revenues of \$3.1 million from the date of acquisition through December 31, 2012 are included in the Consolidated Statement of Operations and Comprehensive Income. The Company s selected unaudited pro forma results of operations for the year ended December 31, 2012 and 2011, assuming the Hemosphere acquisition had occurred as of January 1, 2011 are presented for comparative purposes below. These amounts are based on available information of the results of operations of Hemosphere prior to the acquisition date and are not necessarily indicative of what the results of operations would have been had the acquisition been completed on January 1, 2011. This unaudited pro forma information does not project operating results post acquisition. This pro forma information is as follows (in thousands, except per share amounts):

		Twelve Months Ended December 31,		
	2012	2011		
Total revenues	\$ 133,722	\$ 124,877		
Net income	8,758	3,205		
Pro forma income per common share basic	\$ 0.32	\$ 0.11		
Pro forma income per common share diluted	\$ 0.31	\$ 0.11		

Pro forma results for the year ended December 31, 2011 include the Company s acquisition and integration related costs of approximately \$2.4 million, on a pre-tax basis, and other costs as appropriate. Pro forma disclosures were calculated using a tax rate of approximately 34%.

## 5. ValveXchange Investment

#### Investment

In July 2011 the Company purchased approximately 2.4 million shares of Series A Preferred Stock of ValveXchange, Inc. (ValveXchange) for approximately \$3.5 million. 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. The Company scarrying value of this investment includes the purchase price and certain transaction costs and CryoLife s investment represents an approximate 19% equity ownership in ValveXchange. As ValveXchange s stock is not actively traded on any public stock exchange and as the Company s investment is in preferred stock, the Company accounted for this investment using the cost method. The Company recorded its investment as a long-term asset, investment in equity securities, on the Company s Consolidated Balance Sheets.

During the quarter ended September 30, 2012 the Company reviewed available information to determine if factors indicated that the Company should evaluate its investment in ValveXchange preferred stock for impairment. The Company determined that available information indicated that the Company should evaluate its investment in ValveXchange preferred stock for impairment. The Company used available information to analyze its investment for impairment, and the information indicated that the fair value of the investment was less than the carrying value. Therefore, based on this analysis, the Company believed that its investment in ValveXchange was impaired in the third quarter of 2012, and the impairment was other than temporary. As a result, the Company recorded an other non-operating expense of \$340,000 to write down its investment in ValveXchange preferred stock.

During the quarter ended December 31, 2012 the Company determined that available information indicated that it should reevaluate its investment in ValveXchange preferred stock for impairment. Based on this updated analysis, the Company does not believe that its investment in ValveXchange was impaired further in the fourth quarter of 2012. If the Company subsequently determines that the value of its ValveXchange stock has been impaired, or if the Company decides to sell its ValveXchange Preferred Stock for less than the carrying value, the resulting impairment charge or realized loss on sale of the investment in ValveXchange could be material.

As of December 31, 2012 the carrying value of the Company s 2.4 million shares of ValveXchange preferred stock was \$3.2 million.

## Loan Agreement

In July 2011 the Company entered into an agreement with ValveXchange to make available up to \$2.0 million to ValveXchange in debt financing through a revolving credit facility ( ValveXchange Loan ). The ValveXchange Loan includes various affirmative and negative covenants, including financial covenant requirements, and expires on July 30, 2018, unless terminated earlier. Amounts loaned under the ValveXchange Loan earn interest at an 8% annual rate and are secured by substantially all of the tangible and intangible assets of ValveXchange. The Company incurred loan origination costs, net of fees charged to ValveXchange, of approximately \$117,000, which will be expensed on a straight-line basis over the life of the loan facility. The Company advanced \$1.0 million to ValveXchange under this loan in July 2012 and advanced the remaining \$1.0 million in October 2012. The \$2.0 million advance is recorded as long-term notes receivable on the Company s Consolidated Balance Sheet as of December 31, 2012. The Company may decide to allow ValveXchange to issue shares in payment of some or all of the outstanding debt balance in connection with a currently proposed financing or a future round of financing.

#### **Option Agreement**

Concurrently with the ValveXchange Loan described above, CryoLife entered into an option agreement with ValveXchange through which CryoLife obtained 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. The Company s rights may be modified or reduced in connection with a currently proposed financing or a future round of financing.

## 6. Cardiogenesis Acquisition

#### Overview

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 operates Cardiogenesis as a wholly owned subsidiary.

Cardiogenesis is a leading developer of surgical products used in the treatment of patients with severe angina resulting from diffuse coronary artery disease. Cardiogenesis markets its revascularization technologies, which include the Holmium: YAG laser console and single use, fiber-optic handpieces. These products are U.S. Food and Drug Administration (FDA) approved for performing a surgical procedure known as Transmyocardial Revascularization, used for treating patients with stable angina that is not responsive to conventional therapy.

### Accounting for the Transaction

The Company recorded an allocation of the \$21.7 million purchase price to Cardiogenesis tangible and identifiable intangible assets acquired and liabilities assumed based on their acquisition date fair values. The allocation of the purchase price to intangible assets was based on valuations performed to determine the fair value of such assets as of the acquisition date. Goodwill was recorded based on the amount by which the purchase price exceeded the fair value of the net assets acquired. The liability amounts recorded included the Company s estimate of contingent liabilities assumed. The purchase price allocation was finalized as of December 31, 2011.

The purchase price allocation as of December 31, 2011 was as follows (in thousands):

	pening nce Sheet
Cash and cash equivalents	\$ 650
Receivables	1,055
Inventory	852
Property and equipment	248
Intangible assets	11,900
Goodwill	4,220
Net deferred tax assets	5,002
Other assets	230
Liabilities assumed	(2,445)
Total purchase price	\$ 21,712

CryoLife incurred approximately \$3.0 million in transaction and integration costs related to the acquisition in the year ended December 31, 2011. The Company did not incur significant transaction or integration costs in 2012.

#### Pro Forma Results

Cardiogenesis revenues of \$5.7 million from the date of acquisition are included in the Company s Consolidated Statement of Operations and Comprehensive Income for the year ended December 31, 2011. Selected unaudited pro forma results of operations for the years ended December 31, 2011, 2010, and 2009 assuming the Cardiogenesis acquisition had occurred as of January 1, 2009, are presented for comparative purposes below (in thousands):

	T	Twelve Months Ended			
		December 31,			
	2011	2010	2009		
Total revenues	\$ 123,951	\$ 127,935	\$ 122,039		
Net income	7.962	3,176	5,610		

Pro forma results for the year ended December 31, 2009 include CryoLife s acquisition and integration related costs of approximately \$3.0 million, on a pre-tax basis, and other costs as appropriate. Pro forma disclosures were calculated using a tax rate of approximately 36%.

#### Legal Action

As previously discussed in CryoLife s Form 10-Q for the quarter ended June 30, 2012 and its prior filings, in 2008 CardioFocus, Inc. ( CardioFocus ) filed a complaint in the U.S. District Court for the District of Massachusetts ( Massachusetts Court ) against Cardiogenesis and a number of other companies. The litigation related to an alleged infringement by Cardiogenesis of two patents held by CardioFocus that have now expired.

On June 14, 2012 Cardiogenesis entered into a settlement agreement with respect to its litigation with CardioFocus. The settlement provides that each party release the other from all claims and liabilities related to the patents in question and that all claims and counterclaims in the litigation be withdrawn with prejudice. Pursuant to the terms of the settlement agreement, Cardiogenesis paid \$4.5 million in cash to CardioFocus. Cardiogenesis and CardioFocus agreed and acknowledged that each party would bear its own costs and expenses, including attorneys fees, incurred in or as a result of the litigation.

On June 14, 2012 the parties filed a stipulation of dismissal with prejudice in the Massachusetts Court.

## Accounting for the Settlement

As a result of the settlement described above, the Company recorded an additional loss of \$3.6 million in general, administrative, and marketing expenses on its Consolidated Statement of Operations and Comprehensive Income in the second quarter of 2012 for a total of \$4.1 million in

legal settlement expenses for the year ended December 31, 2012. The Company paid the \$4.5 million settlement payment to CardioFocus in July 2012 using cash on hand.

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#### 7. PerClot Technology Acquisition

#### 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 SMI of San Jose, California for PerClot, a polysaccharide hemostatic agent used in surgery. PerClot is an absorbable powdered hemostat that has Conformité Européene Mark product certification designation allowing commercial distribution into the European Community and other markets. It is indicated for use in surgical procedures, including cardiac, vascular, orthopaedic, 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 under the terms of the License Agreement, which extends for an indefinite period. Upon FDA approval, the Company may terminate such minimum purchase requirements. 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 granted CryoLife a three-year option to purchase certain remaining related technology from SMI, which the Company exercised in September 2011.

As part of the initial 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.

In the year ended December 31, 2011 CryoLife recorded research and development expenses of \$250,000 for the contractual milestone payment due to SMI upon filing of the investigational device exemption. The Company recorded the additional technology purchased in 2011 and 2012 as an intangible asset, which will be amortized over its useful life of 14 years. 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.

#### 8. 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. Medafor is a non-reporting company and its common stock is not actively traded on any public stock exchange, therefore, financial information for Medafor is not readily available. As their financial information is unavailable 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 a long-term asset, investment in equity securities, on the Company s 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 and determined that the carrying value was impaired. As a result CryoLife wrote down the value of this inventory in the third quarter of 2010. The amount of this write-down reflected management s estimate based on information available at that time. 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 quarter of 2011 was favorably impacted by approximately \$330,000. As of December 31, 2012 and 2011 the Company had zero in remaining value of HemoStase inventory on its Consolidated Balance Sheets.

## **Investment in Medafor Common Stock**

During the year ended December 31, 2012 the Company reviewed available information and determined that no factors were present indicating that the Company should evaluate the carrying value of its investment in Medafor common stock for impairment. The carrying value of the Company s 2.4 million shares of Medafor common stock was approximately \$2.6 million as of both December 31, 2012 and 2011.

The Company will continue to evaluate the carrying value of this investment if factors become known that indicate the Company should evaluate its investment in Medafor common stock for impairment. If the Company subsequently determines that the value of its Medafor common stock has been impaired, or if the Company decides to sell its Medafor common stock for less than the carrying value, the resulting impairment charge or realized loss on sale of the investment in Medafor could be material. If the Company subsequently sells its Medafor common stock for higher than the carrying value, the resulting gain on the 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 ), the last of which will expire on June 7, 2013, CryoLife is required to make a future per share payment (the Purchase Price Make-Whole Payment ) to such sellers. 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 Consolidated Balance Sheets. 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 Consolidated Statements of Operations and Comprehensive Income.

During 2010 the Company s estimate of the likelihood of a Triggering Event decreased significantly, as the Company withdrew its offer to purchase Medafor. As of December 31, 2012 and 2011 the Company believed that the likelihood of a Triggering Event was remote.

The value of the Medafor Derivative was zero as of both December 31, 2012 and 2011. The change in the value of the derivative recorded on the Consolidated Statements of Operations and Comprehensive Income was zero for the years ended December 31, 2012 and 2011 and a gain of \$1.3 million for the year ended December 31, 2010.

## Legal Action

As previously discussed in CryoLife s Form 10-Q for the quarter ended June 30, 2012 and its prior filings, 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 in the same case. The litigation related to an exclusive distribution agreement that the parties entered into in April 2008.

On June 8, 2012 the parties agreed to a settlement of their litigation and entered into a further settlement agreement on June 25, 2012. Per the settlement, Medafor paid \$3.5 million in cash to CryoLife in the third quarter of 2012. Pursuant to the terms of the settlement, all claims and counterclaims in the litigation were dismissed with prejudice, including Medafor s counterclaim for payment of approximately \$1.2 million for product purchased by CryoLife, which the amount had previously been recorded as a payable on CryoLife s balance sheet. Each party also released the other from all claims and liabilities, except with respect to possible claims that Medafor may have against CryoLife regarding certain patent-related rights, which were not counterclaims filed by Medafor. CryoLife and Medafor agreed and acknowledged that each party would bear its own costs and expenses, including attorneys fees, incurred in or as a result of the litigation.

On June 29, 2012 the parties jointly filed stipulated dismissals with prejudice with the Georgia Court.

CryoLife received a letter from Medafor in September 2012 stating that PerClot, when introduced in the U.S., will, when used in accordance with the method published in CryoLife s literature and with the instructions for use, infringe Medafor s U.S. patent.

#### Accounting for the Settlement

As a result of the settlement described above, CryoLife recorded a gain of \$4.7 million as a reduction in general, administrative, and marketing expenses on its Consolidated Statement of Operations and Comprehensive Income in the second quarter of 2012 and recorded a reduction in accounts payable of \$1.2 million to write off a payable for previous inventory purchases, which was discharged pursuant to the settlement agreement.

#### 9. Deferred Preservation Costs and Inventories

Deferred preservation costs at December 31, 2012 and 2011 are comprised of the following (in thousands):

	2012	2011
Cardiac tissues	\$ 11,950	\$ 12,656
Vascular tissues	16,004	16,383
Total deferred preservation costs	\$ 27,954	\$ 29,039

Inventories at December 31, 2012 and 2011 are comprised of the following (in thousands):

	2012	2011
Raw materials and supplies	\$ 5,836	\$ 4,759
Work-in-process	830	218
Finished goods	3,891	2,343
Total inventories	\$ 10,557	\$ 7,320

## 10. Goodwill and Other Intangible Assets

## Indefinite Lived Intangible Assets

As of December 31, 2012 and 2011 the carrying values of the Company s indefinite lived intangible assets are as follows (in thousands):

	2012	2011
Goodwill	\$ 11,365	\$ 4,220
Procurement contracts and agreements	2,013	2,013
Trademarks	870	847
Other	250	250

Based on its prior 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. The Company believes that its trademarks and other acquired technology have an indefinite useful life as the Company currently anticipates that these trademarks and other acquired technology will contribute cash flows to the Company indefinitely.

A roll-forward of the goodwill balances for the Company s medical devices reportable segment is as follows (in thousands):

	2012	2011
Balance as of January 1,	\$ 4,220	\$
Goodwill from Hemosphere acquisition	7,145	
Goodwill from Cardiogenesis acquisition		4,220
Balance as of December 31,	\$ 11,365	\$ 4,220

## Definite Lived Intangible Assets

As of December 31, 2012 and 2011 gross carrying values, accumulated amortization, and approximate amortization periods of the Company s definite lived intangible assets are as follows (dollars in thousands):

December 31, 2012	Gross Carrying Value	Accumulated Amortization	Amortization Period
Acquired technology	\$ 14,020	\$ 1,538	11-16 Years
Patents	4,644	2,530	17 Years
Distribution and manufacturing rights and know-how	3,559	473	15 Years
Customer lists and relationships	3,370	330	13-17 Years
Non-compete agreement	381	229	10 Years
Other	198	123	1-3 Years
	~		
	Gross	Accumulated	Amontization
December 31, 2011	Gross Carrying Value	Accumulated Amortization	Amortization Period
December 31, 2011 Acquired technology	Carrying		
·	Carrying Value	Amortization	Period
Acquired technology	Carrying Value \$ 9,230	Amortization \$ 524	Period 11 Years
Acquired technology Patents	Carrying Value \$ 9,230 5,610	<b>Amortization</b> \$ 524 2,871	Period 11 Years 17 Years
Acquired technology Patents Distribution and manufacturing rights and know-how	Carrying Value \$ 9,230 5,610 3,559	* 524 2,871 231	Period 11 Years 17 Years 15 Years

## Amortization Expense

Amortization expense recorded in general, administrative, and marketing expenses on the Company s Consolidated Statements of Operations and Comprehensive Income for the years ended December 31 is as follows (in thousands):

	2012	2011	2010
Amortization expense	\$ 1,971	\$ 1,370	\$ 571

As of December 31, 2012 scheduled amortization of intangible assets for the next five years is as follows (in thousands):

	2013	2014	2015	2016	2017	Total
Amortization expense	\$ 2,013	\$ 1,960	\$ 1,915	\$ 1,905	\$ 1,856	\$ 9,649

#### 11. Income Taxes

#### Income Tax Expense

Income before income taxes consists of the following (in thousands):

	2012	2011	2010
Domestic	\$ 11,686	\$ 11,238	\$ 6,936
Foreign	366	228	341
Income before income taxes	\$ 12,052	\$ 11,466	\$ 7,277

Income tax expense consists of the following (in thousands):

	2012	2011	2010
Current:			
Federal	\$ 2,778	\$ 2,634	\$ 4,415
State	180	103	255
Foreign	98	84	46
	3,056	2,821	4,716
Deferred:			
Federal	1,274	1,087	(1,560)
State	(227)	183	158
Foreign	3	4	19
	1,050	1,274	(1,383)
Income tax expense	\$ 4,106	\$ 4,095	\$ 3,333

The Company s income tax expense in 2012, 2011, and 2010 included the Company s federal, state, and foreign tax obligations. The Company s effective income tax rate was approximately 34%, 36%, and 46% for the years ended December 31, 2012, 2011, and 2010, respectively. The Company s income tax rate for the year ended December 31, 2012 was favorably impacted by \$427,000 in adjustments to valuation allowances on certain of the Company s state net operating loss carryforwards, based on revised estimates of utilization of these carryforwards. The Company s income tax rates were also impacted by the unfavorable tax treatment of certain acquisition related expenses due to the acquisition of Hemosphere and by the research and development tax credit, which had not been enacted for the 2012 tax year. The Company s effective income tax rate for the year ended December 31, 2011 was impacted by the discrete and favorable effect of deductions taken on the Company s 2010 federal tax returns, which were filed in the third quarter of 2011. This favorable effect was largely offset by the unfavorable tax treatment, recognized in the second quarter of 2011, of certain acquisition related expenses, which the Company incurred related to its acquisition of Cardiogenesis.

The income tax expense amounts differ from the amounts computed by applying the U.S. federal statutory income tax rate of 35% to pretax income as a result of the following (in thousands):

	2012	2011	2010
Tax expense at statutory rate	\$ 4,220	\$ 4,013	\$ 2,547
Increase (reduction) in income taxes resulting from:			
Non-deductible transaction costs	151	540	
State income taxes, net of federal benefit	296	150	347
State valuation allowance adjustment	(427)	100	
Equity compensation	32	149	334
Non-deductible entertainment expenses	188	142	129
Foreign income taxes	(199)	3	28
Domestic production activities deduction	(407)	(727)	
Research and development credit		(314)	(187)
Other	252	39	135
	\$ 4,106	\$ 4,095	\$ 3,333

#### **Deferred Taxes**

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, in prior periods, due to operating losses. The Company acquired significant deferred tax assets, primarily net operating loss carryforwards, from its acquisitions of Hemosphere and Cardiogenesis in the second quarters of 2012 and 2011, respectively. See Note 4 and Note 6 for a further discussion of the Company s acquisitions of Hemosphere and Cardiogenesis, respectively.

The tax effects of temporary differences which give rise to deferred tax assets and liabilities at December 31 are as follows (in thousands):

	2012	2011
Deferred tax assets:		
Allowance for bad debts	\$ 194	\$ 151
Deferred preservation costs and inventory reserves	392	699
Investment in equity securities	925	802
Property	2,644	2,380
Intangible assets	502	
Accrued expenses	3,782	2,859
Loss carryforwards	17,539	11,842
Credit carryforwards	2,166	4,124
Stock compensation	2,319	1,636
Other	969	717
Less valuation allowance	(2,292)	(2,395)
Total deferred tax assets	29,140	22,815
Deferred tax liabilities:		
Prepaid items	(314)	(348)
Intangible assets	(5,814)	(3,935)
Other	(348)	(20)
Total deferred tax liabilities	(6,476)	(4,303)
Total net deferred tax assets	\$ 22,664	\$ 18,512

As of December 31, 2012 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 \$22.7 million. As of December 31, 2011 the Company maintained a total of \$2.4 million in valuation allowances against deferred tax assets, related to state net operating loss carryforwards, and a net deferred tax asset of \$18.5 million.

As of December 31, 2012 the Company had approximately \$3.4 million of tax-effected state net operating loss carryforwards that began to expire in 2012, \$61,000 in research and development tax credit carryforwards that will begin to expire in 2022, and \$167,000 in credits from the state of Texas that will fully expire by 2027. Additionally, at December 31, 2012 the Company had \$1.9 million in alternative minimum tax credit carryforwards that do not expire.

#### **Uncertain Tax Positions**

A reconciliation of the beginning and ending balances of the Company s uncertain tax position liability, excluding interest and penalties, is as follows (in thousands):

	2012	2011	2010
Beginning balance	\$ 1,788	\$ 1,822	\$ 1,742
Decreases related to prior year tax positions	(15)	(112)	(19)
Increases related to current year tax positions	231	78	99
Ending balance	\$ 2,004	\$ 1,788	\$ 1,822

A reconciliation of the beginning and ending balances of the Company s liability for interest and penalties on uncertain tax positions is as follows (in thousands):

	2012	2011	2010
Beginning balance	\$418	\$ 391	\$ 342
Accrual of interest and penalties	79	65	49
Decreases related to prior year tax positions	(8)	(38)	
Ending balance	\$ 489	\$418	\$ 391

As of December 31, 2012 the Company s total uncertain tax liability, including interest and penalties of \$2.5 million, was recorded as a reduction to deferred tax assets of \$103,000 and a non-current liability of \$2.4 million on the Company s Consolidated Balance Sheet. As of December 31, 2011 the Company s total uncertain tax liability, including interest and penalties of \$2.2 million, was recorded as a reduction to deferred tax assets of \$309,000 and a non-current liability of \$1.9 million on the Company s Consolidated Balance Sheet.

#### Other

The Company s tax years 2009 through 2012 generally remain open to examination by the major taxing jurisdictions to which the Company is subject. However, certain returns from years prior to 2009, in which net operating losses and tax credits have arisen, are still open for examination by the tax authorities.

#### 12. Debt

#### **GE Credit Agreement**

On October 28, 2011 CryoLife amended and restated its March 26, 2008 credit agreement with GE Capital (the GE Credit Agreement ) which provides revolving credit for working capital, acquisitions, and other corporate purposes. The amendment increased the borrowing capacity under the GE Credit Agreement from \$15.0 million to \$20.0 million (including a letter of credit subfacility) and extended the expiration from October 31, 2011 to October 28, 2014. The initial commitment may continue to be reduced or increased from time to time pursuant to the terms of the GE Credit Agreement. In September 2012 the Company amended the agreement to allow the payment of cash dividends up to a maximum of \$3.0 million per year, subject to satisfaction of specified conditions.

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. 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 cash and securities as of December 31, 2012 and 2011 on the Company s 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. Commitment fees are paid based on the unused portion of the facility. As of December 31, 2012 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 as determined by GE Capital at either LIBOR, with a minimum rate of 4.25%, or GE Capital s base rate, with a minimum rate of 3.25% each, plus the applicable margin.

As of December 31, 2012 the outstanding balance of the GE Credit Agreement was zero, the aggregate interest rate was 6.50%, and the remaining availability was \$20.0 million. As of December 31, 2011 the outstanding balance of the GE Credit Agreement was zero, the aggregate interest rate was 6.50%, and the remaining availability was \$19.8 million.

#### Other

In March 2010 the Company entered into an agreement to finance approximately \$1.2 million in insurance premiums at a 2.707% annual interest rate, which was payable in equal monthly payments over a nine-month period. As of December 31, 2012 and 2011 the aggregate outstanding balances under this agreement were zero.

Total interest expense was \$179,000, \$142,000, and \$180,000 in 2012, 2011, and 2010, respectively, which included interest on debt, uncertain tax positions, and capital leases.

#### 13. Commitments and Contingencies

#### Leases

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 manufacturing, office, and warehouse space, leases on Company vehicles, and leases on a variety of office equipment. In prior years, the Company s capital lease obligations resulted from the financing of certain of the Company s equipment. As of December 31, 2012 and 2011 the remaining obligations under the Company s capital leases was zero.

The term of the lease of the land and buildings that comprise the Company s corporate headquarters was originally 15 years. During the second quarter of 2010 the Company signed an amendment to the lease on its corporate headquarters extending the lease until 2022. The Company has a deferred rent accrual of \$1.6 million as of December 31, 2012 and 2011 recorded in other long-term liabilities on the Company s Consolidated Balance Sheets, primarily related to the lease on its corporate headquarters. Total rental expense for operating leases was \$2.7 million in both 2012 and 2011 and \$2.6 million in 2010.

Future minimum operating lease payments under non-cancelable leases as of December 31, 2012 are as follows (in thousands):

Op.	perating
I	Leases
2013 \$	2,674
2014	2,902
2015	2,868
2016	2,852
2017	2,907
Thereafter	12,423
Total minimum lease payments \$	26,626

#### Liability Claims

At December 31, 2012 and 2011 the short-term and long-term portions of the unreported loss liability and any related recoverable insurance amounts are as follows (in thousands):

	2012	2011
Short-term liability	\$ 895	\$ 1,030
Long-term liability	755	960
Total liability	1,650	1,990
Short-term recoverable	320	350
Long-term recoverable	300	350
Total recoverable	620	700
Total net unreported loss liability	\$ 1,030	\$ 1,290

Further analysis indicated that the liability as of December 31, 2012 could be estimated to be as high as \$3.1 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, such as voluntary retirement. As of both December 31, 2012 and December 31, 2011 the Company has recorded \$2.1 million in accrued expenses and other current liabilities on the Consolidated Balance Sheets representing benefits payable upon the CEO s voluntary retirement, for which he is currently eligible. The CEO s prior employment agreement terminated on December 31, 2012. A new agreement, which took effect on January 1, 2013 and terminates on December 31, 2015, was signed in October 2012. Termination payment amounts to the CEO under the new agreement are not significantly different from those in the prior agreement. However, the new agreement includes an additional \$100,000 payment to the CEO that was conditional on his remaining employed by CryoLife on January 1, 2013. This payment was made in January 2013.

#### 14. Shareholders Equity

#### Common Stock Repurchase

On June 1, 2010 the Company announced that its Board of Directors had authorized the purchase of up to \$15.0 million of its common stock over the course of the following two years. From June 1, 2010 to September 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. On November 1, 2011 the Company announced that its Board of Directors had authorized the Company s purchase of \$15.0 million of its common stock through December 31, 2012, which included approximately \$7.7 million remaining from the June 1, 2010 repurchase program and an additional \$7.3 million, for a total authorization of \$22.3 million. This program expired on December 31, 2012. In February 2013 the Company s Board of Directors authorized the purchase of up to \$15.0 million of its common stock through October 31, 2014.

For the year ended December 31, 2012 the Company purchased approximately 639,000 shares of its common stock for an aggregate purchase price of \$3.3 million. For the year ended December 31, 2011 the Company purchased approximately 593,000 shares of its common stock for an aggregate purchase price of \$2.9 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 Consolidated Balance Sheets.

#### Treasury Stock

On August 7, 2012 the Company retired 2.7 million shares of treasury stock with an aggregate value of \$15.1 million. The retirement was recorded as a reduction of \$15.1 million in treasury stock, \$27,000 in common stock, and approximately \$15.1 million in additional paid in capital. These shares remain available for issuance as authorized unissued shares.

#### Cash Dividends

On August 21, 2012 the Company announced that its Board of Directors had approved the initiation of a quarterly cash dividend of \$0.025 per share of common stock outstanding. In 2012 cash dividends of \$0.025 per share were paid on September 21, 2012 to all common stockholders of record as of September 14, 2012 and December 21, 2012 to all common stockholders of record as of December 14, 2012. The dividend payments of \$1.4 million were paid from cash on hand and were recorded as a reduction to retained earnings on the Company s Consolidated Balance Sheet. In February 2013 the Company announced a quarterly cash dividend for the first quarter of 2013 of \$0.025 per share, which will be paid on March 21, 2013 to all common stockholders of record as of March 14, 2013. The Company currently anticipates paying the quarterly dividends in March, June, September, and December of each year, however, this may change.

#### Shareholder Rights Plan

The Company has a shareholder rights agreement entered into in 1995 and amended in 2005. Under the rights agreement, each share of the Company's common stock outstanding on December 11, 1995 is entitled to one Right, as defined in, and subject to, the terms of the rights agreement. A Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock (Series A Stock) of the Company at \$33.33 per one one-hundredth of a Preferred Share, subject to adjustment. Additionally, each common share that has or shall become outstanding after December 11, 1995 is also entitled to a Right, subject to the terms and conditions of the rights agreement. The Rights, which expire on November 23, 2015, may be exercised only if certain conditions are met, such as the acquisition of 15% or more of the Company's common stock by a person or affiliated group (together with its affiliates, associates, and transferees, an Acquiring Person). Rights beneficially owned by an Acquiring Person become void from and after the time such persons become Acquiring Persons, and Acquiring Persons have no rights whatsoever under the rights agreement.

Each share of Series A Stock purchasable upon exercise of a Right will be entitled, when, as, and if declared, to a minimum preferential quarterly dividend payment of \$1.00 per share but will be entitled to an aggregate dividend of 100 times the dividend declared per share of common stock. In the event of liquidation, each share of the Series A Stock will be entitled to a minimum preferential liquidation payment of 100 times the payment made per share of common stock. Finally, in the event of any merger, consolidation, or other transaction in which shares of common stock are exchanged, each share of Series A Stock will be entitled to receive 100 times the amount received per share of common stock. These rights are protected by customary antidilution provisions.

In the event the Rights become exercisable, each Right will enable the owner, other than Acquiring Persons, to purchase shares of the Company s Series A Stock as described above. Alternatively, if the Rights become exercisable, the holder of a Right may elect to receive, upon exercise of the Right and in lieu of receiving Series A Stock, that number of shares of common stock of the Company having an exercise value of two times the exercise price of the Right. In the event that, after a person or group has become an Acquiring Person, the Company is acquired in a merger or other business combination transaction or 50% or more of its consolidated assets or earning power are sold, proper provision will be made so that each holder of a Right will thereafter have the right to receive, upon the exercise of a Right, and in lieu of Series A Stock of the Company, that number of shares of common stock of the person with whom the Company has engaged in the foregoing transaction (or its parent) that at the time of such transaction will have a market value of two times the exercise price of the Right. In addition, after any person or group becomes an Acquiring Person and prior to the acquisition by the person or group of 50% or more of the outstanding common stock, the Board of Directors may elect to exchange all outstanding Rights at an exchange ratio of one share of common stock (or fractional share of Series A Stock or other preferred shares) per Right (subject to adjustment).

#### 15. Employee Benefit Plans

#### 401(k) Plan

The Company has a 401(k) savings plan (the Plan ) providing retirement benefits to all employees who have completed at least three months of service. The Company made matching contributions of 40% of each participant s contribution for up to 5% of each participant s salary in 2012. In 2011 and 2010 the Company made matching contributions to the plan of 20% of each participant s contribution for up to 5% of each participant s salary. Total Company contributions approximated \$500,000 for the year ended December 31, 2012 and \$204,000 for both years ended December 31, 2011 and 2010. Additionally, the Company may make discretionary contributions to the Plan that are allocated to each participant s account. No discretionary contributions were made in any of the past three years.

#### **Deferred Compensation Plan**

On January 1, 2011 CryoLife initiated a nonqualified Deferred Compensation Plan ( Deferred Plan ). The Deferred Plan allows certain employees of CryoLife to defer receipt of a portion of their salary and cash bonus. The Deferred Plan provides for tax-deferred growth of deferred compensation. Pursuant to the terms of the Deferred Plan, CryoLife agrees to return the deferred amounts plus gains and losses, based on investment fund options chosen by each respective participant, to the plan participants upon distribution. All deferred amounts and deemed earnings thereon are vested at all times. The Company has no current plans to match any contributions. Amounts owed to plan participants are unsecured obligations of CryoLife. CryoLife has established a rabbi trust in which it will make contributions to fund its obligations under the Deferred Plan. Pursuant to the terms of the trust, CryoLife will be required to make contributions each year to fully match its obligations under the Deferred Plan. The trust s funds are invested in Company Owned Life Insurance ( COLI ) and the Company plans to hold the policies until the death of the insured.

The Company s deferred compensation liabilities are recorded as a component of other current liabilities or other long-term liabilities as appropriate based on anticipated distribution dates. The cash surrender value of COLI is recorded in other long-term assets. Changes in the value of participant accounts and changes in the cash surrender value of COLI are recorded as part of the Company s operating expenses and are subject to the Company s normal allocation of expenses to inventory and deferred preservation costs.

#### 16. Stock Compensation

#### Overview

Under the Company s plans, the Company is currently authorized to grant the following number of shares and the Company has available for grant up to the following number of shares as of December 31, 2012 and 2011:

	Authorized	Available f	for Grant
Plan	Shares	2012	2011
1996 Discounted Employee Stock Purchase Plan, as amended	1,900,000	847,000	918,000
2002 Stock Incentive Plan	974,000		7,000
2004 Employee Stock Incentive Plan	2,100,000	41,000	293,000
2008 Non-Employee Directors Stock Incentive Plan	300,000	27,000	88,000
2009 Employee Stock Incentive Plan	4,100,000	2,847,000	1,037,000
Total	9.374.000	3,762,000	2,343,000

During 2012 the Company amended the 2009 Employee Stock Incentive Plan to increase the authorized shares under the plan by 2.1 million shares. During 2010 the Company amended the 1996 Discounted Employee Stock Purchase Plan to increase the authorized shares under the plan by 1.0 million shares. Upon the exercise of stock options or grants of RSAs, RSUs, or PSUs, the Company may issue the required shares out of authorized but unissued common stock or out of treasury stock, at management s discretion.

#### Stock Awards

In 2012 the Compensation Committee of the Company s Board of Directors authorized grants of RSAs, RSUs, and PSUs from approved stock incentive plans to non-employee Directors and certain Company officers and employees totaling 451,000 shares of common stock, counting PSUs at target levels, which had an aggregate market value of \$2.4 million. The PSUs granted in 2012 represent the right to receive from 50% to 150% of the target numbers of shares of common stock. The number of shares earned is determined based on the attainment of specified levels of adjusted EBITDA, as defined in the grant, for the 2012 calendar year. The PSUs granted in 2012 earned approximately 125% of the target number of shares.

In 2011 the Compensation Committee of the Company s Board of Directors authorized grants of RSAs and RSUs from approved stock incentive plans to non-employee Directors and certain Company officers and employees totaling 421,000 shares of common stock, which had an aggregate market value of \$2.2 million.

In 2010 the Compensation Committee of the Company s Board of Directors authorized grants of RSAs and RSUs from approved stock incentive plans to non-employee Directors and certain Company officers and employees totaling 278,000 shares of common stock, which had an aggregate market value of \$1.7 million.

A summary of stock grant activity for the years ended December 31, 2012, 2011, and 2010 for RSAs, RSUs, and PSUs, based on at shares granted at goal, is as follows:

RSAs	Shares	Weighted Average Grant Date Fair Value
Unvested at December 31, 2009	267,000	\$ 7.67
Granted	219,000	5.93
Vested	(122,000)	6.34
Unvested at December 31, 2010	364,000	7.07
Granted	360,000	5.18
Vested	(128,000)	7.28
Forfeited	(44,000)	5.48
Unvested at December 31, 2011	552,000	5.91
Granted	229,000	5.39
Vested	(142,000)	7.00
Unvested at December 31, 2012	639,000	5.48

		Weighted Average Remaining	Aggregate
		Contractual	Intrinsic
RSUs	Shares	Term in years	Value
Outstanding at December 31, 2009			\$
Granted	58,000		
Outstanding at December 31, 2010	58,000	1.85	313,000
Granted	61,000		
Vested	(19,000)		
Forfeited	(3,000)		
Outstanding at December 31, 2011	97,000	1.66	466,000
Granted	64,000		
Vested	(37,000)		
Forfeited	(4,000)		
Outstanding at December 31, 2012	120,000	1.54	747,000
Vested and expected to vest	112,000	1.53	699,000
		Weighted Average	
		Remaining	Aggregate
		Contractual	Intrinsic
PSUs	Shares		Value

		Term in	
		years	
Outstanding at December 31, 2011			\$
Granted	159,000		
Outstanding at December 31, 2012	159,000	0.93	989,000
Vested and expected to vest  Stock Options	151,000	0.90	943,000

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 159,000, 599,000, and 451,000 shares in 2012, 2011, and 2010, respectively, with exercise prices equal to the stock prices on the respective grant dates.

A summary of the Company s stock option activity for the years ended December 31, 2012, 2011, and 2010 follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in years	Aggregate Intrinsic Value
Outstanding at December 31, 2009	1,987,000	\$ 6.92	3.59	\$ 1,731,000
Granted	451,000	6.96		
Exercised	(4,000)	4.49		
Forfeited	(15,000)	6.11		
Expired	(138,000)	10.20		
Outstanding at December 31, 2010	2,281,000	6.74	3.46	603,000
Granted	599,000	5.13		
Exercised	(260,000)	4.53		
Forfeited	(100,000)	5.60		
Expired	(320,000)	5.30		
Outstanding at December 31, 2011	2,200,000	6.83	4.00	
Granted	159,000	5.67		
Exercised	(48,000)	5.64		
Forfeited	(2,000)	7.01		
Expired	(249,000)	7.03		
Outstanding at December 31, 2012	2,060,000	6.74	3.66	1,225,000
Vested and expected to vest	2,043,000	6.75	3.65	1,211,000
Exercisable at December 31, 2012	1,412,000	7.25	3.04	743,000

Other information concerning stock options for the years ended December 31 is as follows:

	2012	2011	2010
Weighted-average fair value of options granted	\$ 2.67	\$ 2.54	\$ 3.34
Intrinsic value of options exercised	10,000	261,000	10,000

Employees purchased common stock totaling 72,000, 64,000, and 43,000 shares in 2012, 2011, and 2010, respectively, through the Company s ESPP.

### Stock Compensation Expense

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

	2012		2011		2010	
	Stock Options	ESPP Options	Stock Options	ESPP Options	Stock Options	ESPP Options
Expected life of options	4.3 Years	.50 Years	4.0 Years	.50 Years	3.8 Years	.38 Years
Expected stock price volatility	0.60	0.48	.65	.39	.65	.47
Risk-free interest rate	0.71%	0.12%	1.25%	0.14%	1.25%	0.17%

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

	2012	2011	2010
RSA, RSU, and PSU expense	\$ 2,204	\$ 1,408	\$ 970
Stock option and ESPP option expense	1,172	1,606	1,950
Total stock compensation expense	\$ 3,376	\$ 3,014	\$ 2,920

Included in the total stock compensation expense, as applicable in each period, were expenses related to RSAs, RSUs, PSUs, and stock options issued in each respective year, as well as those issued in prior periods 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 deferred preservation costs and inventory costs. The Company capitalized \$214,000, \$224,000 and \$299,000 in the years ended December 31, 2012, 2011 and 2010, respectively, of the stock compensation expense into its deferred preservation costs and inventory costs.

As of December 31, 2012 the Company had total unrecognized compensation costs of \$976,000 related to unvested stock options and \$2.5 million related to RSAs, RSUs, and PSUs, before considering the effect of expected forfeitures. As of December 31, 2012 this expense is expected to be recognized over a weighted-average period of 1.19 years for stock options, 1.08 years for RSAs, 2.24 years for RSUs, and 0.93 years for PSUs.

#### 17. 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):

	2012	2011	2010
Basic income per common share			
Net income	\$ 7,946	\$ 7,371	\$ 3,944
Net income allocated to participating securities	(180)	(149)	(51)
Net income allocated to common shareholders	\$ 7,766	\$ 7,222	\$ 3,893
Basic weighted-average common shares outstanding	26,967	27,441	27,987
Basic income per common share	\$ 0.29	\$ 0.26	\$ 0.14
Diluted income per common share			
Net income	\$ 7,946	\$ 7,371	\$ 3,944
Net income allocated to participating securities	(178)	(147)	(50)
Net income allocated to common shareholders	\$ 7,768	\$ 7,224	\$ 3,894
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Basic weighted-average common shares outstanding	26,967	27,441	27,987
Effect of dilutive options and awards	444	318	287
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Diluted weighted-average common shares outstanding	27,411	27,759	28,274
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Diluted income per common share	\$ 0.28	\$ 0.26	\$ 0.14
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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 1.7 million, 2.0 million, and 1.5 million, shares for the years ended December 31, 2012, 2011, and 2010, respectively, were excluded from the calculation of diluted weighted-average common shares outstanding.

#### 18. Transactions with Related Parties

An investment banking services company employee became a member of the Company s Board of Directors and a shareholder of the Company in 2012. The Company made stock repurchases of \$794,000, \$2.9 million, and \$750,000 in 2012, 2011, and 2010, respectively, which includes the cost of stock and commissions of less than 1%, and expensed \$818,000 in 2011 for investment banking services from that company. The Company did not record expenses for investment banking services from that company in 2012 or 2010.

A member of the Company s Board of Directors and a shareholder of the Company is a current employee of and the former Chief of Thoracic Surgery of a university hospital that generated preservation services and product revenues of \$267,000, \$198,000, and \$390,000 with the Company in 2012, 2011, and 2010, respectively. Additionally, the son of this member of the Company s Board of Directors receives a retainer for performing heart and lung transplants from a medical center that generated preservation services and product revenues of \$312,000, \$219,000, and \$189,000 with the Company in 2012, 2011, and 2010, respectively.

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The Company expensed \$22,000, \$45,000, and \$22,000 in 2012, 2011, and 2010, respectively, relating to supplies for clinical trials purchased from a company whose Chief Financial Officer is a member of the Company s Board of Directors and a shareholder of the Company.

A relative of the Company s CEO is employed as a vice president of the Company. His compensation and benefits are set and subject to review by the Compensation Committee of the Board of Directors.

#### 19. Segment and Geographic 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, BioFoam, PerClot, HemoStase, revascularization technologies, and HeRO Graft, 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 preservation services and products, and gross margins for the Company s operating segments (in thousands):

	2012	2011	2010
Revenues:			
Preservation services	\$ 63,603	\$ 59,793	\$ 59,724
Medical devices	67,496	59,387	56,370
Other <sup>a</sup>	619	446	551
Total revenues	131,718	119,626	116,645
Cost of preservation services and products:			
Preservation services	35,320	34,340	35,868
Medical devices	11,380	9,442	12,409
Total cost of preservation services and products	46,700	43,782	48,277
Gross margin:			
Preservation services	28,283	25,453	23,856
Medical devices	56,116	49,945	43,961
Other <sup>a</sup>	619	446	551
Total gross margin	\$ 85,018	\$ 75,844	\$ 68,368

Net revenues by product for the years ended December 31, 2012, 2011, and 2010 were as follows (in thousands):

	2012	2011	2010
Preservation services:			
Cardiac tissue	\$ 29,756	\$ 26,618	\$ 27,997
Vascular tissue	33,847	33,175	31,727
Total preservation services	63,603	59,793	59,724
Products:			
BioGlue and BioFoam	53,211	49,455	47,383
PerClot	3,078	2,528	264
HemoStase		1,699	8,793
Revascularization technologies	8,092	5,705	
HeRO Graft	3,115		
Other medical devices			(70)
Total products	67,496	59,387	56,370
Other <sup>a</sup>	619	446	551
Total revenues	\$ 131,718	\$ 119,626	\$ 116,645

	2012	2011	2010
U.S	\$ 103,804	\$ 95,975	\$ 97,037
International	27,914	23,651	19,608
Total	\$ 131,718	\$ 119,626	\$ 116,645

At December 31, 2012 and 2011, over 95% of the long-lived assets of the Company were held in the U.S., where all of the Company  $\,$ s manufacturing facilities and the corporate headquarters are located. At December 31, 2012 and 2011 the Company  $\,$ s \$11.4 million and \$4.2 million, respectively, of goodwill was allocated entirely to its Medical Devices segment.

## 20. Subsequent Events

On January 30, 2013 CryoLife received a warning letter ( Warning Letter ) dated January 29, 2013 from the U.S. Food and Drug Administration ( FDA ). The Warning Letter followed a Form 483, Notice of Inspectional Observations from the FDA ( Form 483 ) related to the Company s processing, preservation, and distribution of human tissue and the manufacture of medical devices. The Form 483 followed a routine quality system inspection of the Company s facilities by the FDA during the period September 17, 2012 to October 16, 2012. The Warning Letter relates to certain Observations from the Form 483 that the FDA believes were either inadequately addressed by the Company s responses or for which the FDA required further information to fully assess the Company s corrective actions. It is possible that actions it may be required to take in response to the Form 483 and Warning Letter could materially, adversely impact the availability of the Company s tissues and products and cost structure, which could impact the Company s revenues, financial condition, profitability, or cash flows.

<sup>&</sup>lt;sup>a</sup> For the years ended December 31, 2012, 2011, and 2010 the Other designation includes grant revenue. Net revenues by geographic location attributed to countries based on the location of the customer for the years ended December 31, 2012, 2011, and 2010 were as follows (in thousands):

#### SELECTED QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

(in thousands, except per share data)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
REVENUE:	_	_	_	_
2012	\$ 32,301	\$ 33,188	\$ 33,429	\$ 32,800
2011	30,196	29,379	29,654	30,397
2010	29,717	29,263	28,443	29,222
GROSS MARGIN:				
2012	\$ 21,292	\$ 21,371	\$ 21,310	\$ 21,045
2011	18,504	19,053	18,912	19,375
2010	17,792	17,769	15,222*	17,585
NET INCOME (LOSS):				
2012	\$ 991	\$ 3,334	\$ 1,538	\$ 2,083
2011	1,666	1,820	2,019	1,866
2010	1,934	2,926	(3,031)*	2,115
INCOME (LOSS) PER COMMON SHARE DILUTED:				
2012	\$ 0.04	\$ 0.12	\$ 0.06	\$ 0.07
2011	0.06	0.06	0.07	0.07
2010	0.07	0.10	(0.11)*	0.08

<sup>\*</sup> The third quarter 2010 gross margin, net loss, and loss per share-diluted includes the unfavorable effect of a \$1.6 million write-down of HemoStase inventory as a result of Medafor, Inc. s termination of the distribution agreement between the parties. The third quarter 2010 net loss and loss per share-diluted also includes the unfavorable effects of \$3.5 million in acquired in-process research and development expense, as a result of the transaction with Starch Medical, Inc., and \$3.6 million for the other than temporary impairment of the Company s investment in Medafor common stock.