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

FORM 10-Q

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

For the quarterly period ended June 30, 2015

OR

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

For the transition period from ___ to __

Commission file number: 1-13165

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida

(State or other jurisdiction of incorporation or organization)

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

(770) 419-3355

(Registrant's telephone number, including area code)

Not Applicable

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗵 No 🗆

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

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

| Large accelerated filer | Accelerated filer 🗵 |
|--|---------------------------|
| Non-accelerated filer [] (Do not check if a smaller reporting company) | Smaller reporting company |
| | |
| Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Ex | change Act). |
| Yes | □ No ⊠ |
| | |

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

Class Common Stock, \$.01 par value per share Outstanding at July 23, 2015 28,385,389 Shares

Identification No.) 30144 (Zip Code)

59-2417093

(I.R.S. Employer

Yes 🗵 No 🗆

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements.

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

| | Three Months Ended June 30, | | | | Six Months En June 30, | | | ded |
|---|--------------------------------|------------------|----------|------------------|---------------------------|------------------|----------|------------------|
| | | 2015 2014 | | | 2015 | | 2014 | |
| | | (Unaı | dited |) | | (Unau | dited |) |
| Revenues: | <u>^</u> | 10.010 | <u>^</u> | | <u>^</u> | | <u>,</u> | |
| Products | \$ | 19,918 | \$ | 20,350 | \$ | 39,309 | \$ | 39,805 |
| Preservation services | | 15,608 | | 14,340 | | 30,048 | | 30,616 |
| Total revenues | | 35,526 | | 34,690 | _ | 69,357 | | 70,421 |
| Cost of products and preservation services: | | | | | | | | |
| Products | | 4,244 | | 4,131 | | 9,277 | | 7,932 |
| Preservation services | | 9,728 | | 8,175 | | 18,859 | | 17,632 |
| Total cost of products and preservation services | | 13,972 | | 12,306 | | 28,136 | | 25,564 |
| Gross margin | | 21,554 | | 22,384 | | 41,221 | | 44,857 |
| Operating experience | | | | | | | | |
| Operating expenses: General, administrative, and marketing | | 19,327 | | 17,959 | | 38,296 | | 36,234 |
| Research and development | | 2,684 | | 2,203 | | 4,936 | | 4,705 |
| Total operating expenses | _ | 22,011 | | 20,162 | _ | 43,232 | | 40,939 |
| | | | | | | | | |
| Operating (loss) income | | (457) | | 2,222 | | (2,011) | | 3,918 |
| Interest expense | | 30 | | (16) | | 60 | | 45 |
| Interest income | | (12) | | (45) | | (15) | | (48) |
| Gain on sale of Medafor investment Other expense (income), net | | (891) 250 | | (111) | | (891) 442 | | (210) |
| oner expense (meonic), net | | 250 | | (111) | | 112 | | (210) |
| Income (loss) before income taxes | | 166 | | 2,394 | | (1,607) | | 4,131 |
| Income tax expense (benefit) | | 668 | | 233 | | (831) | | 911 |
| Net (loss) income | \$ | (502) | \$ | 2,161 | \$ | (776) | \$ | 3,220 |
| | | | | | | | | |
| (Loss) income per common share: | | | | | | | | |
| Basic | \$ | (0.02) | \$ | 0.08 | \$ | (0.03) | \$ | 0.12 |
| Diluted | \$ | (0.02) | \$ | 0.08 | \$ | (0.03) | \$ | 0.11 |
| Dividends declared per common share | \$ | 0.0300 | \$ | 0.0300 | \$ | 0.0600 | \$ | 0.0575 |
| Weighted-average common shares outstanding: | | 07.510 | | 07.500 | | 07 (10 | | 07.100 |
| Basic Diluted | | 27,713 27,713 | | 27,502 28,317 | | 27,619 27,619 | | 27,439 28,382 |
| Diruted | | 27,115 | | 20,317 | | 27,019 | | 20,302 |
| Net (loss) income | \$ | (502) | \$ | 2,161 | \$ | (776) | \$ | 3,220 |
| Other comprehensive income | | 342 | | 41 | | 225 | | 6 |
| Comprehensive (loss) income | \$ | (160) | \$ | 2,202 | \$ | (551) | \$ | 3,226 |

See accompanying Notes to Summary Consolidated Financial Statements.

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

| | June 30, 2015 | December 31, 2014 |
|--|---------------------------------------|----------------------|
| | (Unaudited) | |
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 35,075 | \$ 33,375 |
| Restricted securities | 869 | 884 |
| Receivables, net | 23,189 | 22,863 |
| Inventories | 13,508 | 12,739 |
| Deferred preservation costs | 23,726 | 25,196 |
| Deferred income taxes | 6,610 | 6,210 |
| Prepaid expenses and other | 5,655 | 4,761 |
| Total current assets | 108,632 | 106,028 |
| Property and equipment, net | 12,108 | 12,002 |
| Restricted cash | 5,000 | 5,000 |
| Goodwill | 11,365 | 11,365 |
| Patents, net | 1,611 | 1,784 |
| Trademarks and other intangibles, net | 18,151 | 19,496 |
| Deferred income taxes | 13,889 | 15,659 |
| Other | 5,312 | 4,823 |
| | · · · · · · · · · · · · · · · · · · · | |
| Total assets | <u>\$ 176,068</u> | \$ 176,157 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 4,104 | \$ 4,543 |
| Accrued compensation | 6,545 | 5,406 |
| Accrued procurement fees | 4,805 | 4,675 |
| Accrued expenses and other | 3,351 | 5,583 |
| Deferred income | 382 | 420 |
| Total current liabilities | 19,187 | 20,627 |
| Other | 7,339 | 6,845 |
| | · · · · · · · · · · · · · · · · · · · | |
| Total liabilities | 26,526 | 27,472 |
| Commitments and contingencies | | |
| Shareholders' equity: | | |
| Preferred stock | | |
| Common stock (issued shares of 29,608 in 2015 and 29,229 in 2014) | 296 | 292 |
| Additional paid-in capital | 140,073 | 135,227 |
| Retained earnings | 20,292 | 22,768 |
| Accumulated other comprehensive income (loss) | 104 | (121) |
| Treasury stock at cost (shares of 1,265 in 2015 and 1,101 in 2014) | (11,223) | (9,481) |
| Total shareholders' equity | 149,542 | 148,685 |
| Total liabilities and shareholders' equity | \$ 176,068 | \$ 176,157 |
| | ÷ 170,000 | \$ 1,0,107 |

See accompanying Notes to Summary Consolidated Financial Statements.

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

| | | nths Ended ne 30, |
|---|----------------|----------------------|
| | 2015 | 2014 |
| | (Una | udited) |
| Net cash flows from operating activities: | | |
| Net (loss) income | \$ (776) | \$ 3,220 |
| Adjustments to reconcile net (loss) income to net cash from operating activities: | | |
| Depreciation and amortization | 3,111 | 2,937 |
| Non-cash compensation | 3,174 | 1,644 |
| Gain on sale of Medafor investment | (891) | |
| Other non-cash adjustments to income | 2,380 | (391) |
| | <u>}</u> | () |
| Changes in operating assets and liabilities: | | |
| Receivables | (326) | (1,264) |
| Inventories and deferred preservation costs | 130 | (1,731) |
| Prepaid expenses and other assets | (1,383) | (2,608) |
| Accounts payable, accrued expenses, and other liabilities | (225) | (978) |
| Net cash flows provided by operating activities | 5,194 | 829 |
| Not south the sector south as south the sec | | |
| Net cash flows from investing activities: Capital expenditures | (2,192) | (2 2 7 2) |
| Proceeds from sale of Medafor investment | (2,192) 891 | (2,272) |
| Other | (487) | (1,522) |
| | | |
| Net cash flows used in investing activities | (1,788) | (3,794) |
| Net cash flows from financing activities: | | |
| Cash dividends paid | (1,700) | (1,610) |
| Proceeds from exercise of stock options and issuance of common stock | 707 | 504 |
| Repurchases of common stock | | (2,007) |
| Other | (884) | (672) |
| Net cash flows used in financing activities | (1,877) | (3,785) |
| | 171 | |
| Effect of exchange rate changes on cash | 171 | (23) |
| Increase (decrease) in cash and cash equivalents | 1,700 | (6,773) |
| Cash and cash equivalents, beginning of period | 33,375 | 37,643 |
| Cash and cash equivalents, end of period | \$ 35,075 | \$ 30,870 |

See accompanying Notes to Summary Consolidated Financial Statements.

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

1. Basis of Presentation

The accompanying summary consolidated financial statements include the accounts of CryoLife, Inc. and its subsidiaries ("CryoLife," the "Company," "we," or "us"). All significant intercompany accounts and transactions have been eliminated in consolidation. The accompanying Summary Consolidated Balance Sheet as of December 31, 2014 has been derived from audited financial statements. The accompanying unaudited summary consolidated financial statements as of and for the three and six months ended June 30, 2015 and 2014 have been prepared in accordance with (i) accounting principles generally accepted in the U.S. for interim financial information and (ii) the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the U.S. Securities and Exchange Commission ("SEC"). Accordingly, such statements do not include all of the information and disclosures required by accounting principles generally accepted in the U.S. for a complete presentation of financial statements. In the opinion of management, all adjustments (including those of a normal, recurring nature) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2015 are not necessarily indicative of the results that may be expected for the year ending December 31, 2015. These summary consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in CryoLife's Annual Report on Form 10-K for the year ended December 31, 2014.

2. Financial Instruments

The following is a summary of the Company's financial instruments measured at fair value (in thousands):

| June 30, 2015 | Level 1 | | Level 1 | | Level 1 | | Level 1 Level | | Level 2 | | Level 2 | | Level 2 | | Level 2 | | Level 2 | | Level 2 | | Lev | vel 3 | Т | otal |
|------------------------|---------|-----|---------|--|---------|--|---------------|-----|---------|--|---------|--|---------|--|---------|--|---------|--|---------|--|-----|-------|---|------|
| Restricted securities: | | | | | | | | | | | | | | | | | | | | | | | | |
| Money market funds | \$ | 869 | \$ | | \$ | | \$ | 869 | | | | | | | | | | | | | | | | |
| Total assets | \$ | 869 | \$ | | \$ | | \$ | 869 | | | | | | | | | | | | | | | | |

| December 31, 2014 | <u> </u> | Level 1 | | Level 1 | | el 2 | Lev | vel 3 | Total |
|------------------------|----------|---------|----|---------|----|------|--------------|-------|-------|
| Cash equivalents: | | | | | | | | | |
| Money market funds | \$ | 18,213 | \$ | | \$ | | \$ 18,213 | | |
| Restricted securities: | | | | | | | | | |
| Money market funds | | 884 | | | | | 884 | | |
| Total assets | \$ | 19,097 | \$ | | \$ | | \$ 19,097 | | |

The Company used prices quoted from its investment management companies to determine the Level 1 valuation of its investments in money market funds.

3. Cash Equivalents and Restricted Cash and Securities

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

| June 30, 2015 | (| Cost Basis | Unrealized Holding Gains | | Estimated Market Value | |
|---------------------------------|----|------------|--------------------------------|--|------------------------------|-------|
| Restricted cash and securities: | | | | | | |
| Cash | \$ | 5,000 | \$ | | \$ | 5,000 |
| Money market funds | | 869 | | | | 869 |

| December 31, 2014 | C | Cost Basis | | Cost Basis | | alized ding tins | Ι | stimated Market Value |
|---------------------------------|----|------------|----|------------|----|------------------------|---|-----------------------------|
| Cash equivalents: | | JST DUSIS | | | | · urue | | |
| Money market funds | \$ | 18,213 | \$ | | \$ | 18,213 | | |
| Restricted cash and securities: | | | | | | | | |
| Cash | | 5,000 | | | | 5,000 | | |
| Money market funds | | 884 | | | | 884 | | |

As of June 30, 2015 and December 31, 2014 \$869,000 and \$884,000, respectively, of the Company's money market funds were designated as shortterm restricted securities due to a contractual commitment to hold the securities as pledged collateral relating primarily to international tax obligations. As of June 30, 2015 and December 31, 2014 \$5.0 million of the Company's cash was designated as long-term restricted cash due to a financial covenant requirement under the Company's credit agreement with General Electric Capital Corporation ("GE Capital"), as discussed in Note 11. This restriction will lapse upon expiration of the credit agreement with GE Capital on September 26, 2019.

There were no gross realized gains or losses on cash equivalents in the three and six months ended June 30, 2015 and 2014. As of June 30, 2015 \$869,000 of the Company's restricted securities had a maturity date of between three months and one year. As of December 31, 2014 \$622,000 of the Company's restricted securities had a maturity date within three months and \$262,000 had a maturity date between three months and one year. As of June 30, 2015 and 2014 \$5.0 million of the Company's long-term restricted cash had no maturity date.

4. Distribution Agreements

ProCol Distribution Agreement

In 2014 CryoLife acquired the exclusive worldwide distribution rights for ProCol® Vascular Bioprosthesis ("ProCol") from Hancock Jaffe Laboratories, Inc. ("Hancock Jaffe"). The agreement between CryoLife and Hancock Jaffe (the "HJ Agreement") has an initial three-year term and is renewable for two oneyear periods at CryoLife's option. Per the terms of the HJ Agreement, CryoLife has the option to acquire the ProCol product line from Hancock Jaffe beginning in March 2016.

ProCol, which is approved for sale in the U.S., is a biological graft derived from a bovine mesenteric vein that provides vascular access for end-stage renal disease ("ESRD") hemodialysis patients. It is intended for the creation of a bridge graft for vascular access subsequent to at least one previously failed prosthetic access graft. ProCol is complementary to the Company's <u>He</u>modialysis <u>R</u>eliable <u>O</u>utflow Graft ("HeRO® Graft"), which also serves patients with ESRD; however, ProCol provides vascular access for ESRD patients in an earlier-stage of treatment protocol than the HeRO Graft.

In accordance with the terms of the HJ Agreement, CryoLife made payments to Hancock Jaffe of \$1.7 million during 2014 and \$576,000 in January 2015. In exchange for these payments, CryoLife obtained the right to receive a designated amount of ProCol inventory for resale, a portion of which the Company received in 2014 and 2015. Subsequent to this initial inventory purchase, CryoLife can purchase additional units from Hancock Jaffe at an agreed upon transfer price. The Company began limited distribution of ProCol in the second quarter of 2014. On September 29, 2014 Hancock Jaffe received U.S. Food and Drug Administration ("FDA") approval of the Premarket Approval ("PMA") Supplement associated with its new manufacturing facility, and the Company began shipping product made in this new facility in the fourth quarter of 2014.

PhotoFix Distribution Agreement

In 2014 CryoLife entered into an exclusive supply and distribution agreement with Genesee Biomedical, Inc. ("GBI") to acquire the distribution rights to PhotoFix TM, a bovine pericardial patch stabilized using a dye-mediated photo-fixation process that requires no glutaraldehyde. PhotoFix has received FDA 510(k) clearance and is indicated for use in intracardiac repair, including ventricular repair and atrial repair, great vessel repair and suture line buttressing, and pericardial closure.

The agreement between CryoLife and GBI (the "GBI Agreement") has an initial five-year term and is renewable for two one-year periods at CryoLife's option. Per the terms of the GBI Agreement, CryoLife is purchasing PhotoFix inventory for resale at an agreed upon transfer price and has the option to acquire the PhotoFix product line from GBI that became effective in March 2015. In January 2015 the Company received its initial shipments and launched its distribution of PhotoFix.

5. Hemosphere Acquisition

Overview

On May 16, 2012 CryoLife acquired Hemosphere, Inc. ("Hemosphere") and its HeRO Graft product line, which the Company operated as a wholly owned subsidiary until December 31, 2014 when it was merged into the CryoLife, Inc. parent entity. The HeRO Graft is a proprietary graft-based solution for ESRD hemodialysis patients with limited access options and central venous obstruction.

Contingent Consideration

As of the Hemosphere acquisition date, CryoLife recorded a contingent consideration liability of \$1.8 million in long-term liabilities on its Summary 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 the attainment of 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. This fair value measurement was based on unobservable inputs, including management estimates and assumptions about future revenues, and was, therefore, classified as Level 3 within the fair value hierarchy. The Company remeasured this liability at each reporting date and recorded changes in the fair value of the contingent consideration in other expense (income) on the Company's Consolidated Statements 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. As of December 31, 2014 the Company reviewed the full year revenue performance of Hemosphere for 2014 and 2013, and reviewed its 2015 annual budgets, which were updated in the fourth quarter of 2014. As a result of this review, as of December 31, 2014 the Company believed that achievement of the minimum revenue target to trigger payment was remote, and, therefore, estimated the fair value of the contingent consideration to be zero.

The Company recorded a gain of zero in both the three and six months ended June 30, 2015 and gains of \$198,000 and \$296,000 in the three and six months ended June 30, 2014, respectively, on the remeasurement of the contingent consideration liability. The gains recorded in the prior year periods were due to changes in the Company's estimates, partially offset by the effect of the passage of time on the fair value measurements. The balance of the contingent consideration liability was zero as of June 30, 2015 and December 31, 2014.

6. ValveXchange

Preferred Stock Investment

In July 2011 the Company purchased shares of series A preferred stock of ValveXchange, Inc. ("ValveXchange") for approximately \$3.5 million. ValveXchange was a private medical device company that was spun off from Cleveland Clinic to develop a lifetime heart valve replacement technology platform featuring exchangeable bioprosthetic leaflets. As ValveXchange's stock was not actively traded on any public stock exchange, and as the Company's investment was in preferred stock, the Company initially accounted for this investment using the cost method as a long-term asset, investment in equity securities, on the Company's Summary Consolidated Balance Sheet.

During the fourth quarter of 2013 the Company reevaluated its investment in ValveXchange preferred stock for impairment. Based on this analysis, the Company believed that its investment in ValveXchange was fully impaired as of December 31, 2013, and the impairment was other than temporary. As of June 30, 2015 and December 31, 2014 the carrying value of the Company's investment in ValveXchange preferred stock was zero.

Loan Agreement

In July 2011 the Company entered into an agreement with ValveXchange, as amended, to make available to ValveXchange up to \$2.0 million in debt financing through a revolving credit facility (the "Loan"). The Loan includes various affirmative and negative covenants, including financial covenant requirements, and expires on July 30, 2018, unless terminated earlier. Amounts under the Loan earn interest at an 8% annual rate and are secured by substantially all of the tangible and intangible assets of ValveXchange. The Company advanced \$2.0 million to ValveXchange under this loan in 2012.

During the quarter ended December 31, 2014 CryoLife became aware of various factors, including ValveXchange's inability to secure additional funding, its lack of capital to continue basic operations, and the likelihood of impending default on the Loan. In December 2014 CryoLife notified ValveXchange that it was in breach of the Loan, and in January 2015, after ValveXchange failed to cure this breach, CryoLife accelerated the amounts due under the Loan. In January 2015 ValveXchange informed CryoLife management of its intent to file for bankruptcy, which created substantial uncertainty regarding the disposition of CryoLife's claim for amounts it is owed under the Loan. Given these circumstances, CryoLife believed that its Loan became fully impaired in the fourth quarter of 2014. As a result, during the three months ended December 31, 2014 the Company recorded other non-operating expense of \$2.0 million to write-down its long-term note receivable from ValveXchange. ValveXchange was dissolved in June 2015. The net carrying value of the long-term note receivable was zero as of June 30, 2015 and December 31, 2014.

7. Medafor Matters

Investment in Medafor Common Stock

In 2009 and 2010 CryoLife purchased shares of common stock in Medafor, Inc. ("Medafor"). The Company initially recorded its investment using the cost method as a long-term asset, investment in equity securities, on the Company's Summary Consolidated Balance Sheets.

On October 1, 2013 C.R. Bard, Inc. ("Bard") and its subsidiaries completed the previously announced acquisition of the outstanding shares of Medafor common stock. The Company received an initial payment of approximately \$15.4 million in the fourth quarter of 2013 for its 2.4 million shares of Medafor common stock and received additional payments of \$530,000 in the fourth quarter of 2014 and \$891,000 in April 2015 related to the release of funds in escrow. Based on information provided by Medafor as part of its September 24, 2013 Proxy Statement, the Company could receive additional payments totaling up to \$7.0 million upon the release of funds held in escrow and the satisfaction of certain contingent milestones, measurable through June 2015.

The Company recorded a gain on the sale of Medafor investment of approximately \$891,000 for the three and six months ended June 30, 2015 and zero for the three and six months ended June 30, 2014. Subsequent payments will be recorded as an additional gain if, and when, received by the Company.

Legal Action

In April 2014 CryoLife filed a declaratory judgment lawsuit against Bard, and its subsidiaries Davol, Inc. ("Davol") and Medafor (collectively, "Defendants"), in the U.S. District Court for the District of Delaware (the "District Court"). CryoLife requested that the District Court declare that CryoLife's manufacture, use, offer for sale, and sale of PerClot in the U.S. does not, and would not, infringe Bard's U.S. Patent No. 6,060,461 (the "'461 Patent"). In addition, CryoLife requested that the District Court declare that the claims of the '461 Patent are invalid. As part of the relief requested, CryoLife requested injunctive relief and an award of attorneys' fees.

The lawsuit against the Defendants followed the receipt by CryoLife of a letter from Medafor in September 2012 stating that PerClot, when introduced in the U.S., would infringe the '461 Patent when used in accordance with the method published in CryoLife's literature and with the instructions for use. CryoLife received FDA 510(k) clearance for the sale of PerClot Topical in April 2014, began distributing PerClot Topical in August 2014, and received IDE approval in March 2014 to begin clinical trials for PerClot in certain surgical indications.

In September 2014 Medafor filed a motion for a preliminary injunction, asking the District Court to enjoin CryoLife's marketing and sale of PerClot in the U.S. In March 2015 the District Court ruled that CryoLife's declaratory judgment lawsuit against Medafor may proceed but dismissed Bard and Davol from the lawsuit. The District Court also granted Medafor's motion for a preliminary injunction, which prohibits CryoLife from marketing, selling, and distributing PerClot in the U.S. while the litigation proceeds. In March 2015 CryoLife ceased all marketing, sales, and distribution of PerClot, including PerClot Topical, in the U.S. in accordance with the District Court's order.

In April 2015 CryoLife appealed the District Court's ruling on the preliminary injunction motion to the U.S. Court of Appeals for the Federal Circuit, and CryoLife dismissed this appeal in June 2015. The District Court proceedings are scheduled to resume in late August 2015.

8. Inventories and Deferred Preservation Costs

Inventories at June 30, 2015 and December 31, 2014 are comprised of the following (in thousands):

| | | June 30, 2015 | | | |
|----------------------------|-----------|------------------|----|--------|--|
| Raw materials and supplies | \$ | 6,998 | \$ | 7,942 | |
| Work-in-process | | 1,036 | | 1,006 | |
| Finished goods | | 5,474 | | 3,791 | |
| Total inventories | <u>\$</u> | 13,508 | \$ | 12,739 | |

Deferred preservation costs at June 30, 2015 and December 31, 2014 are comprised of the following (in thousands):

| | | une 30, 2015 | December 31, 2014 | | |
|-----------------------------------|-----------|-----------------|----------------------|--------|--|
| Cardiac tissues | \$ | 10,839 | \$ | 10,875 | |
| Vascular tissues | | 12,887 | | 14,321 | |
| Total deferred preservation costs | <u>\$</u> | 23,726 | \$ | 25,196 | |

9. Goodwill and Other Intangible Assets

Indefinite Lived Intangible Assets

As of June 30, 2015 and December 31, 2014 the carrying values of the Company's indefinite lived intangible assets are as follows (in thousands):

| | | June 30, 2015 | December 31, 2014 | | |
|--------------------------------------|----|------------------|----------------------|--------|--|
| Goodwill | \$ | 11,365 | \$ | 11,365 | |
| Procurement contracts and agreements | | 2,013 | | 2,013 | |
| Trademarks | | 856 | | 853 | |

Based on its experience with similar agreements, the Company believes that its acquired procurement contracts and agreements have indefinite useful lives, as the Company expects to continue to renew these contracts for the foreseeable future. The Company believes that its trademarks have indefinite useful lives as the Company currently anticipates that these trademarks will contribute to cash flows of the Company indefinitely.

As of June 30, 2015 and December 31, 2014 the Company's entire goodwill balance is related to its Medical Devices segment, and there has been no change from the balance recorded as of December 31, 2014.

Definite Lived Intangible Assets

As of June 30, 2015 and December 31, 2014 the gross carrying values, accumulated amortization, and approximate amortization period of the Company's definite lived intangible assets are as follows (in thousands):

| June 30, 2015 | Gross Carrying Value | | • • | | • 0 | | • 0 | | . 8 | | Amortiz Perio | |
|--|-------------------------|--------|-----|-------|---------|-------|-----|--|-----|--|------------------|--|
| Acquired technology | \$ | 14,020 | \$ | 4,384 | 11 - 16 | Years | | | | | | |
| Patents | | 4,194 | | 2,583 | 17 | Years | | | | | | |
| Distribution and manufacturing rights and know-how | | 4,059 | | 1,101 | 11 - 12 | Years | | | | | | |
| Customer lists and relationships | | 3,370 | | 933 | 13 - 17 | Years | | | | | | |
| Non-compete agreement | | 381 | | 324 | 10 | Years | | | | | | |
| Other | | 267 | | 73 | 3 - 5 | Years | | | | | | |

| | Gros | s Carrying | Acc | umulated | Amortiz | ation |
|--|------|------------|-----|------------|---------|-------|
| December 31, | | | | | | |
| 2014 | | Value | Amo | ortization | Perio | bd |
| Acquired technology | \$ | 14,020 | \$ | 3,815 | 11 - 16 | Years |
| Patents | | 4,281 | | 2,497 | 17 | Years |
| Distribution and manufacturing rights and know-how | | 4,559 | | 989 | 11 - 15 | Years |
| Customer lists and relationships | | 3,370 | | 813 | 13 - 17 | Years |
| Non-compete agreement | | 381 | | 305 | 10 | Years |
| Other | | 461 | | 239 | 1 – 5 | Years |

Amortization Expense

The following is a summary of amortization expense as recorded in general, administrative, and marketing expenses on the Company's Summary Consolidated Statement of Operations and Comprehensive Income (in thousands):

| | Three Mo Jun | nths Ende ie 30, | ed | | ths Endeo 1e 30, | 1 | |
|----------------------|-----------------|---------------------|------|----|---------------------|----|------|
| | 2015 | | 2014 | | 2015 | | 2014 |
| Amortization expense | \$ 502 | \$ | 503 | \$ | 1,017 | \$ | 999 |

As of June 30, 2015 scheduled amortization of intangible assets for the next five years is as follows (in thousands):

| | mainder of 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------------------|------------------------|-------------|-------------|-------------|-------------|-------------|
| Amortization expense | \$ 1,005 | \$ 2,004 | \$ 1,951 | \$ 1,944 | \$ 1,896 | \$ 1,721 |

10. Income Taxes

Income Tax Expense

The Company's effective income tax rate was approximately 402% and 52% for the three and six months ended June 30, 2015, respectively, as compared to 10% and 22% for the three and six months ended June 30, 2014, respectively. The Company's income tax rate for the three months ended June 30, 2015 was unfavorably affected by changes in the Company's estimated full year effective tax rate, which had a large impact when compared to the Company's small pretax book income for the quarter. The Company's income tax rate for the three and six months ended June 30, 2015 was unfavorably affected by the absence of the domestic production activities deduction, as the Company does not anticipate being eligible for this deduction in 2015, and by other permanent book/tax differences, which are expected to have a proportionally larger impact in 2015 than in the prior year when compared to the Company's estimates of pretax book income. The Company's income tax rates for the six months ended June 30, 2014 did not include an anticipate benefit from the research and development tax credit, which had not yet been enacted within the respective time periods.

Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax return purposes. The Company generates deferred tax assets primarily as a result of book write-downs, reserves, or impairments which are not immediately deductible for tax return purposes. The Company acquired significant deferred tax assets, primarily net operating loss carryforwards, from its acquisitions of Hemosphere and Cardiogenesis Corporation in the second quarters of 2012 and 2011, respectively. The Company currently estimates that a portion of its state net operating loss carryforwards will not be recoverable and has, therefore, recorded a valuation allowance against these state net operating loss carryforwards.

As of June 30, 2015 the Company maintained a total of \$2.1 million in valuation allowances against deferred tax assets, related to state net operating loss carryforwards, and a net deferred tax asset of \$20.5 million. As of December 31, 2014 the Company had a total of \$2.1 million in valuation allowances against deferred tax assets and a net deferred tax asset of \$21.9 million.

11. Debt

GE Credit Agreement

On September 26, 2014 CryoLife amended and restated its credit agreement with GE Capital, extending the expiration date and amending other terms, which are discussed further below. CryoLife's amended and restated credit agreement with GE Capital (the "GE Credit Agreement") provides revolving credit for working capital, permitted acquisitions, and general corporate purposes. The GE Credit Agreement has aggregate commitments of \$20.0 million for revolving loans, including swing loans subject to a sublimit, and letters of credit, and expires on September 26, 2019. The commitments may be reduced from time to time pursuant to the terms of the GE Credit Agreement. The GE Credit Agreement also permits CryoLife to request a term loan in an aggregate amount of up to \$25.0 million to finance the purchase price of a permitted acquisition.

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, based on the Company's election, at either LIBOR or GE Capital's base rate plus the respective applicable margins. All swing loans will, however, bear interest at the base loan rate. Commitment fees are paid based on the unused portion of the facility. If an event of default occurs, the applicable interest rate will increase by 2.0% per annum. As of June 30, 2015 and December 31, 2014 the aggregate interest rate was 4.75%. As of June 30, 2015 and December 31, 2014 the outstanding balance of the GE Credit Agreement was zero, and the remaining availability was \$20.0 million.

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 and (ii) maintain minimum earnings subject to defined adjustments as of specified dates. The agreement also (i) limits the payment of cash dividends, up to specified maximums and subject to satisfaction of specified conditions, (ii) requires that, after giving effect to a stock repurchase, the Company maintain liquidity, as defined within the agreement, of at least \$20.0 million, (iii) limits acquisitions or mergers except for certain permitted acquisitions, (iv) sets specified limits on the amount the Company can pay to purchase or redeem CryoLife common stock pursuant to a stock repurchase program and to fund estimated tax liabilities incurred by officers, directors, and employees as a result of awards of stock or stock equivalents, and (v) includes customary conditions on incurring new indebtedness. As of June 30, 2015 the Company was in compliance with the covenants of the GE Credit Agreement.

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 long-term restricted cash as of June 30, 2015 and December 31, 2014 on the Company's Summary Consolidated Balance Sheets, as they are restricted for the term of the GE Credit Agreement.

Interest Expense

Interest expense was \$30,000 and \$60,000 for the three and six months ended June 30, 2015, respectively. Interest expense was a favorable \$16,000 for the three months ended June 30, 2014 and \$45,000 for the six months ended June 30, 2014, respectively. Interest expense in all periods included interest on debt and uncertain tax positions.

12. Commitments and Contingencies

Liability Claims

The Company's estimated unreported loss liability was \$1.5 million as of June 30, 2015 and \$1.4 million as of December 31, 2014. The related recoverable insurance amounts were \$630,000 and \$600,000 as of June 30, 2015 and December 31, 2014, respectively. The Company accrues its estimate of unreported product and tissue processing liability claims as a component of other long-term liabilities and records the related recoverable insurance amount as a component of other long-term assets, as appropriate. Further analysis indicated that the liability as of June 30, 2015 could have been estimated to be as high as \$2.7 million, after including a reasonable margin for statistical fluctuations calculated based on actuarial simulation techniques.

Employment Agreements

In July 2014 the Company's Board of Directors appointed Mr. J. Patrick Mackin as President and Chief Executive Officer ("CEO"), and the Company and Mr. Mackin entered into an employment agreement, which became effective September 2, 2014. The employment agreement has an initial three-year term. Beginning on the second anniversary of the effective date, and subject to earlier termination pursuant to the agreement, the employment term will, on a daily basis, automatically extend by one day. In accordance with the agreement, on September 2, 2014, Mr. Mackin received a one-time signing bonus of \$200,000, a grant of 400,000 stock options, and a performance stock award grant of 250,000 shares. The agreement also provides for a severance

payment, which would become payable upon the occurrence of certain employment termination events, including termination by the Company without cause.

The employment agreement of the Company's former President, CEO, and Executive Chairman, Mr. Steven G. Anderson, conferred certain benefits upon his retirement or termination of employment in conjunction with certain change in control events. As of December 31, 2014 the Company had \$2.2 million in accrued expenses and other current liabilities on the Summary Consolidated Balance Sheet, including approximately \$2.0 million representing severance payable upon Mr. Anderson's voluntary retirement. Mr. Anderson's employment agreement took effect on January 1, 2013 and would have terminated on December 31, 2016.

On April 9, 2015 Mr. Anderson retired from service as an employee of the Company and a member of its Board of Directors, and entered into a Separation Agreement (the "Agreement") with the Company. In accordance with the Agreement, in addition to the severance benefit discussed above, Mr. Anderson will receive an additional \$400,000 in cash; 25% of the annual bonus he would have been entitled to under his employment agreement, estimated at target payout rates to be approximately \$100,000; reimbursement of a Medicare supplement policy for Mr. Anderson and his spouse for the duration of their lives; accelerated vesting of all outstanding and unvested stock options and awards; and reimbursement of attorneys' fees not to exceed \$20,000. The Company recorded expense of approximately \$1.4 million related to the Agreement in the second quarter of 2015. The acceleration of Mr. Anderson's stock options and awards was effective as of the date of his retirement. As of June 30, 2015 the Company had \$2.6 million, primarily in accrued compensation, on the Summary Consolidated Balance Sheet, representing severance and cash payments that are expected to be made in October 2015, six months after Mr. Anderson's retirement. The annual bonus payment is expected to be made in February 2016 at the same time as annual bonus payments, if any, are made to the Company's officers.

PerClot Technology

On September 28, 2010 the Company entered into a worldwide distribution agreement (the "Distribution Agreement") and a license and manufacturing agreement (the "License Agreement") with Starch Medical, Inc. ("SMI") for PerClot, a polysaccharide hemostatic agent used in surgery. The Distribution Agreement contains certain minimum purchase requirements and has a term of 15 years. Following U.S. regulatory approval and the start of U.S. manufacturing, CryoLife may terminate the Distribution Agreement and the related requirements to purchase minimum amounts of PerClot manufactured by SMI. Upon termination of the Distribution Agreement, CryoLife would manufacture and sell PerClot pursuant to the License Agreement. The Company will pay royalties to SMI at stated rates on net revenues of products manufactured under the License Agreement.

In April 2014 CryoLife received 510(k) clearance from the FDA to market PerClot Topical in the U.S. PerClot Topical is a version of the Company's PerClot product, which was manufactured by the Company at its headquarters and labeled for use in certain topical indications. CryoLife launched PerClot Topical in August 2014. In March 2015 CryoLife ceased all marketing, sales, and distribution of PerClot, including PerClot Topical, in the U.S. in accordance with the District Court's order discussed in Note 7.

The Company is currently initiating its pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. Management believes that the costs of this clinical trial will be significant in 2015 and 2016. The Company began enrollment in the second quarter of 2015 and currently expects to receive PMA from the FDA in 2018. However, if the Company does not prevail or reach a settlement with respect to the patent litigation discussed in Note 7, the timing of the launch of PerClot in the U.S. may be delayed until early 2019, when the '461 Patent expires.

CryoLife paid \$500,000 to SMI in January 2015 related to the achievement of a contingent milestone. The Company expects to make additional contingent payments to SMI of up to \$1.0 million if certain FDA regulatory and other commercial milestones are achieved.

Direct Sales in France

In June 2015 CryoLife signed a Business Transfer Agreement with its French distribution partner to facilitate an orderly transition of the Company to a direct sales model in France. As a result of the agreement, the Company will acquire certain intangible assets, including commercial and business information, assignment of contracts, and a non-compete agreement with the French distribution partner for a purchase price of 1.2 million Euros. The Company expects the transaction to close and the purchase price to be paid in October 2015. As a result of this transaction, certain members of the distributor's sales team who are currently responsible for selling the Company's products in France will become CryoLife employees.

13. Shareholders' Equity

Common Stock Repurchase

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, 2014 the Company purchased approximately 585,000 shares for an aggregate purchase price of \$5.6 million. These shares were recorded, at cost, as part of treasury stock on the Company's Summary Consolidated Balance Sheets. In the six months ended June 30, 2015 the Company did not repurchase any common stock under a repurchase program, and no formal repurchase program was in effect during that period.

Cash Dividends

The Company initiated a quarterly cash dividend of \$0.025 per share of common stock outstanding in the third quarter of 2012 and increased this dividend to \$0.0275 per share in the second quarter of 2013 and \$0.03 per share in the second quarter 2014. The Company paid dividend payments of \$850,000 and \$1.7 million from cash on hand for the three and six months ended June 30, 2015, respectively, and \$838,000 and \$1.6 million for the three and six months ended June 30, 2014, respectively. The dividend payments were recorded as a reduction to retained earnings on the Company's Summary Consolidated Balance Sheets.

14. Stock Compensation

Overview

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

Equity Grants

During the six months ended June 30, 2015 the Compensation Committee of the Company's Board of Directors (the "Committee") authorized awards from approved stock incentive plans of RSUs to certain employees and RSAs and PSUs to certain Company officers, which, assuming that performance under the PSUs were to be achieved at target levels, together totaled 283,000 shares and had an aggregate grant date market value of \$3.1 million. The PSUs granted in 2015 represent the right to receive from 60% to 150% of the target number of shares of common stock. The performance component of PSU awards granted in 2015 was based on attaining specified levels of adjusted EBITDA, adjusted inventory levels, and trade accounts receivable days sales outstanding, each as defined in the PSU grant documents, for the 2015 calendar year. The Company currently believes that achievement of the performance component is probable, and it will reevaluate this likelihood on a quarterly basis.

During the six months ended June 30, 2014 the Committee authorized awards from approved stock incentive plans of RSUs to certain employees and RSAs and PSUs to certain Company officers, which, counting PSUs at target levels, together totaled 326,000 shares of common stock and had an aggregate grant date market value of \$3.3 million. The PSUs granted in 2014 represented the right to receive from 50% to 150% of the target number of shares of common stock. The performance component of PSU awards granted in 2014 was based on attaining specified levels of adjusted EBITDA, as defined in the PSU grant documents, for the 2014 calendar year. The PSUs granted in 2014 earned 50% of the target number of shares.

The Committee authorized, from approved stock incentive plans, grants of stock options to purchase a total of 290,000 and 162,000 shares to certain Company officers during the six months ended June 30, 2015 and 2014, respectively. The exercise prices of the options were equal to the closing stock prices on their respective grant dates.

Employees purchased common stock totaling 36,000 and 59,000 shares in the six months ended June 30, 2015 and 2014, respectively, through the Company's ESPP.

Stock Compensation Expense

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

| | Three Mon June 30 | | Six Montl June 30 | |
|---------------------------------|----------------------|--------------|----------------------|--------------|
| | Stock Options | ESPP Options | Stock Options | ESPP Options |
| Expected life of options | 2.82 Years | .50 Years | 4.47 Years | .50 Years |
| Expected stock price volatility | 0.37 | 0.34 | 0.44 | 0.34 |
| Dividends | 1.17% | 1.06% | 1.10% | 1.06% |
| Risk-free interest rate | 0.78% | 0.12% | 1.40% | 0.12% |

| | | nths Ended 0, 2014 | Six Mont June 30 | |
|---------------------------------|-------------------|-----------------------|---------------------|--------------|
| | Stock Options ESI | | Stock Options | ESPP Options |
| Expected life of options | N/A | .50 Years | 4.25 Years | .50 Years |
| Expected stock price volatility | N/A | 0.34 | 0.55 | 0.34 |
| Dividends | N/A | 0.99% | 1.10% | 0.99% |
| Risk-free interest rate | N/A | 0.10% | 1.19% | 0.10% |

The following table summarizes total stock compensation expenses prior to the capitalization of amounts into deferred preservation and inventory costs (in thousands):

| | | Three Mo Jur | onths End ne 30, | led | Six Mon Jur | ths Endo 1e 30, | ed |
|--|-----------|-----------------|---------------------|------------|--------------------|--------------------|--------------|
| | 2015 2014 | | | 2015 | 2014 | | |
| RSA, PSA, RSU, and PSU expense Stock option and ESPP option expense | \$ | 1,625 487 | \$ | 701 164 | \$ 2,490 795 | \$ | 1,413 371 |
| Total stock compensation expense | \$ | 2,112 | \$ | 865 | \$ 3,285 | \$ | 1,784 |

Included in the total stock compensation expense, as applicable in each period, were expenses related to RSAs, PSAs, 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 \$75,000 and \$66,000 in the three months ended June 30, 2015 and 2014, respectively, of the stock compensation expense into its deferred preservation costs and inventory costs.

As of June 30, 2015 the Company had total unrecognized compensation costs of \$5.6 million related to RSAs, PSAs, RSUs, and PSUs and \$2.5 million related to unvested stock options, before considering the effect of expected forfeitures. As of June 30, 2015 this expense is expected to be recognized over a weighted-average period of 2.2 years for stock options, 2.2 years for PSAs, 2.0 years for RSUs, 1.4 years for RSAs, and 1.2 years for PSUs.

15. Income Per Common Share

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

| | | Three Months Ended June 30, | | | | | Six Months Ended June 30, | | | |
|--|-----------|--------------------------------|----|---------------|----|------------------|------------------------------|---------------|--|--|
| Basic (loss) income per common share | | 2015 | | 2014 | | 2015 | | 2014 | | |
| Net (loss) income Net loss (income) allocated to participating securities | \$ | (502) 11 | \$ | 2,161 (38) | \$ | (776) 19 | \$ | 3,220 (60) | | |
| Net (loss) income allocated to common shareholders | <u>\$</u> | (491) | \$ | 2,123 | \$ | (757) | \$ | 3,160 | | |
| Basic weighted-average common shares outstanding | | 27,713 | | 27,502 | | 27,619 | | 27,439 | | |
| Basic (loss) income per common share | <u>\$</u> | (0.02) | \$ | 0.08 | \$ | (0.03) | \$ | 0.12 | | |
| | _ | Three Mon June | | | | Six Mont June | | nded | | |
| Diluted (loss) income per common share | | 2015 | | 2014 | _ | 2015 | | 2014 | | |
| Net (loss) income Net loss (income) allocated to participating securities | \$ | (502) 11 | \$ | 2,161 (37) | \$ | (776) 19 | \$ | 3,220 (59) | | |
| Net (loss) income allocated to common shareholders | \$ | (491) | \$ | 2,124 | \$ | (757) | \$ | 3,161 | | |

| Basic weighted-average common shares outstanding | 27,713 | 27,502 | 27,619 | 27,439 |
|--|--------------|------------|--------------|------------|
| Effect of dilutive stock options and awards ^a | | 815 | | 943 |
| Diluted weighted-average common shares outstanding | 27,713 | 28,317 | 27,619 | 28,382 |
| Diluted (loss) income per common share | \$ (0.02) | \$ 0.08 | \$ (0.03) | \$ 0.11 |
| | | | | |

^a 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 (loss) per common share. Accordingly, stock options to purchase a weighted-average 389,000 and 309,000 shares for the three and six months ended June 30, 2015, respectively, and 485,000 and 182,000 shares for the three and six months ended June 30, 2014, respectively, were excluded from the calculation of diluted weighted-average common shares outstanding.

16. Segment Information

The Company has two reportable segments organized according to its products and services: Medical Devices and Preservation Services. The Medical Devices segment includes external revenues from product sales of BioGlue® Surgical Adhesive, BioFoam® Surgical Matrix, PerClot, CardioGenesis cardiac laser therapy, HeRO Graft, ProCol, and PhotoFix. The Preservation Services segment includes external services revenues from the preservation of cardiac and vascular tissues. 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 products and preservation services. 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 products and services, and gross margins for the Company's operating segments (in thousands):

| | | Three Months Ended June 30, | | | | | ths E1 e 30, | s Ended 30, | |
|--|------------|--------------------------------|----|--------|----|--------|-----------------|----------------|--|
| | | 2015 | | 2014 | | 2015 | | 2014 | |
| Revenues: | | | | | | | | | |
| Medical devices | \$ | 19,918 | \$ | 20,350 | \$ | 39,309 | \$ | 39,805 | |
| Preservation services | | 15,608 | | 14,340 | | 30,048 | | 30,616 | |
| Total revenues | | 35,526 | | 34,690 | | 69,357 | | 70,421 | |
| Cost of products and preservation services: | | | | | | | | | |
| Medical devices | | 4,244 | | 4,131 | | 9,277 | | 7,932 | |
| Preservation services | . <u> </u> | 9,728 | | 8,175 | | 18,859 | | 17,632 | |
| Total cost of products and preservation services | | 13,972 | | 12,306 | | 28,136 | | 25,564 | |
| Gross margin: | | | | | | | | | |
| Medical devices | | 15,674 | | 16,219 | | 30,032 | | 31,873 | |
| Preservation services | | 5,880 | | 6,165 | | 11,189 | | 12,984 | |
| Total gross margin | <u>\$</u> | 21,554 | \$ | 22,384 | \$ | 41,221 | \$ | 44,857 | |

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

| | | Three Mo Jun | nths H e 30, | | Six Mont Jun | ths E1 e 30, | | |
|-------------------------------------|----|-----------------|-----------------|--------|-----------------|-----------------|----|--------|
| | | 2015 | | 2014 | | 2015 | | 2014 |
| Products: | | | | | | | | |
| BioGlue and BioFoam | \$ | 14,519 | \$ | 15,389 | \$ | 28,561 | \$ | 30,629 |
| PerClot | | 1,036 | | 1,143 | | 2,012 | | 2,059 |
| CardioGenesis cardiac laser therapy | | 1,943 | | 2,084 | | 4,080 | | 3,768 |
| HeRO Graft | | 1,744 | | 1,705 | | 3,604 | | 3,320 |
| ProCol | | 333 | | 29 | | 537 | | 29 |
| PhotoFix | | 343 | | | | 515 | | |
| Total products | | 19,918 | | 20,350 | | 39,309 | | 39,805 |
| Preservation services: | | | | | | | | |
| Cardiac tissue | | 6,889 | | 6,454 | | 13,552 | | 13,644 |
| Vascular tissue | | 8,719 | | 7,886 | | 16,496 | | 16,972 |
| Total preservation services | | 15,608 | | 14,340 | | 30,048 | | 30,616 |
| Total revenues | ¢ | 35,526 | \$ | 34,690 | ¢ | 69,357 | \$ | 70,421 |
| | \$ | 55,520 | \$ | 54,090 | \$ | 09,337 | φ | 70,421 |

PART I - FINANCIAL INFORMATION

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

Overview

CryoLife, Inc. ("CryoLife," the "Company," "we," or "us"), incorporated in 1984 in Florida, is a leader in medical device manufacturing and distribution and in the processing and distribution of implantable human tissues for use in cardiac and vascular surgeries. CryoLife's surgical sealants and hemostats include BioGlue® Surgical Adhesive ("BioGlue"), BioFoam® Surgical Matrix ("BioFoam"), and PerClot®, an absorbable powdered hemostat, which the Company distributes internationally for Starch Medical, Inc. ("SMI"). CryoLife's CardioGenesis cardiac laser therapy product line, which includes a laser console system and single-use, fiber-optic handpieces, is used for the treatment of coronary artery disease in patients with severe angina. CryoLife markets the Hemodialysis Reliable Outflow Graft ("HeRO® Graft") and is the exclusive distributor of ProCol® Vascular Bioprosthesis ("ProCol") for Hancock Jaffe Laboratories, Inc. ("Hancock Jaffe"). Both HeRO Graft and ProCol are solutions for end-stage renal disease ("ESRD") in certain hemodialysis patients. CryoLife is the exclusive distributor of PhotoFixTM for Genesee Biomedical, Inc. ("GBI"). PhotoFix is a bovine pericardial patch stabilized using a dyemediated photo-fixation process that requires no glutaraldehyde. The cardiac and vascular human tissues distributed by CryoLife include the CryoValve® SG pulmonary heart valve ("CryoValve SGPV") and the CryoPatch[®] SG pulmonary cardiac patch tissue ("CryoPatch SG"), both of which are processed using CryoLife's proprietary SynerGraft[®] technology.

The Company reported second quarter revenues of \$35.5 million, a 2% increase over the quarter ended June 30, 2014. This increase was primarily due to an increase in tissue preservation services revenues, partially offset by a decrease in BioGlue revenues. The Company's revenues were also affected by the unfavorable impact of foreign currency exchange rates during the first half of 2015. See the "Results of Operations" section below for additional analysis of the three and six months ended June 30, 2015.

Recent Events

Expanded Indication for BioGlue in Japan

In July 2015 the Japanese Pharmaceuticals and Medical Device Agency approved an expanded indication for BioGlue, which is now indicated for adhesion and support of hemostasis for aortotomy closure sites, suture/anastomosis sites (including aortic dissection and anastomosis sites with use of a prosthetic graft), and suture sites on the heart. BioGlue was previously approved for aortic dissection procedures in Japan, and the expanded indication potentially doubles the estimated BioGlue annual market opportunity in Japan to over \$10 million. CryoLife's Japanese distributor, Century Medical, Inc., is expected to begin selling BioGlue in the third quarter of 2015 for the expanded indications.

Direct Sales in France

In June 2015 CryoLife signed a Business Transfer Agreement with its French distribution partner to facilitate an orderly transition of the Company to a direct sales model in France. As a result of the agreement, the Company will acquire certain intangible assets, including commercial and business information, assignment of contracts, and a non-compete agreement with the French distribution partner for a purchase price of 1.2 million Euros. The Company expects the transaction to close and the purchase price to be paid in October 2015. As a result of this transaction, certain members of the distributor's sales team who are currently responsible for selling the Company's products in France will become CryoLife employees.

PerClot Litigation

In April 2014 CryoLife received 510(k) clearance from the U.S. Food and Drug Administration ("FDA") to market PerClot Topical in the U.S. PerClot Topical is a version of the Company's PerClot product, which was manufactured by the Company at its headquarters and labeled for use in certain topical indications. CryoLife launched PerClot Topical in August 2014.

In April 2014 CryoLife filed a declaratory judgment lawsuit against C.R. Bard, Inc. ("Bard") and its subsidiaries Davol, Inc. ("Davol") and Medafor, Inc. ("Medafor") (collectively, "Defendants") in the U.S. District Court for the District of Delaware (the "District Court"), requesting that the District Court declare that CryoLife's manufacture, use, offer for sale, and sale of PerClot in the U.S. does not, and would not, infringe Bard's U.S. Patent No. 6,060,461 (the "461 Patent"). In addition, CryoLife requested that the District Court declare that the claims of the '461 Patent are invalid. In September 2014 Medafor filed a motion for a preliminary injunction, asking the District Court to enjoin CryoLife's marketing and sale of PerClot in the U.S. In March 2015 the District Court ruled that CryoLife's declaratory judgment lawsuit against Medafor may proceed but dismissed Bard and Davol from the lawsuit. The District Court also granted Medafor's motion for a preliminary injunction, which prohibits CryoLife from



marketing, selling, and distributing PerClot in the U.S. while the litigation proceeds. In March 2015 CryoLife ceased all marketing, sales, and distribution of PerClot, including PerClot Topical, in the U.S. in accordance with the District Court's order.

In April 2015 CryoLife appealed the District Court's ruling on the preliminary injunction motion to the U.S. Court of Appeals for the Federal Circuit, and CryoLife dismissed this appeal in June 2015. The District Court proceedings are scheduled to resume in late August 2015.

Regulatory Activity

In March 2015 the FDA re-inspected the Company to review the Company's corrective actions in response to the January 2013 warning letter ("Warning Letter") and Form 483, Notice of Inspectional Observations issued to the Company in 2014. In April 2015 the Company received a close-out letter from the FDA verifying that the Company has successfully implemented corrective actions put in place following the Warning Letter. The receipt of the close-out letter confirms that all items in the Warning Letter were closed, with the FDA determining that the Company's remediation activities are effective and its quality management system is in substantial compliance.

Critical Accounting Policies

A summary of the Company's significant accounting policies is included in Note 1 of the "Notes to Consolidated Financial Statements," contained in the Company's Form 10-K for the year ended December 31, 2014. Management believes that the consistent application of these policies enables the Company to provide users of the financial statements with useful and reliable information about the Company's operating results and financial condition. The summary consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S., which require the Company to make estimates and assumptions. The Company did not experience any significant changes during the quarter ended June 30, 2015 in any of its Critical Accounting Policies from those contained in the Company's Form 10-K for the year ended December 31, 2014.

New Accounting Pronouncements

In May 2014 the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers,* which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. On July 9, 2015, the FASB approved the deferral of the effective date of ASU 2014-09 by one year. The new standard is effective for annual and interim reporting periods beginning after December 15, 2017, and early application is not permitted. The standard permits the use of either the retrospective or cumulative effect transition method. The Company is evaluating the effect that ASU 2014-09 will have on its consolidated financial statements and related disclosures, but does not expect the adoption of ASU 2014-09 to have a material impact on its financial position, results of operations, or cash flows.

Results of Operations (*Tables in thousands*)

Revenues

| | Three Mo | es for the nths End e 30, | Revenues as a Pe Total Revenue Three Month June 3 | es for the s Ended | |
|-------------------------------------|--------------|---------------------------------|--|-----------------------|------|
| | 2015 | | 2014 | 2015 | 2014 |
| Products: | | | | | |
| BioGlue and BioFoam | \$ 14,519 | \$ | 15,389 | 41% | 45% |
| PerClot | 1,036 | | 1,143 | 3% | 3% |
| CardioGenesis cardiac laser therapy | 1,943 | | 2,084 | 5% | 6% |
| HeRO Graft | 1,744 | | 1,705 | 5% | 5% |
| ProCol | 333 | | 29 | 1% | % |
| PhotoFix | 343 | | | 1% | % |
| Total products | 19,918 | | 20,350 | 56% | 59% |
| Preservation services: | | | | | |
| Cardiac tissue | 6,889 | | 6,454 | 19% | 18% |
| Vascular tissue | 8,719 | | 7,886 | 25% | 23% |
| Total preservation services | 15,608 | | 14,340 | 44% | 41% |
| Total | \$ 35,526 | \$ | 34,690 | 100% | 100% |

| | | Six Mon | es for the ths Ende e 30, | Revenues as a Pe Total Revenue Six Months June 3 | es for the Ended | |
|-------------------------------------|------------|---------|---------------------------------|---|---------------------|------|
| | | 2015 | | 2014 | 2015 | 2014 |
| Products: | | | | | | |
| BioGlue and BioFoam | \$ | 28,561 | \$ | 30,629 | 41% | 44% |
| PerClot | | 2,012 | | 2,059 | 3% | 3% |
| CardioGenesis cardiac laser therapy | | 4,080 | | 3,768 | 6% | 5% |
| HeRO Graft | | 3,604 | | 3,320 | 5% | 5% |
| ProCol | | 537 | | 29 | 1% | % |
| PhotoFix | | 515 | | | 1% | % |
| Total products | | 39,309 | | 39,805 | 57% | 57% |
| Preservation services: | | | | | | |
| Cardiac tissue | | 13,552 | | 13,644 | 19% | 19% |
| Vascular tissue | . <u> </u> | 16,496 | | 16,972 | 24% | 24% |
| Total preservation services | | 30,048 | | 30,616 | 43% | 43% |
| Total | \$ | 69,357 | \$ | 70,421 | 100% | 100% |

Revenues increased 2% and decreased 2% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. A detailed discussion of the changes in product revenues and preservation services revenues for the three and six months ended June 30, 2015 is presented below.

Products

Revenues from products decreased 2% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. Revenues from products decreased 1% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. The decreases in BioGlue and PerClot revenues during these periods were largely offset by increases in the

Company's newest products ProCol and PhotoFix. A detailed discussion of the changes in product revenues for BioGlue and BioFoam; PerClot; CardioGenesis cardiac laser therapy; and HeRO Graft is presented below.

The Company's sales of products 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. During the first half of 2015, the U.S. Dollar strengthened materially, as compared to the British Pound and Euro and, as a result, the Company's revenues denominated in these currencies decreased when translated into U.S. Dollars. Any further change in these exchange rates could have a material, adverse effect on the Company's revenues denominated in U.S. Dollars, Additionally, the Company's sales to many distributors around the world are denominated in U.S. Dollars, and, although these sales are not directly impacted by the strong U.S. Dollar, the Company believes that its distributors may be delaying or reducing purchases of products in U.S. Dollars due to the relative price of these goods in their local currencies. The Company expects that the effects of the strong U.S. Dollar will continue to unfavorably impact product revenues throughout 2015.

BioGlue and BioFoam

Revenues from the sale of surgical sealants, consisting of BioGlue and BioFoam, decreased 6% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. This decrease was primarily due to a 4% decrease in the volume of milliliters sold, which decreased revenues by 5%, and the unfavorable effect of foreign currency exchange, which decreased revenues by 2%, partially offset by an increase in average sales prices, which increased revenues by 1%.

Revenues from the sale of surgical sealants decreased 7% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. This decrease was primarily due to a 6% decrease in the volume of milliliters sold, which decreased revenues by 6%, and the unfavorable effect of foreign currency exchange, which decreased revenues by 2%, partially offset by an increase in average sales prices, which increased revenues by 1%.

The decrease in sales volume of surgical sealants for the three and six months ended June 30, 2015 was primarily due to a lack of shipments of BioGlue to the Company's French distributor in 2015, as the Company was in the process of transitioning this market from a distributor to a direct sales model effective October 1, 2015, and, to a lesser extent, due to a decrease in sales in domestic markets, partially offset by an increase in shipments to Japan.

The Company's BioGlue revenues will continue to be negatively impacted by the transition to a direct sales model in France during the third quarter of 2015. The Company believes that the expanded BioGlue indication in Japan discussed above will begin to have a favorable impact on BioGlue revenues by the end of 2015. Management is currently seeking regulatory approval for BioGlue in China and, if successful, believes this will provide additional international growth opportunity for BioGlue in future years.

Domestic revenues accounted for 58% and 60% of total BioGlue revenues for the three and six months ended June 30, 2015, respectively, and 56% of total BioGlue revenues for both the three and six months ended June 30, 2014. BioFoam sales accounted for less than 1% of surgical sealant sales for each of the three and six months ended June 30, 2014. BioFoam is approved for sale in certain international markets.

PerClot

Revenues from the sale of PerClot decreased 9% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. This decrease was primarily due to the unfavorable effect of foreign currency exchange, which decreased revenues 8%, and a decrease in average selling prices, which decreased revenues by 4%, partially offset by a 3% increase in revenues due to favorable volume.

Revenues from the sale of PerClot, including PerClot and PerClot Topical, decreased 2% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. This decrease was primarily due to the unfavorable effect of foreign currency exchange, which decreased revenues 8%, and a decrease in average selling prices, which decreased revenues 2%, partially offset by an 8% increase in revenues due to favorable volume.

Revenues during these periods were largely for sales in certain international markets, as PerClot Topical was only distributed domestically for a limited time, as discussed below. The effect of foreign exchange rate changes discussed above had a larger impact on the Company's PerClot revenues as a larger percentage of these revenues are denominated in foreign currencies. The volume increase for the six months ended June 30, 2015 was primarily due to sales increases in the first quarter of 2015 in the U.S., Latin America, and in the Company's direct markets in Europe, partially offset by decreases in several indirect markets.

The Company expects that overall PerClot revenues in 2015 will be comparable to 2014; however, revenues may show some variability from quarter to quarter.

As discussed in "Recent Events" above, in April 2014 CryoLife received 510(k) clearance for PerClot Topical from the FDA, which allowed CryoLife to begin commercialization of PerClot Topical in the U.S. In March 2015 the District Court granted Medafor's motion for a preliminary injunction with respect to CryoLife's marketing, sale, and distribution of PerClot. The Company began shipping PerClot Topical in August 2014 but in March 2015 CryoLife ceased all marketing, sales, and distribution of PerClot, including all sales of PerClot Topical, in the U.S. in accordance with the District Court's order.

The Company is currently initiating its pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. Management believes that the costs of this clinical trial will be significant in 2015 and 2016. The Company began enrollment in the second quarter of 2015 and currently expects to receive Premarket Approval ("PMA") from the FDA in 2018. However, if the Company does not prevail or reach a settlement with respect to the patent litigation discussed above, the timing of the launch of PerClot in the U.S. may be delayed until early 2019, when the '461 Patent expires.

CardioGenesis Cardiac Laser Therapy

Revenues from the Company's CardioGenesis cardiac laser therapy product line consist primarily of sales of handpieces and, in certain periods, revenues from the sale of laser consoles. Revenues from cardiac laser therapy decreased 7% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. Revenues from the sale of laser consoles were zero for both the three months ended June 30, 2015 and 2014. Revenues from the sale of laser consoles were zero for both the three months ended June 30, 2015 and 2014. Revenues from the sale of handpieces decreased 8% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. This decrease was primarily due to a 6% decrease in unit shipments of handpieces, which decreased revenues by 5%, and a decrease in average sales prices, which decreased revenues by 3%.

Revenues from cardiac laser therapy increased 8% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. Revenues from the sale of laser consoles were \$69,000 and \$57,000 for the six months ended June 30, 2015 and 2014, respectively. Revenues from the sale of handpieces increased 9% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. This increase was primarily due to a 9% increase in unit shipments of handpieces, which increased revenues by 9%.

The decrease in handpiece revenues for the three months ended June 30, 2015 was primarily due to a reduction in procedure volume, which can vary from quarter to quarter due to physician case volume and patient-specific factors, which can determine whether cardiac laser therapy can be used adjunctively with cardiac bypass surgery. The increase in handpiece revenues for the six months ended June 30, 2015 was primarily due to the unusually low handpiece revenues in the first quarter of 2014, as a result of the slower than anticipated adoption of a new handpiece design, which was rolled out in the second half of 2013 and early 2014, and resulted in a revenue increase in the first quarter of 2015.

The Company expects that overall cardiac laser therapy revenues will increase slightly in 2015 as compared to 2014, however, revenues from laser console sales can vary significantly from quarter to quarter due to the long lead time required to generate sales of capital equipment.

HeRO Graft

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 distributed in domestic and certain international markets as a solution for ESRD in hemodialysis patients. HeRO Graft revenues increased 2% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. This increase was primarily due to an increase in average sales prices, which increased revenues by 2%, and a 3% increase in number of kits sold, which increased revenues by 1%, partially offset by the unfavorable effect of foreign currency exchange, which decreased revenues by 1%.

HeRO Graft revenues increased 9% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. This increase was primarily due to a 9% increase in number of kits sold, which increased revenues by 7% and an increase in average sales prices, which increased revenues by 3%, partially offset by the unfavorable effect of foreign currency exchange, which decreased revenues by 1%.

The increase in HeRO Graft volume for the three and six months ended June 30, 2015 was primarily due to an increase in the volume of kits sold in international markets as a result of an increase in procedure volume and an increase in the number of implanting physicians, partially offset by a decrease in domestic sales volume for the three months ended June 30, 2015. This decrease in domestic sales was due to the timing of surgical cases.

Management currently expects that overall HeRO Graft revenues will increase in 2015, as compared to 2014. Although HeRO Graft revenues are subject to variability quarter to quarter due to the timing of surgical cases, the Company believes that this variability will continue to decrease as the Company broadens its base of implanting physicians.

ProCol and PhotoFix

In 2014 CryoLife acquired the exclusive worldwide distribution rights from Hancock Jaffe for ProCol, a biological graft derived from a bovine mesenteric vein. ProCol is distributed in the U.S. to provide vascular access for ESRD hemodialysis patients. The Company began limited distribution of ProCol in the second quarter of 2014 and began its full U.S. launch in the fourth quarter of 2014.

In 2014 CryoLife acquired the distribution rights from GBI for PhotoFix, a bovine pericardial patch. PhotoFix is distributed in the U.S. and is indicated for use in intracardiac repair, including ventricular repair and atrial repair, great vessel repair and suture line buttressing, and pericardial closure. The Company launched its distribution of PhotoFix in the first quarter of 2015.

Preservation Services

Revenues from preservation services increased 9% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. Revenues from preservation services decreased 2% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. A detailed discussion of the changes in cardiac and vascular preservation services revenues is presented below.

Throughout 2014 the Company made significant changes to various tissue processing and quality procedures in an effort to address the Warning Letter and Form 483 as discussed in "Recent Events" above, which resulted in a decrease in tissue processing throughput and an increase in the Company's cost of processing tissues. Preservation services revenues and costs were negatively impacted during 2014 due to these factors. The Company expects these factors to continue to impact revenues and costs in 2015 as it continues to ship tissues that were processed in 2014, although these effects are expected to lessen in the second half of 2015. The Company continues to review and modify its procedures as part of its ongoing compliance efforts and in an effort to improve tissue processing throughput and reduce costs. The Company believes that these efforts have begun to increase tissue availability and will begin to reduce costs in the second half of 2015.

Preservation services revenues, particularly revenues for certain high-demand tissues, can vary from quarter to quarter and year to year due to a variety of factors including: quantity and type of incoming tissues, yields of tissue through the preservation process, timing of receipt of donor information, timing of the release of tissues to an implantable status, demand for certain tissue types due to the number and type of procedures being performed, and pressures from competing products or services. See further discussion below of specific items affecting cardiac and vascular preservation services revenues for the three and six months ended June 30, 2015.

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 June 30, 2015, as compared to the three months ended June 30, 2014. This increase was primarily due to an increase in average service fees, which increased revenues by 5%, and a 2% increase in cardiac volume on flat unit shipments.

Revenues from cardiac preservation services decreased 1% for the six months ended June 30, 2015, as compared to the six months ended June 30, 2014. This decrease was primarily due to an 8% decrease in unit shipments of cardiac tissues, which decreased revenues by 5%, largely offset by an increase in average service fees, which increased revenues by 4%.

The increase in average service fees for the three and six months ended June 30, 2015 was primarily due to list fee increases in domestic markets that took effect in July 2014 and the routine negotiation of pricing contracts with certain customers.

The increase in volume for the three months ended June 30, 2015 was primarily due to a mix shift as the volume of cardiac valve shipments increased, partially offset by a decrease in the volume of lower fee cardiac patches. The decrease in cardiac volume for the six months ended June 30, 2015 was primarily due to a decrease in volume of aortic valve and patch shipments in the first quarter of 2015. The decrease in cardiac tissue shipments was due to the timing of tissue releases, which were unfavorably impacted by reduced tissue availability as discussed above, as compared to the prior year period.

Revenues from SynerGraft processed tissues, including the CryoValve SGPV and CryoPatch SG, accounted for 65% of total cardiac preservation services revenues for both the three and six months ended June 30, 2015, respectively, and 63% and 60% of total cardiac preservation services revenues for the three and six months ended June 30, 2014, respectively.

The Company's cardiac valves are primarily used in cardiac replacement and reconstruction surgeries, including the Ross procedure, for patients with endocarditis or congenital heart defects. The Company's cardiac tissues are primarily distributed in domestic markets.

The Company expects that cardiac preservation services revenues for the full year 2015 will be comparable to revenues in 2014.

Vascular Preservation Services

Revenues from vascular preservation services increased 11% for the three months ended June 30, 2015, as compared to the three months ended June 30, 2014. This increase was primarily due to an increase in average service fees, which increased revenues by 8%, and a 1% increase in unit shipments of vascular tissues, which increased revenues by 3%.

Revenues from vascular preservation services decreased 3% for the six months ended June 30, 2015, as compared to revenues for the six months ended June 30, 2014. This decrease was primarily due to a 9% decrease in unit shipments of vascular tissues, which decreased revenues by 9%, partially offset by an increase in average service fees, which increased revenues by 6%.

The increase in average service fees for the three and six months ended June 30, 2015 was primarily due to list fee increases in domestic markets that took effect in July 2014, fee differences due to physical characteristics of vascular tissues, and the routine negotiation of pricing contracts with certain customers.

The increase in volume for the three months ended June 30, 2015 was primarily due to increases in shipments of saphenous veins as a result of increased tissue availability, as discussed above. The decrease in volume for the six months ended June 30, 2015 was primarily due to decreases in shipments of saphenous veins in the first quarter of 2015. The decrease in unit shipments of veins was primarily due to the timing of tissue releases for shipments as compared to the prior year periods, which were unfavorably impacted by reduced tissue availability as discussed above, and due to increasing competition in the vascular tissue market.

The majority of the Company's vascular preservation services revenues are related to shipments of saphenous veins, which are mainly used in peripheral vascular reconstruction surgeries to avoid limb amputations. These tissues are primarily distributed in domestic markets.

The Company expects that vascular preservation services revenues will increase for the full year 2015, as compared to 2014.

Cost of Products and Preservation Services

Cost of Products

| | Three Mon June | led | | d | | |
|------------------|-----------------------|-------------|----|-------|----|-------|
| | 2015 | 2014 2015 | | | | 2014 |
| Cost of products | \$ 4,244 | \$ 4,131 | \$ | 9,277 | \$ | 7,932 |

Cost of products increased 3% and 17% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. Cost of products in 2015 and 2014 includes costs related to BioGlue, BioFoam, PerClot, CardioGenesis cardiac laser therapy, HeRO Grafts, and ProCol. Cost of products in 2015 also includes costs related to PhotoFix.

The increase in cost of products in the three months ended June 30, 2015 was primarily due to sales of the Company's new distributed products, PhotoFix and ProCol, partially offset by a decrease in unit sales of BioGlue. The increase in cost of products in the six months ended June 30, 2015 was primarily due to the write-down of PerClot Topical inventory following the Company's cessation of marketing, sales, and distribution of that product in accordance with the District Court's order, as discussed in "Recent Events" above. To a lesser extent, the increase was due to increases in unit sales of the Company's new distributed products, ProCol and PhotoFix, and HeRO Grafts and an increase in the cost of manufacturing cardiac laser therapy handpieces, partially offset by a decrease in unit sales of BioGlue.

| Cost of Preservation Services | Three Mon Jun | | nded | | Six Mont Jun | | ded |
|-------------------------------|----------------------|------|-------|------|-----------------|------|--------|
| | 2015 | 2014 | | 2015 | | 2014 | |
| Cost of preservation services | \$ 9,728 | \$ | 8,175 | \$ | 18,859 | \$ | 17,632 |

Cost of preservation services increased 19% and 7% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. Cost of preservation services includes costs for cardiac and vascular tissue preservation services.

Cost of preservation services increased in the three and six months ended June 30, 2015 primarily due to an increase in the per unit cost of processing tissues, as a result of lower processing throughput of tissues, increased compliance and personnel costs, and an increase in the cost of materials, as discussed in "Preservation Services" above. For the six months ended June 30, 2015 this increase was partially offset by a decrease in unit shipments of cardiac and vascular tissues. The higher per unit cost of processing tissues is expected to continue in the third quarter of 2015.

Gross Margin

| | Three Months Ended June 30, | | | | led | | |
|--|------------------------------------|----|--------|----|--------|----|--------|
| | 2015 | | 2014 | | 2015 | | 2014 |
| Gross margin | \$ 21,554 | \$ | 22,384 | \$ | 41,221 | \$ | 44,857 |
| Gross margin as a percentage of total revenues | 61% | | 65% | | 59% | | 64% |

Gross margin decreased 4% and 8% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. Gross margin as a percentage of total revenues in the three and six months ended June 30, 2015 decreased as compared to the three and six months ended June 30, 2014, respectively. These decreases were primarily due to an increase in the per unit cost of processing tissues, as discussed above, and a change in the tissue and product mix, as revenues decreased for the Company's higher margin BioGlue product and increased for the Company's tissues and lower margin products. The gross margin and gross margin as a percentage of total revenues for the six months ended June 30, 2015 also decreased due to the write-down of PerClot Topical inventory, as discussed above.

Operating Expenses

General, Administrative, and Marketing Expenses

| | Three Months Ended June 30, | | | Six Mon Jun | ths En le 30, | ded |
|---|------------------------------------|----|--------|--------------------|------------------|--------|
| | 2015 | | 2014 | 2015 | | 2014 |
| General, administrative, and marketing expenses | \$ 19,327 | \$ | 17,959 | \$ 38,296 | \$ | 36,234 |
| General, administrative, and marketing expenses as a percentage of total revenues | 54% | | 52% | 55% | | 51% |

General, administrative, and marketing expenses increased 8% and 6% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively.

The increase in general, administrative, and marketing expenses for the three and six months ended June 30, 2015 was primarily due to severance and termination benefits, including approximately \$1.4 million related to the retirement of Mr. Anderson, the Company's former President, Chief Executive Officer ("CEO"), and Executive Chairman, in April 2015 and due to costs related to business development activities, partially offset by a reduction in commission expenses. The increase in expenses for the six months ended June 30, 2015 was also due to the impairment of a PerClot Topical intangible asset and higher legal fees related to the litigation with Medafor. See Part I, Item 3, "Legal Proceedings" for discussion of the Company's litigation with Medafor.

Research and Development Expenses

| | Three Months Ended June 30, | | | | ded | | |
|---|--------------------------------|----|-------|----|-------|----|-------|
| | 2015 | | 2014 | | 2015 | | 2014 |
| Research and development expenses | \$ 2,684 | \$ | 2,203 | \$ | 4,936 | \$ | 4,705 |
| Research and development expenses as a percentage of total revenues | 8% | | 6% | | 7% | | 7% |

Research and development expenses increased 22% and 5% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. Research and development spending in these periods was primarily focused on clinical work with respect to PerClot, the Company's tissue processing, and BioGlue and BioFoam. The Company expects that research and development spending will increase materially for the full year of 2015, as compared to the full year of 2014, due to planned increases in spending on the PerClot clinical study.

Gain on Sale of Medafor Investment

The gain on sale of Medafor investment was \$891,000 for the three and six months ended June 30, 2015 and zero for the three and six months ended June 30, 2014. On October 1, 2013 Bard completed its acquisition of the outstanding shares of Medafor common stock. The gain on the sale of Medafor investment in 2015 represents additional consideration received by the Company in April 2015 related to the release of funds in escrow. Based on information provided by Medafor as part of its September 24, 2013 Proxy Statement, the Company could receive additional payments totaling up to an additional \$7.0 million upon the final release of funds held in escrow and the satisfaction of certain contingent milestones, measurable through June 2015. Subsequent payments will be recorded as an additional gain if, and when, received by the Company.

Earnings

| | | Three Months Ended June 30, | | | | Six Months Endo June 30, | | | |
|---|-----------|--------------------------------|----|--------------|----|-----------------------------|----|--------------|--|
| | | 2015 | | 2014 | | 2015 | | 2014 | |
| Income (loss) before income taxes Income tax expense (benefit) | \$ | 166 668 | \$ | 2,394 233 | \$ | (1,607) (831) | \$ | 4,131 911 | |
| Net (loss) income | <u>\$</u> | (502) | \$ | 2,161 | \$ | (776) | \$ | 3,220 | |
| Diluted (loss) income per common share | <u>\$</u> | (0.02) | \$ | 0.08 | \$ | (0.03) | \$ | 0.11 | |
| Diluted weighted-average common shares outstanding | | 27,713 | | 28,317 | | 27,619 | | 28,382 | |

Income (loss) before income taxes decreased 93% and 139% for the three and six months ended June 30, 2015, respectively, as compared to the three and six months ended June 30, 2014, respectively. The decrease in income (loss) before income taxes for the three and six months ended June 30, 2015 was due to a decrease in gross margins and an increase in operating expenses, as discussed above.

The Company's effective income tax rate was approximately 402% and 52% for the three and six months ended June 30, 2015, respectively, as compared to 10% and 22% for the three and six months ended June 30, 2014, respectively.

In June 2014 the Internal Revenue Service completed a limited scope examination of certain of the Company's federal income tax returns. At the resolution of this examination, the Company reevaluated its liabilities for uncertain tax positions, primarily related to its research and development tax credits and credit carryforwards, and, based on revised estimates and the settlement of the examination, reversed \$748,000 in uncertain tax liabilities and tax expense.

The Company's income tax rate for the three months ended June 30, 2015 was unfavorably affected by changes in the Company's estimated full year effective tax rate, which had a large impact when compared to the Company's small pretax book income for the quarter. The Company's income tax rate for the three and six months ended June 30, 2015 was unfavorably affected by the absence of the domestic production activities deduction, as the Company does not anticipate being eligible for this deduction in 2015, and by other permanent book/tax differences, which are expected to have a proportionally larger impact in 2015 than in the prior year when compared to the Company's estimates of pretax book income. The Company expects these factors to continue to have an unfavorable impact, and the expected reversal of uncertain tax positions to have a favorable impact, on the Company's effective income tax rate for the remainder of 2015. The Company's income tax rates for the six months ended June

30, 2015 and 2014 did not include an anticipated benefit from the research and development tax credit, which had not yet been enacted within the respective time periods.

Net (loss) income and diluted (loss) income per common share decreased for the three and six months ended June 30, 2015, as compared to the three and six months ended June 30, 2014, respectively, primarily due to the income (loss) before income taxes, as discussed above.

Diluted (loss) income per common share could be affected in future periods by changes in the Company's common stock outstanding.

Seasonality

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 seasons in Europe and the U.S. The Company believes that demand for BioGlue in Japan may continue to be lowest in the second quarter of each year due to distributor ordering patterns driven by the slower summer holiday season in Japan.

The Company does not believe the demand for CardioGenesis cardiac laser therapy or HeRO Grafts is seasonal, as the Company's data does not indicate a significant trend.

The Company is uncertain whether the demand for PerClot, ProCol, or PhotoFix will be seasonal, as these products have not fully penetrated many markets and, therefore, the nature of any seasonal trends may be obscured.

The Company's demand for its cardiac preservation services has traditionally been seasonal, with peak demand generally occurring in the third quarter. Management believes that this trend for cardiac preservation services is primarily due to the high number of surgeries scheduled during the summer months for school-aged patients. Based on experience in recent years, management believes that this trend is lessening as the Company is distributing a higher percentage of its tissues for use in adult populations.

The Company's 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 vascular surgeries being scheduled during the winter holiday months.

Liquidity and Capital Resources

Net Working Capital

At June 30, 2015 net working capital (current assets of \$108.6 million less current liabilities of \$19.2 million) was \$89.4 million, with a current ratio (current assets divided by current liabilities) of 6 to 1, compared to net working capital of \$85.4 million and a current ratio of 5 to 1 at December 31, 2014.

Overall Liquidity and Capital Resources

The Company's largest cash requirement for the six months ended June 30, 2015 were capital expenditures for facilities and equipment 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.

The Company believes that its 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 are expected to include cash to fund business development activities, to fund the PerClot clinical trial, to pay severance and post-employment benefits, to fund the litigation against Medafor, to fund cash dividends to common shareholders, to fund additional research and development expenditures, for general working capital needs, for capital expenditures, and for other corporate purposes. These items may have a significant effect on the Company's cash flows during 2015. The Company may seek additional borrowing capacity or financing, pursuant to future shelf registration statements or privately, for general corporate purposes or to fund other future cash requirements. If the Company undertakes significant business development activity in 2015, this would likely require the Company to draw down monies under its credit agreement, discussed below, obtain additional debt financing, and/or issue or sell additional equities, either privately or in registered offerings.

Significant Sources and Uses of Liquidity

On September 26, 2014 CryoLife amended and restated its credit agreement with General Electric Capital Corporation ("GE Capital"), extending the expiration date and amending other terms, which are discussed further below. CryoLife's amended and restated credit agreement with GE Capital (the "GE Credit Agreement") provides revolving credit for working capital, acquisitions, and general corporate purposes. The GE Credit Agreement provides borrowing capacity of \$20.0 million (including a letter of credit subfacility and a swingline subfacility) and expires on September 26, 2019. The commitment may be reduced or increased from time to time pursuant to the terms of the GE Credit Agreement. The GE Credit Agreement also permits CryoLife to request a term loan in an aggregate amount of up to \$25.0 million to finance or refinance the purchase price of a permitted acquisition. As required under the terms of the GE Credit Agreement, the Company is maintaining cash and cash equivalents of at least \$5.0 million in accounts in which GE Capital has a first priority perfected lien. As a result, these funds will not be available to meet the Company's liquidity needs during the term of the GE Credit Agreement and, as such, have been recorded as long-term restricted cash on the Company's Summary Consolidated Balance Sheets. Also, the GE Credit Agreement requires that, after giving effect to a stock repurchase, the Company maintain liquidity, as defined in the agreement, of at least \$20.0 million. As of June 30, 2015 the outstanding balance under the GE Credit Agreement was zero and \$20.0 million was available for borrowing.

On October 1, 2013 Bard completed its previously announced acquisition of the outstanding shares of Medafor common stock. The Company received an initial payment of approximately \$15.4 million in the fourth quarter of 2013 for its 2.4 million shares of Medafor common stock and received additional payments of \$530,000 in the fourth quarter of 2014 and \$891,000 in April 2015 related to the release of funds in escrow. Based on information provided by Medafor as part of its September 24, 2013 Proxy Statement, the Company could receive additional payments totaling up to an additional \$7.0 million upon the final release of funds held in escrow and the satisfaction of certain contingent milestones, measurable through June 2015. Subsequent payments will be recorded as an additional gain if, and when, received by the Company.

The Company is currently initiating its pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. Management believes that the costs of this clinical trial will be significant in 2015 and 2016. The Company began enrollment in the second quarter of 2015 and currently expects to receive PMA from the FDA during 2018. However, if the Company does not prevail or reach a settlement with respect to the patent litigation discussed above, the timing of the launch of PerClot in the U.S. may be delayed until early 2019, when the '461 Patent expires.

As discussed in "Recent Events" above, on April 9, 2015 Mr. Anderson retired from service as an employee of the Company and a member of its Board of Directors. The Company anticipates making a payment of approximately \$2.4 million in cash severance and compensation payments to Mr. Anderson in October 2015, six months after his retirement. Additionally, a bonus payment, estimated at target payout rates to be approximately \$100,000, is expected to be made in February 2016 at the same time as annual bonus payments, if any, are made to the Company's officers.

The Company acquired net operating loss carryforwards from its acquisitions of Hemosphere, Inc. ("Hemosphere") and Cardiogenesis Corporation that the Company believes will reduce required cash payments for federal income taxes by approximately \$1.5 million for the 2015 tax year.

As of June 30, 2015 approximately 6% of the Company's cash and cash equivalents were held in foreign jurisdictions.

Net Cash Flows from Operating Activities

Net cash provided by operating activities was \$5.2 million for the six months ended June 30, 2015, as compared to \$829,000 for the six months ended June 30, 2014. The increase in net cash provided is primarily due to a large cash requirement for working capital needs in the six months ended June 30, 2014 that was not experienced in the six months ended June 30, 2015.

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, items classified as investing and financing cash flows, and for changes in operating assets and liabilities from the prior year end. For the six months ended June 30, 2015 these non-cash items included a favorable \$3.1 million in depreciation and amortization expenses and \$3.2 million in non-cash compensation.

The Company's working capital needs, or changes in operating assets and liabilities, also affected cash from operations. For the six months ended June 30, 2015 these changes included unfavorable adjustments of \$1.4 million in prepaid expenses and other assets, for which payments have already been made.

Net Cash Flows from Investing Activities

Net cash used in investing activities was \$1.8 million for the six months ended June 30, 2015, as compared to \$3.8 million for the six months ended June 30, 2014. The current year cash used was primarily due to \$2.2 million in capital expenditures.

Net Cash Flows from Financing Activities

Net cash used in financing activities was \$1.9 million for the six months ended June 30, 2015, as compared to \$3.8 million for the six months ended June 30, 2014. The current year cash used was primarily due to \$1.7 million in cash dividends paid.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

Scheduled Contractual Obligations and Future Payments

Scheduled contractual obligations and the related future payments as of June 30, 2015 were as follows (in thousands):

| | | Re | mainder of | | | | | | |
|-------------------------------|-----------|----|------------|-------------|----|-------|-------------|-------------|------------|
| | Total | | 2015 | 2016 | | 2017 | 2018 | 2019 | Thereafter |
| Operating leases | \$ 25,842 | \$ | 1,437 | \$ 3,431 | \$ | 3,502 | \$ 3,502 | \$ 3,462 | \$ 10,508 |
| Purchase commitments | 6,974 | | 3,652 | 1,661 | | 1,661 | | | |
| Compensation payments | 2,385 | | 2,385 | | | | | | |
| Research obligations | 1,731 | | 1,481 | 250 | | | | | |
| Contingent payments | 1,000 | | | | _ | 1,000 | | | |
| Total contractual obligations | \$ 37,932 | \$ | 8,955 | \$ 5,342 | \$ | 6,163 | \$ 3,502 | \$ 3,462 | \$ 10,508 |

The Company's operating lease obligations result from the lease of land and buildings that comprise the Company's corporate headquarters and manufacturing facilities, leases related to additional office and warehouse space, leases on Company vehicles, and leases on a variety of office equipment.

The Company's purchase commitments include minimum purchase requirements for PerClot related to the Company's transaction with SMI. These minimum purchases are included only through 2017, which assumes that the Company receives FDA approval for PerClot during 2018. Upon FDA approval, the Company may terminate its minimum purchase requirements, per the terms of its agreements with SMI, which the Company expects to do. However, if the Company does not terminate this provision, it will have minimum purchase obligations of up to \$1.75 million per year through the end of the contract term in 2025. The Company's purchase commitments also include obligations to purchase intangible assets from the Company's French distribution partner and obligations from agreements with suppliers.

The Company's compensation payment obligations represent estimated payments for post-employment benefits for Mr. Anderson, the Company's former President, CEO, and Executive Chairman, primarily consisting of cash severance and bonus payments. The timing of Mr. Anderson's post-employment benefits, for purposes of the schedule above, is based on the anticipated payment of this benefit in October 2015, which is six months following his April 2015 retirement.

The Company's research obligations represent commitments for ongoing studies and payments to support research and development activities and largely represent commitments related to the PerClot pivotal clinical trial and the Company's clinical registries.

The contingent payment obligation includes payments that the Company will make to SMI for PerClot, if certain FDA regulatory approvals and other commercial milestones are achieved.

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, as no assessments have been made for specific litigation, (ii) any estimated liability for uncertain tax positions and interest and penalties, currently estimated to be \$1.7 million, as no specific assessments have been made by any taxing authorities, and (iii) contingent payment obligations of up to \$4.5 million related to the Company's acquisition of Hemosphere, as the Company does not currently anticipate these contingent payments will be triggered.

Capital Expenditures

Capital expenditures were \$2.2 million for the six months ended June 30, 2015 as compared to \$2.3 million for the six months ended June 30, 2014. Capital expenditures in the six months ended June 30, 2015 were primarily related to the routine purchases of computer software; manufacturing and tissue processing equipment, including support for the Company's HeRO Graft and PerClot product lines; computer and office equipment; CardioGenesis cardiac laser therapy laser consoles; and leasehold improvements needed to support the Company's business.

Forward-Looking Statements

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

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

- Plans, costs, and expected timelines regarding clinical trials to obtain PMA to distribute PerClot in the U.S., 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;
- Potential benefits and additional applications of the Company's products;
- Revenue trend estimates for the Company's products and services for 2015;
- Expectations regarding market and growth opportunities for BioGlue in Japan and China;
- Expectations regarding the expected timing and impact of distribution of BioGlue for expanded indications in Japan;
- Expectations regarding 2015 tissue processing revenues and costs, including the impact of the Company's efforts to improve tissue processing throughput and reduce costs;
- Expectations regarding the timing and benefits associated with the transition to a direct distribution model in France;
- Potential for competitive products and services to affect the market for the Company's products and services;
- Anticipated payment of quarterly dividends each year;
- Expectations regarding the recoverability and realizability of deferred tax assets and the anticipated benefits of net operating loss carryforwards;
- Estimates of fair value of acquired assets, and the Company's belief that the estimates are reasonable;
- Expectations regarding the impact of the Company's adoption of new accounting pronouncements;
- The anticipated impact of changes in prevailing economic conditions, interest rates, and foreign currency exchange rates, including the effects of the relative strength of the U.S. dollar;
- Expectations regarding the Company's eligibility for the domestic production activities tax deduction;
- Plans and expectations regarding research and development of new technologies and products;
- Expectations about whether, and when, the Company may receive additional payments related to its sale of Medafor stock;
- Expectations that research and development expenses will increase materially for the full year of 2015;
- Expectations regarding sales of BioGlue, PerClot, HeRO Grafts, ProCol, PhotoFix, handpieces, and laser consoles and the factors affecting such sales;
- The Company's beliefs and underlying assumptions regarding the seasonal nature of the demand for some of its products and services;
- 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;
- Estimates of contingent payments and royalties that may be paid by the Company and the timing of such payments, as well as expectations regarding whether contingent payments will be triggered;
- The impact on cash flows of funding business development activities and the potential need to obtain additional borrowing capacity or financing;
- Expectations regarding the source of any future payments related to any unreported product or tissue processing liability claims;

- Constraints imposed on the Company by its lender under the existing credit facility;
- Issues that may affect the Company's future growth, 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 set forth below, the risk factors set forth under Part I, Item 1A of the Company's Form 10-K for the year ended December 31, 2014, and other factors, many of which are beyond the control of the Company. Consequently, all of the forward-looking statements made in this Form 10-Q are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by the Company will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, the Company or its business or operations. The Company assumes no obligation to update publicly any such forward-looking statements, whether as a result of new information, future events, or otherwise.

Risks and Uncertainties

Along with the risks identified in Part II, Item 1A of this Form 10-Q, the risks and uncertainties which might affect the forward-looking statements and the Company, its ability to continue as a going concern, and the trading value of its common stock include concerns that:

- We are significantly dependent on our revenues from BioGlue and are subject to a variety of risks affecting this product;
- Our BioGlue patent has expired in the U.S. and most of the rest of the world. Competitors may utilize the inventions disclosed in the expired patents in competing products, although the competing product will have to be approved by the appropriate regulatory authority;
- Competitors have obtained FDA approval for indications in which BioGlue has been used off-label and for which we cannot market BioGlue, which has reduced, and could continue to reduce, the addressable procedures for BioGlue;
- Our products and tissues are subject to many significant risks, including being recalled or placed on hold by us, the FDA, or other regulatory bodies and being subjected to adverse publicity, which could lead to decreased use, additional regulatory scrutiny, and/or product liability lawsuits;
- The FDA has expressed an intent to reevaluate the classification of CryoValve SG pulmonary valve tissue, and its advisory committee has voted in favor of classification of such tissue as a class III medical device. If CryoValve SG pulmonary valve tissue were to be reclassified as a class III medical device, we would be required to obtain a PMA. If we were unable to obtain a PMA, issuance of the PMA were delayed, or the attendant investment were to make pursuit of a PMA infeasible, we would be unable to distribute CryoValve SG pulmonary valve tissue to our customers, which would materially, adversely impact our revenues, liquidity, and net income;
- Regulatory agencies could require us to change or modify our processes, procedures, and manufacturing operations, and such agencies could reclassify or reevaluate our clearances and approvals to sell our medical devices and tissue services;
- Our tissues, which are not sterile when processed, and our medical devices allegedly have caused, and may in the future cause, injury to patients, which has exposed, and could in the future expose, us to tissue processing and product liability claims and additional regulatory scrutiny and inspections as a result;
- We may be subject to regulatory action by the FDA, including recalls, injunctions, and/or civil money penalties, and the demand for our products and services could be negatively impacted by adverse publicity with respect to such actions. In addition, such actions could impact the availability of our products and tissues and our cost structure, including our revenues, financial condition, profitability, and cash flows;
- We will not fully realize the benefit of our investment in our distribution and license and manufacturing agreements with Starch Medical, Inc. unless we are able to obtain FDA approval to distribute PerClot in the U.S., which will require an additional commitment of funds;
- We may ultimately be unsuccessful in our PerClot clinical trials and/or may be unable to obtain FDA approval to market and distribute PerClot in the U.S. Even if we receive FDA approval, we may be unsuccessful in our efforts to sell PerClot in the U.S., as other competing products may have penetrated the market by that time;
- Our litigation with Medafor will continue to be expensive, and if we lose, we may be prohibited from selling PerClot and its derivative products, such as PerClot Topical, or we may have to pay substantial royalties or damages related to such sales;
- The receipt of impaired materials or supplies that do not meet our standards, the recall of materials or supplies by our vendors or suppliers, or our inability to obtain materials and supplies could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows;
- Certain of our key production inputs are sourced from single suppliers. Should those suppliers experience production or other disruptions or temporarily suspend or discontinue their business operations or relevant product lines or configurations, or should we be unable to successfully negotiate agreements with them for continued supply, our production output could be reduced or halted, which could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows;
- We continue to evaluate expansion through acquisitions, licenses, investments, and other distribution arrangements in other companies or technologies, and such actions involve the risk of unknown liabilities, and could result in the dilution of our stockholders' value, the consumption of resources that may be necessary to operate our business, the incurrence of debt on unfavorable terms, and unfavorable tax consequences;
- We may not realize the anticipated benefits from acquisitions, and we may be unable to integrate, upgrade, or replace systems acquired in acquisitions, secure the services of key employees, or succeed in the marketplace with the acquisition;

- Our sales are impacted by challenging domestic and international economic conditions and their constraining effect on hospital budgets, and demand for our products and tissues could decrease in the future, which could have a material, adverse impact on our business;
- Healthcare policy changes, including recent federal legislation to reform the U.S. healthcare system, may have a material, adverse impact on us;
- Key growth strategies may not generate the anticipated benefits;
- We may not be successful in obtaining necessary clinical results and regulatory approvals for products and services in development, and our new products and services may not achieve market acceptance;
- Extensive government regulation may adversely impact our ability to develop and market products and services, and restrictive laws, regulations, and rules could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows;
- Uncertainties related to patents and protection of proprietary technology may adversely impact the value of our intellectual property or may result
 in our payment of significant monetary damages and/or royalty payments, negatively impacting our ability to sell current or future products, or
 prohibit us from enforcing our patent and other proprietary technology rights against others;
- Our right to receive additional payments for our Medafor common stock is subject to revenue performance conditions related to the Arista product, with respect to which we have no control or ability to predict;
- Intense competition may impact our ability to operate profitably;
- If we are not successful in expanding our business activities in international markets, it 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;
- Consolidation in the healthcare industry could continue to result in demands for price concessions, limits on the use of our products and tissues, and limitations on our ability to sell to certain of our significant market segments;
- The success of many of our products and tissues depends upon strong relationships with physicians;
- Our existing insurance policies may not be sufficient to cover our actual claims liability, and 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;
- We are not insured against all potential losses. Natural disasters or other catastrophes could adversely impact our business;
- Our current plans and ability to continue to pay a quarterly cash dividend may change;
- Our credit facility limits our ability to pursue significant acquisitions and also may limit our ability to borrow;
- Continued fluctuation of foreign currencies relative to the U.S. Dollar could materially, adversely impact our business;
- Rapid technological change could cause our products and services to become obsolete; and
- We are dependent on our key personnel.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

The Company's interest income and interest expense are sensitive to changes in the general level of U.S. interest rates. In this regard, changes in U.S. interest rates affect the interest earned on the Company's cash and cash equivalents of \$35.1 million and restricted cash of \$5.0 million and interest paid on the Company's variable rate line of credit as of June 30, 2015. A 10% adverse change in interest rates, as compared to the rates experienced by the Company in the six months ended June 30, 2015, affecting the Company's cash and cash equivalents, restricted cash and securities, and line of credit would not have a material effect 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 and PerClot 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, Euros, Swiss Francs, and Singapore Dollars. 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. During the first half of 2015, the U.S. Dollar has strengthened materially as compared to the British Pound and Euro, and as a result, the Company's revenues denominated in these currencies have decreased when translated into U.S. Dollars. Any further change in these exchange rates could have a material, adverse effect on the Company's revenues denominated in these currencies.

An additional 10% adverse change in exchange rates from the exchange rates in effect on June 30, 2015 affecting the Company's balances denominated in foreign currencies would not have had a material effect 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 six months ended June 30, 2015, affecting the Company's revenue and expense transactions denominated in foreign currencies, would not have had a material effect on the Company's financial position, profitability, or cash flows.

Item 4. Controls and Procedures.

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

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

Based upon the most recent Disclosure Controls evaluation conducted by management with the participation of the CEO and CFO, as of June 30, 2015 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 Company's management utilizes the criteria set forth in "Internal Control-Integrated Framework (1992)" issued by the Committee of Sponsoring Organizations of the Treadway Commission to evaluate the effectiveness of its internal controls over financial reporting. During the quarter ended June 30, 2015 there were no changes in the Company's internal control over financial reporting that materially affected, or that are reasonably likely to materially affect, the Company's internal control over financial reporting.

Part II - OTHER INFORMATION

Item 1. Legal Proceedings.

In April 2014 CryoLife filed a declaratory judgment lawsuit against C.R. Bard, Inc. ("Bard"), and its subsidiaries Davol, Inc. ("Davol") and Medafor, Inc. ("Medafor") (collectively, "Defendants"), in the U.S. District Court for the District of Delaware (the "District Court"). CryoLife requested that the District Court declare that CryoLife's manufacture, use, offer for sale, and sale of PerClot in the U.S. does not, and would not, infringe Bard's U.S. Patent No. 6,060,461 (the "461 Patent"). In addition, CryoLife requested that the District Court declare that the claims of the '461 Patent are invalid. As part of the relief requested, CryoLife requested injunctive relief and an award of attorneys' fees.

The lawsuit against the Defendants followed the receipt by CryoLife of a letter from Medafor in September 2012 stating that PerClot, when introduced in the U.S., would infringe the '461 Patent when used in accordance with the method published in CryoLife's literature and with the instructions for use. CryoLife received FDA 510(k) clearance for the sale of PerClot Topical in April 2014, began distributing PerClot Topical in August 2014, and received IDE approval in March 2014 to begin clinical trials for PerClot in certain surgical indications.

In September 2014 Medafor filed a motion for a preliminary injunction, asking the District Court to enjoin CryoLife's marketing and sale of PerClot in the U.S. In March 2015 the District Court ruled that CryoLife's declaratory judgment lawsuit against Medafor may proceed but dismissed Bard and Davol from the lawsuit. The District Court also granted Medafor's motion for a preliminary injunction, which prohibits CryoLife from marketing, selling, and distributing PerClot in the U.S. while the litigation proceeds. In March 2015 CryoLife ceased all marketing, sales, and distribution of PerClot, including PerClot Topical, in the U.S. in accordance with the District Court's order. In April 2015 CryoLife appealed the District Court's ruling to the U.S. Court of Appeals for the Federal Circuit, and CryoLife dismissed this appeal in June 2015. The District Court proceedings are scheduled to resume in late August 2015.

Item 1A. Risk Factors.

There have been no material changes to the Risk Factors as previously disclosed in Part I, Item 1A, "Risk Factors" in our 10-K for the year ended December 31, 2014.

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

(c) The following table provides information about purchases by the Company during the quarter ended June 30, 2015 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 and Common Stock Units

| Period | Total Number of Common Shares and Common Stock Units Purchased | Average Price Paid per Common Share | Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs | Dollar Value of Common Shares That May Yet Be Purchased Under the Plans or Programs |
|---------------------|---|---|--|---|
| 04/01/15 - 04/30/15 | 44,404 | \$ 10.18 | | \$ |
| 05/01/15 - 05/31/15 | | | | |
| 06/01/15 - 06/30/15 | | | | |
| Total | 44,404 | 10.18 | | |

The common shares purchased during the quarter ended June 30, 2015 were tendered to the Company in payment of the exercise price of outstanding options and taxes on stock compensation and were not part of a publicly announced plan or program.

Under the Company's amended and restated 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 also entitled to repurchase up to approximately \$14.0 million of common stock under an authorized stock repurchase plan without obtaining its lender's consent.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibit index can be found below.

| Exhibit Number | Description |
|--|--|
| 3.1 | Amended and Restated Articles of Incorporation of the Company. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 10- Q filed October 28, 2014.) |
| 3.2 | Amended and Restated By-Laws. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed July 27, 2011.) (File No. 001-13165) |
| 4.1 | Form of Certificate for the Company's Common Stock. (Incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997.) (File No. 001-13165) |
| 4.2 | First Amended and Restated Rights Agreement, dated as of November 2, 2005, between CryoLife, Inc. and American Stock Transfer & Trust Company. (Incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K filed November 3, 2005.) (File No. 001- 13165) |
| 10.1 | Separation Agreement between CryoLife and Steven G. Anderson dated April 9, 2015. (Incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed April 10, 2015.) (File No. 001-13165) |
| 10.2 | Compensation Arrangement between CryoLife and David M. Fronk dated April 24, 2015. (Incorporated herein by reference to Item 5.02 to Registrant's Current Report on Form 8-K filed April 27, 2015.) (File No. 001-13165) |
| 10.3* | CryoLife, Inc. Equity and Cash Incentive Plan. |
| 10.4* | Form of Amendment to Performance Share Agreement with Named Executive Officers. |
| 31.1* | Certification by J. Patrick Mackin 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** 101.INS* 101.SCH* 101.CAL* 101.DEF* 101.LAB* 101.PRE* | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002. XBRL Instance Document XBRL Taxonomy Extension Schema Document XBRL Taxonomy Extension Calculation Linkbase Document XBRL Taxonomy Extension Definition Linkbase XBRL Taxonomy Extension Label Linkbase Document XBRL Taxonomy Extension Label Linkbase Document XBRL Taxonomy Extension Presentation Linkbase Document |

* Filed herewith.

** Furnished herewith.

SIGNATURES

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

/s/ J. PATRICK MACKIN

J. PATRICK MACKIN Chairman, President, and Chief Executive Officer (Principal Executive Officer)

July 28, 2015 DATE CRYOLIFE, INC. (Registrant)

/s/ D. ASHLEY LEE

D. ASHLEY LEE

Executive Vice President, Chief Operating Officer, and Chief Financial Officer (Principal Financial and Accounting Officer)

CRYOLIFE, INC. EQUITY AND CASH INCENTIVE PLAN

SECTION 1

GENERAL

1.1 <u>Purpose</u>. The CryoLife, Inc. Equity and Cash Incentive Plan (the "Plan") has been established by CryoLife, Inc. (the "Company") to (i) attract and retain persons eligible to participate in the Plan; (ii) motivate Participants (as defined in Section 1.2 below), by means of appropriate incentives, to achieve annual and long-range goals; (iii) provide equity compensation to Directors of the Company; (iv) provide incentive compensation opportunities to employee Participants that are competitive with those of other similar companies; and (iv) further identify Participants' interests with those of the Company's stockholders through compensation that is based on the Company's common stock; and thereby promote the long-term financial interests of the Company and its Subsidiaries, as defined in Section 11(i), including the growth in value of the Company's equity and enhancement of long-term stockholder return. Pursuant to the Plan, Participants may receive Options, SARs, Other Stock Awards, or Cash-Based Awards, each as defined herein (collectively referred to as "Awards"). The Plan is designed so that Awards granted hereunder intended to comply with the requirements for "performance -based compensation" under Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code"), may comply with such requirements, and the Plan and such Awards shall be interpreted in a manner consistent with such requirements.

1.2 <u>Participation</u>. Subject to the terms and conditions of the Plan, the Committee (as defined in Section 6) shall determine and designate, from time to time, from among the Eligible Grantees, as defined in Section 11(f), those persons who will be granted one or more Awards under the Plan, and thereby become "Participants" in the Plan. In the discretion of the Committee, a Participant may be granted any Award permitted under the provisions of the Plan, and more than one Award may be granted to a Participant. Subject to the provisions of Section 8.2(e), Awards may be granted as alternatives to or replacement of awards outstanding under the Plan, or any other plan or arrangement of the Company or a Subsidiary (including a plan or arrangement of a business or entity, all or a portion of which is acquired by the Company or a Subsidiary).

1.3 <u>Operation, Administration, and Definitions</u>. The operation and administration of the Plan, including the Awards made under the Plan, shall be subject to the provisions of Section 7 (relating to operation and administration). Capitalized terms in the Plan shall be defined as set forth in the Plan (including the definition provisions of Section 11 of the Plan).

SECTION 2

OPTIONS AND SARS

2.1 Definitions.

(a) The grant of an "Option" entitles the Participant to purchase shares of Stock at an Exercise Price established by the Committee. Options granted under this Section 2 may either be Incentive Stock Options ("ISOs") or Non-Qualified Options ("NQOs"), as determined in the discretion of the Committee. An "ISO" is an Option that is intended to satisfy the requirements applicable to an "incentive stock option" described in Section 422(b) of the Code. An "NQO" is an Option that is not intended to be an "incentive stock option" as that term is described in Section 422(b) of the Code.

(b) A stock appreciation right (a "SAR") entitles the Participant to receive, in cash or Stock (as determined in accordance with Subsection 2.5), value equal to (or otherwise based on) the excess of: (a) the Fair Market Value (as defined in Section 11) of a specified number of shares of Stock at the time of exercise; over (b) an Exercise Price established by the Committee.

2.2 Exercise Price. The Exercise Price of each Option and SAR granted under this Section 2 shall be not less than 100% of the Fair Market Value of a share of Stock on the date of grant of the Award. Unless a higher price is established by the Committee or determined by a method established by the Committee at the time the Option or SAR is granted, the Exercise Price for each Option and SAR shall be equal to 100% of the Fair Market Value on the date of grant of the Award.

2.3. Exercise. An Option and an SAR shall be exercisable in accordance with such terms and conditions and during such periods as may be established by the Committee, before or after grant.

2.4 Payment of Option Exercise Price. The payment of the Exercise Price of an Option granted under this Section 2 shall be subject to the following:

(a) Subject to the following provisions of this Subsection 2.4, the full Exercise Price for shares of Stock purchased upon the exercise of any Option shall be paid at the time of such exercise (except that, in the case of an exercise arrangement approved by the Committee and described in paragraph 2.4(c), payment may be made as soon as practicable after the exercise).

(b) The Exercise Price shall be payable in cash or by tendering (by actual delivery of shares) unrestricted shares of Stock that are acceptable to the Committee, valued at Fair Market Value as of the day the shares are tendered, or in any combination of cash or shares, as determined by the Committee.

(c) To the extent permitted by applicable law, a Participant may elect to pay the Exercise Price upon the exercise of an Option by irrevocably authorizing a third party to sell shares of Stock (or a sufficient portion of the shares) acquired upon exercise of the Option and remit to the Company a sufficient portion of the sale proceeds to pay the entire Exercise Price and any tax withholding resulting from such exercise.

2.5 <u>Settlement of Award</u>. Shares of Stock delivered pursuant to the exercise of an Option or an SAR shall be subject to such conditions, restrictions and contingencies as the Committee may establish in the applicable Award Agreement. Settlement of SARs may be made in shares of Stock (valued at their Fair Market Value at the time of exercise), in cash, or in a combination thereof, as determined in the discretion of the Committee. The Committee, in its discretion, may impose such conditions, restrictions and contingencies with respect to shares of Stock acquired pursuant to the exercise of an Option or an SAR as the Committee determines to be desirable.

2.6 Restrictions on Options and SAR Awards. Each Option and SAR shall be subject to the following:

(a) The term of any Option or SAR granted under the Plan shall not exceed seven years from the date of grant.

(b) Any such Award shall be subject to such conditions, restrictions and contingencies as the Committee shall determine.

(c) The Committee may designate whether any such Awards being granted to any Participant are intended to be "qualified performance-based compensation" as that term is used in Section 162(m) of the Code. Any such Awards designated as intended to be "qualified performance-based compensation" shall be conditioned on the achievement of one or more Performance Goals, to the extent required by Section 162(m).

SECTION 3

OTHER STOCK AWARDS

3.1 Definitions. The term "Other Stock Awards" means any of the following:

(a) A "Stock Unit" Award is the grant of a right to receive shares of Stock in the future.

(b) A "Performance Share" Award is a grant of a right to receive shares of Stock or Stock Units, which is contingent on the achievement of performance or other objectives during a specified period.

(c) A "Restricted Stock" Award is a grant of shares of Stock, and a "Restricted Stock Unit" Award is the grant of a right to receive shares of Stock in the future, with such shares of Stock or right to future delivery of such shares of Stock subject to a risk of forfeiture or other restrictions that will lapse upon the achievement of one or more goals relating to completion of service by the Participant, or achievement of performance or other objectives, as determined by the Committee.

3.2 <u>Restrictions on Other Stock Awards</u>. Each Stock Unit Award, Restricted Stock Award, Restricted Stock Unit Award and Performance Share Award shall be subject to the following:

(a) Any such Award shall be subject to such conditions, restrictions and contingencies as the Committee shall determine.

(b) The Committee may designate whether any such Awards being granted to any Participant are intended to be "qualified performance-based compensation" as that term is used in Section 162(m) of the Code. Any such Awards designated as intended to be "qualified performance-based compensation" shall be conditioned on the achievement of one or more Performance Goals.

SECTION 4

CASH-BASED AWARDS

4.3 <u>Definitions</u>. The term "Cash-Based Award" means a right or other interest granted to a Participant under Section 4.2 of the Plan that may be denominated or payable in cash, other than an Award pursuant to which the amount of cash is determined by reference to the value of a specific number of shares of Stock. For the avoidance of doubt, dividend equivalents constitute Cash-Based Awards.

4.2 <u>Grant of Cash-Based Awards</u>. The Committee is authorized to grant Awards to Participants in the form of Cash-Based Awards, as deemed by the Committee to be consistent with the purposes of the Plan, subject to such vesting and other conditions as the Committee shall determine in its sole discretion. At the time of the grant of Cash-Based Awards, the Committee may place restrictions on the payout or vesting of Cash-Based Awards that shall lapse, in whole or in part, only upon the attainment of Performance Goals. The Committee shall determine the terms and conditions of such Awards at the date of grant. The maximum dollar amount that may be covered by all Cash-Based Awards granted to any individual during any fiscal year under the Plan is \$1.5 million. At the discretion of the Committee, Cash-Based Awards under this Plan may be issued jointly under this Plan and any other cash incentive or similar plan of the Company; provided, however, that if a Cash-Based Award is issued under this Plan and another plan of the Company, to the extent of a conflict in the provisions of this Plan and the other plan, the terms of this Plan shall control.

SECTION 5

QUALIFIED PERFORMANCE-BASED COMPENSATION

5.1 Grant of Qualified Performance-Based Compensation. The Committee may determine that any Awards granted to a Covered Employee shall be considered "qualified performance-based compensation" under Section 162(m) of the Code, in which case the provisions of this Section 5 shall apply. When Awards are made under this Section 5, the Committee shall establish in writing (i) the objective Performance Goals that must be met, (ii) the period during which performance will be measured, (iii) the maximum amounts that may be paid if the Performance Goals are met, and (iv) any other conditions that the Committee deems appropriate and consistent with the requirements of Section 162(m) of the Code for "qualified performance-based compensation." The Performance Goals shall satisfy the requirements for "qualified performance-based compensation," including the requirement that the achievement of the goals be substantially uncertain at the time they are established and that the Performance

Goals be established in such a way that a third party with knowledge of the relevant facts could determine whether and to what extent the Performance Goals have been met. The Committee shall not have discretion to increase the amount of compensation that is payable, but may reduce the amount of compensation that is payable, pursuant to Awards identified by the Committee as "qualified performance-based compensation."

5.2 <u>Pre-establishment of Performance Goals</u>. Performance Goals must be pre-established by the Committee. A Performance Goal is considered preestablished if it is established in writing not later than 90 days after the commencement of the period of service to which the Performance Goal relates, provided that the outcome is substantially uncertain at the time the Committee actually established the goal. However, in no event will a Performance Goal be considered pre-established if it is established after 25% of the period of service (as scheduled in good faith at the time the goal is established) has elapsed.

5.3 Adjustments to Performance Goals. The Committee in its sole discretion shall have the authority to make equitable adjustments to the Performance Goals in recognition of unusual or non-recurring events affecting the Company or any Subsidiary of the Company or the financial statements of the Company or any Subsidiary of the Company, in response to changes in applicable laws or regulations, including changes in generally accepted accounting principles or practices, or to account for items of gain, loss or expense determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business, as applicable, provided such adjustment occurs in writing not later than 90 days after the commencement of the period of service to which the Performance Goal relates (and in no event later than the date that 25% of the period of service has elapsed). In addition, the Committee may specify that certain equitable adjustments to the Performance Goals will be made during the applicable performance period, provided such specification occurs in writing not later than 90 days after the commencement of the period of service to which the Performance Boal relates (and in no event later than the date that 25% of the period coal relates (and in no event later than the date that 25% of the period of service for a later than the date that 25% of the period of service bas elapsed).

5.4 <u>Certification of Performance Results</u>. The Committee shall certify the satisfaction of the Performance Goal for the applicable performance period specified in the Award agreement after the performance period ends and prior to any payment with respect to the Award. The Committee shall determine the amount, if any, to be paid pursuant to each Award based on the achievement of the Performance Goals and the satisfaction of all other terms of the Award agreement.

5.5 <u>Payment Upon Death or Disability</u>. The Committee may provide in the Award agreement that Awards under this Section 5 shall be payable, in whole or in part, in the event of the Participant's death or disability, or under other circumstances consistent with the Treasury regulations and rulings under Section 162(m) of the Code.

SECTION 6

STOCK SUBJECT TO THE PLAN

6.1 Awards Subject to Plan. Awards granted under the Plan shall be subject to the following:

(a) Subject to the following provisions of this Subsection 6.1, the maximum number of shares of Stock that may be delivered to Participants and their beneficiaries under the Plan shall be 7.1 million shares of Stock, less the number of shares of Stock subject to Awards that have been granted from May 21, 2014 through May 20, 2015 and have not been forfeited as of May 20, 2015. Shares of Stock issuable hereunder may, in whole or in part, be authorized but unissued shares or shares of Stock that shall have been or may be reacquired by the Company in the open market, in private transactions or otherwise. Notwithstanding the foregoing, with respect to SARs that are settled in Stock, the aggregate number of shares of Stock subject to the SAR grant shall be counted against the shares available for issuance under the Plan as one share for every share subject thereto, regardless of the number of shares used to settle the SAR upon exercise.

(b) Subject to adjustment in accordance with Subsections 6.2 and 6.3, the following additional maximums are imposed under the Plan:

(i) Subject to the proviso contained in this paragraph, the maximum number of shares of Stock that may be issued in conjunction with Other Stock Awards granted pursuant to Section 3 shall be up to 500,000 shares; provided, however, that for every share of Stock in excess of 500,000 awarded hereunder in respect of Other Stock Awards, the maximum number of shares reserved for grant hereunder shall be reduced by 1.5 shares.

(ii) The maximum number of shares of Stock that may be covered by Awards granted to any one individual pursuant to Section 2 (relating to Options and SARs) shall be 400,000 during any fiscal year and the maximum number of shares of Stock that may be covered by Other Stock Awards granted to any one individual pursuant to Section 3 shall be 250,000 during any fiscal year; and

(c) To the extent any shares of Stock covered by an Award are not delivered to a Participant or beneficiary because the Award is forfeited or canceled, or the shares of Stock are not delivered because the Award is settled in cash, such shares shall not be deemed to have been delivered for purposes of determining the maximum number of shares of Stock available for delivery under the Plan. To the extent that shares of Stock subject to Other Stock Awards, and the issuance of which reduced the maximum number of shares authorized for issuance under the Plan by 1.5 shares, are forfeited or cancelled, or if such an Award terminates or expires without a distribution of shares to the Participant, the number of shares of Stock remaining for Award grants hereunder shall be increased by 1.5 for each share forfeited, cancelled or otherwise not delivered. Shares of Stock shall not again be available if such shares are surrendered or withheld as payment of either the exercise price of an Award and/ or withholding taxes in respect of an Award. Awards that are settled solely in cash shall not reduce the number of shares of Stock as to which the Award is exercised and, notwithstanding the foregoing, such number of shares of shares of stock available for Award, such related Awards shall no longer be available for Awards under the Plan. The maximum number of shares of Stock available for delivery of shares of stock available for delivery of shares of stock available for delivery inder the Plan. The maximum number of shares of Stock available for delivery of shares of stock available for delivery in a acquisition of an interest in another company.

6.2 Adjustments for Changes in Capitalization. If the outstanding shares of Stock are changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any recapitalization, reclassification, stock split, stock dividend, combination, subdivision or similar transaction, or if the Company makes an extraordinary dividend or distribution to its stockholders (including without limitation to implement a spinoff) (each, a "Corporate Transaction") then, subject to any required action by the stockholders of the Company, the number and kind of shares of Company stock available under the Plan or subject to any limit or maximum hereunder shall automatically be proportionately adjusted, with no action required on the part of the Committee or otherwise. Subject to any required action by the stockholders, the number and kind of shares covered by each outstanding Award, and the price per share in each such Award, shall also be automatically proportionately adjusted for any increase or decrease in the number of such shares, or any decrease in the value of such shares, or any decrease in the value of such shares, or Other Stock Award in making the foregoing adjustments. All adjustments made pursuant to this Section shall be final, conclusive and binding upon the holders of Options, SARs and Other Stock Awards.

6.3 <u>Certain Mergers and Other Extraordinary Events</u>. If the Company merges or consolidates with another corporation, or if the Company is liquidated or sells or otherwise disposes of substantially all of its assets while unexercised Options or other Awards remain outstanding under this Plan, (A) subject to the provisions of clause (C) below, after the effective date of the merger, consolidation, liquidation, sale or other disposition, as the case may be, whether or not the Company is the surviving corporation, each holder of an outstanding Option or other Award shall be entitled, upon exercise of that Option or Award or in place of it, as the case may be, to receive, at the option of the Committee and in lieu of shares of Stock, (i) the number and class or classes of shares of Stock or other securities or property to which the holder would have been entitled if, immediately prior to the merger, consolidation, liquidation, sale or other disposition, he holder had been the holder of record of a number of shares of Stock equal to the number of shares of Stock as to which that Option may be exercised or are subject to the Award or (ii) shares of stock of the company that is the surviving corporation, liquidation, sele or other disposition having a value, as of the date of payment under Subsection 6.3(i) as determined by the Committee in its sole discretion, equal to the value of the shares of Stock or other securities or property otherwise payable under Subsection 6.3(i); (B) whether or not the Company is the surviving corporation, if Options or other Awards have not already become exercisable, the Board of Directors may waive any limitations set forth in or imposed pursuant to this Plan so that all Options or other Awards, from and after a date prior to the effective date of that merger, consolidation, liquidation, sale or other disposition, as the case may be, specified by the Board of Directors, shall be exercisable in full; and (C) all outstanding Options or SARs may be cancelled by the Board of Directors as o

with respect to a merger or consolidation the Company is not the surviving company, and provided further that any optionee or SAR holder shall have the right immediately prior to such event to exercise his or her Option or SAR to the extent such optionee or holder is otherwise able to do so in accordance with this Plan or his or her individual Option or SAR agreement; provided, further, that any such cancellation pursuant to this Section 6.3 shall be contingent upon the payment to the affected Participants of an amount equal to (i) in the case of any out-of-the-money Option or SAR, cash, property or a combination thereof having an aggregate value equal to the value of such Option or SAR, as determined by the Committee or the Board of Directors, as applicable, in its sole discretion, and (ii) in the case of an in-the-money Option or SAR, cash, property or a combination thereof having an aggregate value equal to the excess of the value of the per-share amount of consideration paid pursuant to the merger, consolidation, liquidation, sale or other disposition, as the case may be, giving rise to such cancellation, over the exercise price of such Option or SAR multiplied by the number of shares of Stock subject to the Option or SAR.

Any adjustments pursuant to this Subsection 6.3 shall be made by the Board or Committee, as the case may be, whose determination in that respect shall be final, binding and conclusive, regardless of whether or not any such adjustment shall have the result of causing an ISO to cease to qualify as an ISO.

6.4 <u>Changes in Par Value</u>. In the event of a change in the shares of the Company as presently constituted, which is limited to a change of all of its authorized shares with par value into the same number of shares with a different par value or without par value, the shares resulting from any such change shall be deemed to be the shares within the meaning of this Plan.

6.5 Limitation on Grantees' Rights. Except as hereinbefore expressly provided in this Section 6, a Participant shall have no rights by reason of any subdivision or consolidation of shares of stock of any class or the payment of any stock dividend or any other increase or decrease in the number of shares of stock of any class or by reason of any dissolution, liquidation, merger, or consolidation or spin-off of assets or stock of another corporation, and any issue by the Company of shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Stock subject to an Award, unless the Committee shall otherwise determine.

6.6 <u>Company Right and Power</u>. The grant of any Award pursuant to this Plan shall not adversely affect in any way the right or power of the Company (A) to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, (B) to merge or consolidate, (C) to dissolve, liquidate or sell, or transfer all or any part of its business or assets or (D) to issue any bonds, debentures, preferred or other preference stock ahead of or affecting the Stock.

6.7 <u>Fractional Shares</u>. If any action described in this Section 6 results in a fractional share for any Participant under any Award hereunder, such fraction shall be completely disregarded and the Participant shall be entitled only to the whole number of shares resulting from such adjustment.

SECTION 7

OPERATION AND ADMINISTRATION

7.1 Effective Date: Duration. The Plan was originally effective as of the date of its initial approval by the stockholders of the Company, May 19, 2009. The Plan was then amended and restated by the Board in February 2012, and such amended and restated Plan became effective upon the approval of the stockholders of the Company on May 16, 2012. The Plan was then amended and restated by the Board in February 2014, and such amended and restated Plan became effective upon the approval of the stockholders of the Company on May 21, 2014. Upon approval of the Plan at the annual stockholders meeting in 2015, the Plan shall have a duration of six years from May 21, 2015; provided that in the event of Plan termination, the Plan shall remain in effect as long as any Awards under it are outstanding; provided further, however, that no Award may be granted under the Plan on a date that is more than six years from May 21, 2015.

7.2 Vesting. Except as set forth below and in Section 6.3, and other than Options, SARs, Restricted Stock, Restricted Stock Units or Other Stock Awards conditioned upon the attainment of Performance Goals that relate to performance periods of at least one fiscal year, and except to the extent accelerated by the Committee upon death,

disability, retirement or Change in Control, no Option, SAR, Restricted Stock, Restricted Stock Units or Other Stock Awards granted hereunder to any Eligible Grantee other than a non-employee Director of the Company may vest in excess of ¹/₃ of the number of shares subject to the Award per year for the first three years after the grant date, and no such Award granted hereunder to any Eligible Grantee that is a non-employee Director of the Company may vest prior to the May 15th next following the grant date. Unless the Committee determines otherwise, the date on which the Committee adopts a resolution expressly granting an Award shall be considered the day on which such Award is granted. The term of any Award granted under the Plan will not exceed seven years from the date of grant.

7.3 <u>Uncertificated Stock</u>. To the extent that the Plan provides for issuance of stock certificates to reflect the issuance of shares of Stock, the issuance may be effected on a non-certificated basis, to the extent not prohibited by applicable law or the applicable rules of any stock exchange.

7.4 <u>Tax Withholding</u>. All distributions under the Plan are subject to withholding of all applicable taxes, and the Committee may condition the delivery of any shares or other benefits under the Plan on satisfaction of the applicable withholding obligations. The Committee, in its discretion, and subject to such requirements as the Committee may impose prior to the occurrence of such withholding, may permit such withholding obligations to be satisfied through cash payment by the Participant, through the surrender of shares of Stock which the Participant already owns, or through the surrender of unrestricted shares of Stock to which the Participant is otherwise entitled under the Plan, but only to the extent of the minimum amount required to be withheld under applicable law.

7.5 <u>Use of Shares</u>. Subject to the overall limitation on the number of shares of Stock that may be delivered under the Plan, the Committee may use available shares of Stock as the form of payment for compensation, grants or rights earned or due under any other compensation plans or arrangements of the Company or a Subsidiary, including the plans and arrangements of the Company or a Subsidiary assumed in business combinations.

7.6 <u>Dividends and Dividend Equivalents</u>. An Award (including, without limitation, an Option or SAR Award) may provide the Participant with the right to receive dividend payments or dividend equivalent payments with respect to Stock subject to the Award (both before and after the Stock subject to the Award is earned, vested, or acquired), which payments may be either made currently or credited to an account for the Participant, and may be settled in cash or Stock as determined by the Committee. Any such settlements, and any such crediting of dividends or dividend equivalents or reinvestment in shares of Stock, may be subject to such conditions, restrictions and contingencies as the Committee shall establish, including the reinvestment of such credited amounts in Stock equivalents. In the event an Award is conditioned on the achievement of one or more Performance Goals, any dividend payments or dividend equivalent payments will only be earned, vested or acquired to the extent the underlying Stock subject to the Award is earned, vested or acquired.

7.7 <u>Payments</u>. Awards may be settled through cash payments, the delivery of shares of Stock, the granting of replacement Awards, or any combination thereof as the Committee shall determine. Any Award settlement, including payment deferrals, may be subject to such conditions, restrictions and contingencies as the Committee shall determine. The Committee may permit or require the deferral of any Award payment, subject to such rules and procedures as it may establish.

7.8 <u>Transferability</u>. Except as otherwise provided by the Committee, Awards under the Plan are not transferable except as designated by the Participant by will or by the laws of descent and distribution.

7.9 <u>Form and Time of Elections</u>. Unless otherwise specified herein, each election required or permitted to be made by any Participant or other person entitled to benefits under the Plan, and any permitted modification, or revocation thereof, shall be in writing filed with the Committee at such times, in such form, and subject to such restrictions and limitations, not inconsistent with the terms of the Plan, as the Committee shall require.

7.10 <u>Agreement With Company</u>. An Award under the Plan shall be subject to such terms and conditions, not inconsistent with the Plan, as the Committee shall, in its sole discretion, prescribe. The terms and conditions of any Award to any Participant shall be reflected in such form of written document as is determined by the Committee. A copy of such document shall be provided to the Participant, and the Committee may, but need not, require that the Participant sign a copy of such document. Such document is referred to in the Plan as an "Award Agreement" regardless of whether any Participant signature is required.

7.11 Action by Company or Subsidiary. Any action required or permitted to be taken by the Company or any Subsidiary shall be by resolution of its Board of Directors, or by action of one or more members of the Board (including a committee of the Board) who are duly authorized to act for the Board, or (except to the extent prohibited by applicable law or applicable rules of any stock exchange) by a duly authorized officer of such company.

7.12 Gender and Number. Where the context admits, words in any gender shall include any other gender, words in the singular shall include the plural and the plural shall include the singular.

7.13 Limitation of Implied Rights.

(a) Neither a Participant nor any other person shall, by reason of participation in the Plan, acquire any right in or title to any assets, funds or property of the Company or any Subsidiary whatsoever, including, without limitation, any specific funds, assets, or other property which the Company or any Subsidiary, in its sole discretion, may set aside in anticipation of a liability under the Plan. A Participant shall have only a contractual right to the Stock or amounts, if any, payable under the Plan, unsecured by any assets of the Company or any Subsidiary, and nothing contained in the Plan shall constitute a guarantee that the assets of the Company or any Subsidiary shall be sufficient to pay any benefits to any person.

(b) The Plan does not constitute a contract of employment, and selection as a Participant will not give any participating employee the right to be retained in the employ of the Company or any Subsidiary, nor any right or claim to any benefit under the Plan, unless such right or claim has specifically accrued under the terms of the Plan. Except as otherwise provided in the Plan, no Award under the Plan shall confer upon the holder thereof any rights as a stockholder of the Company prior to the date on which the individual fulfills all conditions for receipt of such rights.

7.14 Evidence. Evidence required of anyone under the Plan may be by certificate, affidavit, document or other information which the person acting on it considers pertinent and reliable, and shall be signed, made or presented by the proper party or parties.

7.15 Termination of Employment Following Change In Control. In the event that the employment of a Participant who is an employee of the Company or a Subsidiary is terminated by the Company during the six-month period following a Change in Control, all of such Participant's outstanding Options and SARs may thereafter be exercised by the Participant, to the extent that such Options and SARs were exercisable as of the date of such termination of employment (x) for a period of six months from such date of termination or (y) until expiration of the stated term of such Option or SAR, whichever period is the shorter.

7.16 Section 409A. It is intended that all Options and SARs granted under the Plan shall be exempt from the provisions of Section 409A of the Code and that all Other Stock Awards under the Plan, to the extent that they constitute "non-qualified deferred compensation" within the meaning of Section 409A of the Code, will comply with Section 409A of the Code (and any regulations and guidelines issued thereunder). The Plan and any Award Agreements issued hereunder may be amended in any respect deemed by the Board or the Committee to be necessary in order to preserve compliance with Section 409A of the Code.

7.17 Regulations and Other Approvals.

(a) The obligation of the Company to sell or deliver Stock with respect to any Award granted under the Plan or make any other distribution of benefits under the Plan shall be subject to all applicable laws, rules and regulations, including all applicable federal and state securities laws (including, without limitation, the requirements of the Securities Act of 1933) and all applicable requirements of any securities exchange or similar entity, and the obtaining of all such approvals by governmental agencies as may be deemed necessary or appropriate by the Committee.

(b) Each Award is subject to the requirement that, if at any time the Committee determines, in its absolute discretion, that the listing, registration or qualification of Stock issuable pursuant to the Plan is required by

any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory body is necessary or desirable as a condition of, or in connection with, the grant of an Award or the issuance of Stock, no such Award shall be granted or payment made or Stock issued, in whole or in part, unless listing, registration, qualification, consent or approval, as applicable, has been effected or obtained free of any conditions not acceptable to the Committee.

(c) In the event that the disposition of Stock acquired pursuant to the Plan is not covered by a then current registration statement under the Securities Act of 1933 and is not otherwise exempt from such registration, such Stock shall be restricted against transfer to the extent required by the Securities Act of 1933, as amended, or regulations thereunder, and applicable state securities laws, and the Committee may require a Participant receiving Stock pursuant to the Plan, as a condition precedent to receipt of such Stock, to represent to the Company in writing that the Stock acquired by such Participant is acquired for investment only and not with a view to distribution.

(d) With respect to persons subject to Section 16 of the Securities and Exchange Act of 1934, as amended, it is the intent of the Company that the Plan and all transactions under the Plan comply with all applicable provisions of Rule 16b-3.

7.18 <u>Awards to Employees Subject to Taxation Outside of the United States</u>. Without amending the Plan, Awards may be granted to Participants who are foreign nationals or who are employed outside the United States or both, on such terms and conditions different from those specified in the Plan as may, in the judgment of the Committee, be necessary or desirable to further the purposes of the Plan. Such different terms and conditions may be reflected in Addenda to the Plan or in the applicable Award Agreement. However, no such different terms or conditions shall be employed if such terms or conditions constitute, or in effect result in, an increase in the aggregate number of shares which may be issued under the Plan or a change in the definition of Eligible Grantee.

SECTION 8

COMMITTEE

8.1 <u>Administration</u>. The authority to control and manage the operation and administration of the Plan shall be vested in a committee (the "Committee") in accordance with this Section 8. The Committee shall be selected by the Board, and shall consist solely of two or more members of the Board who are non-employee Directors within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934, as amended, and are outside Directors within the meaning of Code Section 162(m). If the Committee does not exist, or for any other reason determined by the Board, the Board may take any action under the Plan that would otherwise be the responsibility of the Committee, other than with respect to Awards intended to be "performance-based compensation" under Section 162(m) of the Code. Unless otherwise determined by the Board, CryoLife's Compensation Committee shall be designated as the "Committee" hereunder.

8.2 Powers of Committee. The Committee's administration of the Plan shall be subject to the following:

(a) Subject to the provisions of the Plan, the Committee will have the authority and discretion to select from among the Eligible Grantees those persons who shall receive Awards, to determine the time or times of receipt, to determine the types of Awards and the number of shares or amount of cash covered by the Awards, to establish the terms, conditions, performance criteria, restrictions, and other provisions of such Awards, and (subject to the restrictions imposed by Section 9) to cancel or suspend Awards, and to waive or otherwise modify any vesting or other restrictions contained in awards. The Committee may also, without obtaining stockholder approval, amend any outstanding award to provide the holder thereof with additional rights or benefits of the type otherwise permitted by the Plan, including without limitation, extending the term thereof; provided, however, that in no event may the term of any Option or SAR exceed seven years.

(b) The Committee will have the authority and discretion to interpret the Plan, to establish, amend, and rescind any rules and regulations relating to the Plan, to determine the terms and provisions of any Award

Agreement made pursuant to the Plan, and to make all other determinations that may be necessary or advisable for the administration of the Plan.

(c) Any interpretation of the Plan by the Committee and any decision made by it under the Plan is final and binding on all persons.

(d) In controlling and managing the operation and administration of the Plan, the Committee shall take action in a manner that conforms to the certificate of incorporation and by-laws of the Company, and applicable state corporate law.

(e) Subject to Section 6.2 hereof, neither the Board, the Committee nor their respective delegates shall have the authority to (i) re-price (or cancel and regrant) any Option, SAR or, if applicable, other Award at a lower exercise, base or purchase price, (ii) take any other action (whether in the form of an amendment, cancellation or replacement grant, or a cash-out of underwater options) that has the effect of repricing an Option, SAR or other Award that contains a so-called "reload" feature under which additional Options, SARs or other Awards are granted automatically to the Grantee upon exercise of the original Option, SAR or Award, without in each instance first obtaining the approval of the Company's stockholders.

(f) Anything in the Plan to the contrary notwithstanding, neither the Board nor the Committee may accelerate the payment or vesting of any Option, SAR or other Award except in the event of death, disability, retirement or a Change in Control; provided, however, that Stock Awards and Cash-Based Awards that are intended to be "performance-based compensation" under Section 162(m) of the Code may not be accelerated in the event of retirement with respect to the satisfaction of any Performance Goals.

8.3 <u>Delegation by Committee</u>. Except to the extent prohibited by applicable law or the applicable rules of a stock exchange, the Committee may allocate all or any portion of its responsibilities and powers to any one or more of its members and may delegate all or any part of its responsibilities and powers hereunder, including without limitation, the power to designate Participants hereunder and determine the amount, timing and terms of Awards hereunder, to any person or persons selected by it, including without limitation, any executive officer of the Company; provided that such allocation or delegation is consistent with Section 162(m) of the Code. Any such allocation or delegation may be revoked by the Committee at any time.

8.4 Information to be Furnished to Committee. The Company and Subsidiaries shall furnish the Committee with such data and information as it determines may be required for it to discharge its duties. The records of the Company and Subsidiaries as to an employee's or Participant's employment, termination of employment, leave of absence, reemployment and compensation shall be conclusive unless the Committee determines such records to be incorrect. Participants and other persons entitled to benefits under the Plan must furnish the Committee such evidence, data or information as the Committee considers desirable to carry out the terms of the Plan.

8.5 Indemnification. Each person who is or shall have been a member of the Committee, or the Board, shall be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such action, suit or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall be in addition to any other rights of indemnification or elimination of liability to which such persons may be entitled under the Company's Certificate of Incorporation or Bylaws, as a matter of law, or otherwise, or any power that the Company may have to indemnify them or hold them harmless.

SECTION 9

AMENDMENT AND TERMINATION

(a) The Plan may be terminated or amended by the Board of Directors at any time, except that the following actions may not be taken without stockholder approval:

(i) any increase in the number of shares that may be issued under the Plan (except by certain adjustments provided for under the Plan);

(ii) any change in the class of persons eligible to receive Awards under the Plan;

(iii) any change in the requirements of Section 2.2 hereof regarding the Exercise Price of Options and SARs;

(iv) any re-pricing or cancellation and regrant of any Option or, if applicable, other Award at a lower exercise, base or purchase price, whether in the form of an amendment, cancellation or replacement grant, or a cash-out of underwater options or any action that provides for Awards that contain a so-called "reload" feature under which additional Options or other Awards are granted automatically to the Grantee upon exercise of the original Option or Award; or

(v) any other amendment to the Plan that would require approval of the Company's stockholders under applicable law, regulation or rule.

Notwithstanding any of the foregoing, adjustments pursuant to paragraph 6.2 shall not be subject to the foregoing limitations of this Section 9.

(b) Options, SARs and other Awards may not be granted under the Plan after the date of termination of the Plan, but Options and SARs granted prior to that date shall continue to be exercisable according to their terms and other Awards shall continue to vest in accordance with their terms.

SECTION 10

CHANGE IN CONTROL

Subject to the provisions of paragraph 6.2 (relating to the adjustment of shares), and except as otherwise provided in the Plan or the Award Agreement reflecting the applicable Award, upon the occurrence of a Change in Control as defined in Section 11:

(a) All outstanding Options (regardless of whether in tandem with SARs) shall become fully exercisable.

(b) All outstanding SARs (regardless of whether in tandem with Options) shall become fully exercisable.

(c) All Stock Units, Restricted Stock, Restricted Stock Units, Performance Shares and other Awards, other than Cash-Based Awards, shall become fully vested. (Whether or not Cash-Based Awards shall vest upon a Change in Control shall be determined by the Committee in its discretion, either at or after grant, subject in all cases to compliance with Section 162(m) for Cash-Based Awards intended to be "qualified performance-based compensation" thereunder.)

SECTION 11

DEFINED TERMS

In addition to the other definitions contained herein, the following definitions shall apply:

(a) <u>Award</u>. The term "Award" shall mean any award or benefit granted under the Plan, including, without limitation, the grant of Options, SARs, Other Stock Awards and Cash-Based awards.

(b) Board. The term "Board" shall mean the Board of Directors of the Company.

(c) <u>Change in Control</u>. "Change in Control" means a change in the ownership or effective control of, or in the ownership of a substantial portion of the assets of, the Company, as described in paragraphs (i) through (iii) below.

(i) <u>Change in Ownership of the Company</u>. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), acquires ownership of the Company stock that, together with the Company stock held by such person or group, constitutes more than 50% of the total voting power of the stock of the Company.

(A) If any one person or more than one person acting as a group (within the meaning of paragraph (iv) below), is considered to own more than 50% of the total voting power of the stock of the Company, the acquisition of additional the Company stock by such person or persons shall not be considered to cause a change in the ownership of the Company or to cause a change in the effective control of the Company (within the meaning of paragraph (ii) below).

(B) An increase in the percentage of the Company stock owned by any one person, or persons acting as a group (within the meaning of paragraph (iv) below), as a result of a transaction in which the Company acquires its stock in exchange for property, shall be treated as an acquisition of stock for purposes of this paragraph (i).

(C) Except as provided in (B) above, the provisions of this paragraph (i) shall apply only to the transfer or issuance of the Company stock if such stock remains outstanding after such transfer or issuance.

(ii) Change in Effective Control of the Company.

(A) A change in the effective control of the Company shall occur on the date that either of (1) or (2) below occurs:

(1) Any one person, or more than one person acting as a group (within the meaning of paragraph (iv) below), acquires (or has acquired during the 12 month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company; or

(2) A majority of the members of the Board are replaced during any 12 month period by Directors whose appointment or election is not endorsed by a majority of the Board prior to the date of the appointment or election.

(B) A change in effective control of the Company also may occur with respect to any transaction in which either of the Company or the other entity involved in a transaction experiences a Change of Control event described in paragraphs (i) or (iii).

(C) If any one person, or more than one person acting as a group (within the meaning of paragraph (iv) below), is considered to effectively control the Company (within the meaning of this paragraph (ii)), the acquisition of additional control of the Company by the same person or persons shall not be considered to cause a change in the effective control of the Company (or to cause a change in the ownership of the Company within the meaning of paragraph (i) above).

(iii) <u>Change in Ownership of a Substantial Portion of the Company's Assets</u>. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv) below), acquires (or has acquired during the 12 month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value (within the meaning of paragraph (iii)(B)) equal to or more than 40% of the

total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions.

(A) A transfer of the Company's assets shall not be treated as a change in the ownership of such assets if the assets are transferred to one or more of the following:

(1) A shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company

stock;

(2) An entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company;

(3) A person, or more than one person acting as a group (within the meaning of paragraph (iv) below) that owns, directly or indirectly, 50% or more of the total value or voting power of all of the outstanding stock of the Company; or

(4) An entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a person described in paragraph (iii)(A)(3).

For purposes of this paragraph (iii)(A), and except as otherwise provided, a person's status is determined immediately after the transfer of assets.

(B) For purposes of this paragraph (iii), gross fair market value means the value of all the Company assets, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

(iv) For purposes of this Section 11(c), persons shall be considered to be acting as a group if they are owners of an entity that enters into a merger, consolidation, purchase, or acquisition of assets, or similar business transaction with the Company. If a person, including an entity shareholder, owns stock in the Company and another entity with which the Company enters into a merger, consolidation, purchase, or acquisition of stock, or similar business transaction, such shareholder shall be considered to be acting as a group with the other shareholders in a corporation only to the extent of the ownership in that corporation prior to the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. Persons shall not be considered to be acting as a group solely because they purchase or own stock of the Company at the same time, or as a result of the same public offering of the Company's stock.

(d) <u>Code</u>. The term "Code" means the Internal Revenue Code of 1986, as amended. A reference to any provision of the Code shall include reference to any successor provision of the Code.

(e) <u>Covered Employee</u>. The term "Covered Employee" means an Eligible Grantee who is, or who is anticipated to become, between the time of grant and payment of the Award, a "covered employee," as such term is defined in Section 162(m)(3) of the Code (or any successor section thereof).

(f) <u>Eligible Grantee</u>. The term "Eligible Grantee" shall mean any director, executive officer or employee of the Company or a Subsidiary, as determined by the Committee in its sole discretion. An Award may be granted to an employee or director, in connection with hiring, retention or otherwise, prior to the date the employee or director first performs services for the Company or the Subsidiaries, provided that such Award shall not become vested prior to the date the employee first performs services or the director assumes his position.

(g) Fair Market Value. For purposes of determining the "Fair Market Value" of a share of Stock as of any date, then the "Fair Market Value" as of that date shall be the closing sale price of the Stock on that date on the New York Stock Exchange.

(h) <u>Performance Goals</u>. The term "Performance Goals" means performance goals based on the attainment by the Company or any Subsidiary of the Company (or any division or business unit of any such entity), or any two or

more of the foregoing, of performance goals pre-established by the Committee in its sole discretion, based on one or more of the following criteria, which shall not be required to be calculated in accordance with GAAP and which may be adjusted measures: (1) return on total stockholders' equity; (2) earnings per share of Stock; (3) earnings before any or all of interest, taxes, minority interest, depreciation and amortization; (4) economic profit; (5) sales or revenues; (6) return on assets, capital or investment; (7) market share; (8) control of operating or non-operating expenses; (9) reductions in certain costs (including reductions in inventories or accounts receivable or reductions in operating expenses); (10) operating profit; (11) operating cash flow, (12) free cash flow, (13) return on capital or increase in pretax earnings; (14) net earnings; (15) margins; (16) market price of the Company's securities; (17) pre-tax earnings; (18) net after-tax earnings per share; (19) working capital targets; (20) working capital and the ratio of sales to net working capital; (21) earnings before interest, taxes, depreciation and amortization ("EBITDA"); (22) sales of one or more products or service offerings; (23) control of operating and/or nonoperating expenses (24) any combination of, or a specified increase in, any of the foregoing; and (25) general comparisons with other peer companies or industry groups or classifications with regard to one or more of the foregoing criteria. The relative weights of the criteria that comprise the Performance Goals shall be determined by the Committee in its sole discretion. In establishing the Performance Goals for a performance period, the Committee may establish different Performance Goals for individual Participants or groups of Participants. Subject to the limitations in Section 5, the Committee in its sole discretion shall have the authority to make equitable adjustments to the Performance Goals in recognition of unusual or non-recurring events affecting the Company or any Subsidiary of the Company or the financial statements of the Company or any Subsidiary of the Company, in response to changes in applicable laws or regulations, including changes in generally accepted accounting principles or practices, or to account for items of gain, loss or expense determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business, as applicable, or otherwise as the Committee deems appropriate. Performance Goals may include a threshold level of performance below which no Award will be earned, a level of performance at which the target amount of an Award will be earned and a level of performance at which the maximum amount of the Award will be earned. Solely for an Award not intended to constitute "qualified performance-based compensation" under Section 162(m) of the Code, the term "Performance Goals" shall also mean any other factors directly tied to the performance of the Company and/or one or more divisions and/or Subsidiaries or other performance criteria designated by the Committee.

(i) <u>Subsidiaries</u>. The term "Subsidiary" means any present or future subsidiary corporation of the Company within the meaning of Section 424(f) of the Code, and any present or future business venture designated by the Committee in which the Company has a significant interest, as determined in the discretion of the Committee.

(j) Stock. The term "Stock" shall mean shares of common stock of the Company.

SECTION 12

GOVERNING LAW

This Plan shall be governed by, and construed in accordance with, the laws of the State of Georgia, except to the extent that the Florida Business Corporation Act shall be applicable.

FIRST AMENDMENT TO CRYOLIFE PERFORMANCE SHARE AGREEMENT

This First Amendment to CryoLife Performance Share Agreement (this "First Amendment") is made and entered into this _____ day of _____, ____ by and between CryoLife, Inc., a Florida corporation ("CryoLife"), and _____ ("Grantee").

RECITALS

WHEREAS, CryoLife and Grantee entered into that certain CryoLife Performance Share Agreement, a copy of which is attached hereto as Exhibit A (the "Grant Agreement");

WHEREAS, CryoLife and Grantee desire to amend the Grant Agreement to revise the calculations of two performance metrics — ______ and , as further described herein; and

WHEREAS, the Compensation Committee of the Board of Directors of CryoLife has authorized CryoLife to enter into, execute and deliver this First Amendment.

NOW, THEREFORE, in consideration of the foregoing, of the mutual promises of the parties hereto and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby amend the Grant Agreement as follows:

1. The last two sentences of the paragraph on the first page of the Grant Agreement, which set forth the calculations of ______ and , are hereby removed and replaced with the following:

| "The | calculation | of | includes | | _, but | excludes | · |
|----------------|-------------|---------------------------------|----------|-------|--------|----------|-------------------|
| | | _ is calculated by dividing (x) | | as of | by (| /) | , and multiplying |
| such amount by | | | | | | | |

2. Except as specifically provided herein, the capitalized terms utilized in this First Amendment shall have the meanings ascribed to them in the Grant Agreement.

3. Except as expressly modified hereby, the Grant Agreement shall remain in full force and effect and is hereby ratified and confirmed.

4. This First Amendment shall be construed and enforced in accordance with the laws of the State of Georgia, excluding any conflicts of law rules which might refer such construction to the laws of another state. This First Amendment may be executed in several counterparts, each of which shall be deemed to be an original, and all of which together shall constitute one agreement binding on all parties hereto, notwithstanding that all parties have not signed the original or the same counterpart.

IN WITNESS WHEREOF, the undersigned have executed this First Amendment as of the date first above written.

| CRYOLIFE, INC. | GRANTEE: | |
|---------------------|----------|--|
| | | |
| | | |
| | | |
| D | | |
| By: | | |
| | | |
| Name: D. Ashley Lee | Name: | |
| Name. D. Asmey Lee | ivanic. | |
| | | |
| Its: EVP, COO & CFO | Its: | |
| | | |
| Date: | Date: | |

<u>Exhibit A</u>

Grant Agreement

(see attached.)

Officer Name: [Number of Target Shares: [

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CRYOLIFE PERFORMANCE SHARE AGREEMENT

CRYOLIFE, INC. ("CryoLife") is pleased to grant you the right to receive CryoLife common stock, as described below. This grant is made subject to the further terms and conditions set forth in this Agreement and the terms of the CryoLife, Inc. [] Stock Incentive Plan (the "Plan").

| Grant Date | : | | | | [| 1 |
|------------|--------------|---------|---------|--|---|---|
| Target Nur | nber of Perf | ormance | Shares: | | | |
| | [|] ([|]%) | | [| 1 |
| | [|] ([|]%) | | [| 1 |
| | [|] ([|]%) | | [| 1 |
| | Total: | | | | [| 1 |
| Vesting: | | | []% | | [| 1 |
| | | | 25% | | [|] |
| | | | 25% | | [|] |

 The performance shares will vest, and common stock will be issued, based on a combination of (i) attaining specified levels of [], (ii) [], (iii) [], and (iv) the passage of time, as more specifically described on Exhibits "A," "B," and "C." We calculate [] as []. We calculate []] as []. We calculate []] as [].

The following documents accompany this Agreement:

Additional Terms and Conditions describes transferability, what happens if you cease to be an employee of CryoLife, Inc., CryoLife International, Inc. or another eligible employer approved by the Compensation Committee (the "Committee") of the Board of Directors of CryoLife, Inc. (each, an "Eligible Employer") before all or a portion of your performance shares vest and are issued, where to send notices and other matters.

The Plan contains the detailed terms that govern this Agreement. If anything in this Agreement or the other attachments is inconsistent with the Plan, the terms of the Plan, as amended from time to time, will control.

The Plan Prospectus Document covering this Agreement and the common stock that may be issued hereunder contains important information, including federal income tax consequences.

Most Recent Annual Report of CryoLife (not attached if you previously received the most recent Annual Report).

Please sign below to show that you accept this Agreement after review of the above documents. Keep a copy and return both originals to [CryoLife, Inc., 1655 Roberts Blvd., NW, Kennesaw, GA 30144.

| CRYOLIFE, INC. | GRANTEE: |
|---------------------|----------|
| | |
| | |
| | |
| | |
| By: | |
| | |
| | |
| Name: D. Ashley Lee | Name: |
| | |
| | |
| Its: EVP, COO & CFO | Its: |
| Date: | Date: |

],

ADDITIONAL TERMS AND CONDITIONS

EFFECT OF TERMINATION OF SERVICE. You must be an employee of CryoLife, Inc. or another Eligible Employer on the applicable vesting date to be entitled to the vesting of performance shares and the issuance of common stock as a result of such vesting. If you cease to be an employee for any reason, and any performance shares have not vested as of the date of termination of your employment, your performance shares shall automatically be forfeited, no related common stock will be issued, and this Agreement shall be cancelled as of the date of such termination of employment.

CRYOLIFE'S OBLIGATION TO PAY. Each performance share represents the right to receive one (1) share of CryoLife, Inc. common stock ("Stock") at the target level, and subject to adjustment up or down based upon CryoLife's performance for [], CryoLife's [performance for l. and], as further described on Exhibits "A," "B," and "C," on the date it vests in accordance with the vesting schedules CryoLife's [] performance for [on Exhibits "A," "B," and "C" (or at such later time as indicated in this Agreement or the Plan). Unless and until the performance shares shall have vested, you will have no right to payment of shares of Stock with respect to any such performance shares. Prior to actual payment of any shares of Stock with respect to any performance shares, such performance shares will represent an unfunded, unsecured obligation of CryoLife, payable (if at all) only from the general assets of CryoLife. The number of shares of Stock subject to this Agreement, i.e., the relevant percentage of target shares that will be issued if time vesting requirements are satisfied, will be determined on and as of the date of filing of CryoLife's Form 10-K for fiscal [] with the Securities and Exchange Commission. Shares will be rounded down to the nearest whole number of shares of Stock. No fractional shares will be issued. Notwithstanding anything to the contrary contained herein, at any time prior to the first anniversary of this Agreement, the Committee, in its sole discretion, may reduce the number of shares to be issued hereunder, but in no event may the number of shares to be issued be reduced below the target number of shares. You will receive written notice of any such reduction.

VESTING. Subject to the provisions of this Agreement and the Plan, the performance shares will vest and Stock will be issued according to the vesting schedule set forth on Exhibits "A," "B," and "C."

TIME OF PAYMENT.

(a) <u>Payment after Vesting</u>. Except as otherwise provided in the Plan, any performance shares that vest in accordance with this Agreement shall be paid to you (or in the event of your death, to your estate), in whole shares of Stock within thirty (30) days after the date on which such performance shares vest or as soon as administratively practicable thereafter, but in no event later than the date that is two and one-half months following the later of (i) the end of CryoLife's taxable year; or (ii) the end of your taxable year that includes the vesting date. Notwithstanding anything in the Plan or this Agreement to the contrary, payment to you of Stock upon the vesting of a performance share shall be delayed to the extent required by Section 409A of the Internal Revenue of 1986, as amended (the "Code").

(b) Accelerated Vesting Upon a Change of Control of CryoLife. If the vesting of the balance, or some lesser portion of the balance, of the performance shares subject to this Agreement is accelerated upon a Change of Control, as such term is defined in the Plan, of CryoLife, and such Change of Control is not a "change in the ownership or effective control" or "change in the ownership of a substantial portion of the assets" of CryoLife within the meaning of Section 1.409A-3(i)(5) of the United States Treasury Regulations, then such accelerated performance shares shall not be paid until the applicable vesting date of such performance shares, as set forth on the first page of this Agreement, or if earlier, the date of your death, disability or "separation from service" within the meaning of Section 409A of the Code from CryoLife (a "Separation from Service"); *provided, however*, that if the payment pursuant to this Section (b) is to be made upon your Separation from Service and as of the date of your Separation from Service you are a "specified employee" within the meaning of Section 409A of the Code then payment of the shares of Stock with respect to the performance shares subject to this Section (b) shall not be made until the date that is six (6) months and one day following the date of your Separation from Service if earlier payment would result in the imposition of the additional tax under Section 409A of the Code.

RIGHTS WITH RESPECT TO PERFORMANCE SHARES PRIOR TO VESTING. You may not transfer or otherwise assign your performance share agreement or the stock to be issued hereunder prior to vesting and the issuance of the stock. As this performance share agreement vests, you may receive certificates representing the vested portion or the shares of Stock to be issued to you or the shares may be issued in uncertificated form. Prior to issuance of shares of stock, you are not entitled to any rights as a shareholder with respect to the shares underlying this performance share agreement. As a result, subject to the provisions of the Plan, you will have no rights to vote such shares or to receive dividends or other distributions, if any, payable with respect to such shares after the date of this agreement but prior to the issuance of the shares subsequent to vesting.

WITHHOLDING OF TAXES. Notwithstanding any contrary provision of this Agreement, no certificate representing shares of Stock will be issued to you unless and until satisfactory arrangements (as determined by the Committee) have been made by you with respect to the payment of federal, state, local or foreign income, employment and other taxes which the Committee determines must be withheld ("<u>Tax Related Items</u>") with respect to the shares of Stock so issuable. The Committee hereby allows you, pursuant to such procedures as the Committee may specify from time to time, to satisfy such Tax Related Items, in whole or in part (without limitation) by one or more of the following: (a) paying cash; (b) electing to have CryoLife or an Eligible Employer withhold otherwise deliverable shares of Stock having a Fair Market Value, as defined in the Plan, equal to the amount of the Tax Related Items required to be withheld; or (c) electing to have CryoLife or an Eligible Employer, as the case may be. If the obligation for Tax Related Items is satisfied by withholding a number of shares of Stock as described above, you will be deemed to have been issued the full number of shares of Stock subject to the vested performance shares, notwithstanding that a number of the shares of Stock are held back solely for the purpose of paying the Tax Related Items due as a result of any aspect of the performance shares. If you fail

to make satisfactory arrangements for the payment of the Tax Related Items at the time any applicable performance shares are scheduled to vest, you will permanently forfeit such performance shares and no shares of Stock will be issued to you pursuant to them.

NOTICES. All notices delivered pursuant to this Agreement shall be in writing and shall be (i) delivered by hand, (ii) mailed by United States certified mail, return receipt requested, postage prepaid, (iii) sent by an internationally recognized courier which maintains evidence of delivery and receipt, (iv) sent by fax to [], or (v) sent by email to []. All notices or other communications shall be directed to the following addresses (or to such other addresses as such parties may designate by notice to the other parties):

| To CryoLife: | CryoLife, Inc. |
|--------------|------------------------|
| | 1655 Roberts Blvd., NW |
| | Kennesaw, GA 30144 |
| | Attention: Secretary |
| | - |

To you: The address set forth in the Agreement

<u>MISCELLANEOUS</u>. Failure by you or CryoLife at any time or times to require performance by the other of any provisions in this Agreement will not affect the right to enforce those provisions. Any waiver by you or CryoLife of any condition or of any breach of any term or provision in this Agreement, whether by conduct or otherwise, in any one or more instances, shall apply only to that instance and will not be deemed to waive conditions or breaches in the future. If any court of competent jurisdiction holds that any term or provision of this Agreement is invalid or unenforceable, the remaining terms and provisions will continue in full force and effect, and this Agreement shall be deemed to be amended automatically to exclude the offending provision. This Agreement may be executed in multiple copies and each executed copy shall be an original of this Agreement. This Agreement shall be subject to and governed by the laws of the State of Georgia. No change or modification of this Agreement shall be valid unless it is in writing and signed by the party against which enforcement is sought, except where specifically provided to the contrary herein. This Agreement shall be binding upon, and inure to the benefit of, the permitted successors, assigns, heirs, executors and legal representatives of the parties hereto. The headings of each section of this Agreement, promise, or agreement or other similar understanding between the parties not embodied herein shall be of any force or effect, and no party will be liable or bound in any manner for any warranty, representation, or covenant except as specifically set forth herein or in the Plan.

SECTION 409A. This Agreement and the performance shares granted hereunder are intended to comply with, or otherwise be exempt from, Section 409A of the Code. This Agreement and the performance shares shall be administered, interpreted and construed in a manner consistent with such Code section. Should any provision of this Agreement or the performance shares be found not to comply with, or otherwise be exempt from, the provisions of Section 409A of the Code, it shall be modified and given effect, in the sole discretion of the Committee and without requiring your consent (notwithstanding any other provisions hereof), in such manner as the

Committee determines to be necessary or appropriate to comply with, or effectuate an exemption from, Section 409A of the Code. Each amount payable under this Agreement as a payment upon vesting of a performance share is designated as a separate identified payment for purposes of Section 409A of the Code.

Exhibit "A"

[] Vesting Schedule

- If [] of at least \$[] but less than \$[] is achieved, we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If [] of at least \$[] but less than \$[] is achieved, we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If [] of at least \$[] but less than \$[] is achieved, we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement; and
-] or more is achieved, the fixed number of shares earned will be calculated on a sliding scale; the scale will begin with If [] of \$[] of \$[] (or 106.9% of the [[] of \$[]), resulting in 110% of the target number of shares related to [] being fixed,] (or 115% of the [and the scale will end with []of\$[]), resulting in 150% of the target number of shares related to] of \$[] being fixed; accordingly, we fix the number of shares subject to the [component of the Agreement as follows: ſ
 - o actual [] divided by target [] of \$[],
 - 0 minus 1.069,
 - O times 5,
 - O plus 1.10,
 - O times the target number of shares,

up to a maximum number of shares equal to 150% of the target number of shares. 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of the date of the Agreement.

Exhibit "B"

[] Vesting Schedule

- If CryoLife has [] in an amount greater than or equal to \$[] but less than \$[], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If CryoLife has [] in an amount greater than or equal to \$[] but less than \$[], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If CryoLife has [] in an amount greater than or equal to \$[] but less than \$[], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement; and
- If CryoLife has [] in an amount less than \$[], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement.

Exhibit "C"

[] Vesting Schedule

- If CryoLife's [] is greater than or equal to [] but less than or equal to [], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If CryoLife's [] is greater than or equal to [] days but less than [], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement;
- If CryoLife's [] is greater than or equal to [] days but less than [], we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement; and
- If CryoLife's [] is less than [] days, we will fix the number of shares that may be issued pursuant to the [] component of the Agreement at []% of the target number of shares related to []; 50% of the fixed shares will vest on the anniversary date of the Agreement, 25% of the fixed shares will vest on the second anniversary date of the Agreement, and the final 25% will vest on the third anniversary of date of the Agreement.

Exhibit 31.1

CERTIFICATIONS

I, James Patrick Mackin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 28, 2015

/s/ J. PATRICK MACKIN

Chairman, President, and Chief Executive Officer I, David Ashley Lee, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 28, 2015

/s/ D. ASHLEY LEE

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

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

In connection with the Quarterly Report of CryoLife, Inc. (the "Company") on Form 10-Q for the quarter ending June 30, 2015, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of James Patrick Mackin, the Chairman, President, and Chief Executive Officer of the Company, and David Ashley Lee, the Executive Vice President, Chief Operating Officer, and Chief Financial Officer of the Company, hereby certifies, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ J. PATRICK MACKIN

J. PATRICK MACKIN Chairman, President, and Chief Executive Officer July 28, 2015 /s/ D. ASHLEY LEE

D. ASHLEY LEE Executive Vice President, Chief Operating Officer, and Chief Financial Officer July 28, 2015