CRYOLIFE INC
Form S-3
November 21, 2008

As filed with the Securities and Exchange Commission on November 21, 2008

Registration No. 333-_____

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

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CRYOLIFE, INC.
(Exact name of registrant as specified in its charter)

Florida	59-2417093
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

1655 Roberts Boulevard, NW, Kennesaw, Georgia 30144
(Address, including zip code, of registrant's principal executive offices)

Steven G. Anderson, President, Chief Executive Officer
and Chairman of the Board of Directors
CryoLife, Inc.
1655 Roberts Boulevard, NW
Kennesaw, Georgia 30144
(770) 419-3355
(Name and address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Jeffrey W. Burris, Esq., General Counsel CryoLife, Inc. 1655 Roberts Boulevard, NW Kennesaw, Georgia 30144 (770) 419-3355	B. Joseph Alley, Jr., Esq. Arnall Golden Gregory LLP Suite 2100 171 17th Street, NW Atlanta, Georgia 30363-1031 (404) 873-8500

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after the effective date of this Registration Statement.

If the only securities being represented on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: [ ]

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: [ ]

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box: [ ]

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box: [ ]

Indicate by a 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 ý
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered (1)	Proposed Maximum Aggregate Offering Price (2) (3)	Amount of Registration Fee (2)
Preferred Stock		
Depositary Shares (4)		
Common Stock (including attached preferred share purchase rights)		
Total	$ 50,000,000	$ 1,965 (5)

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, the shares being registered hereunder include such indeterminate number of shares of common stock, preferred stock and depositary shares as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) Rule 457(o) under the Securities Act of 1933, as amended, permits the registration fee to be calculated on the basis of the maximum offering price of all of the securities listed and, therefore, the table does not specify by each class information as to the amount to be registered, the proposed maximum offering price per security or the amount of the registration fee. An indeterminate amount of preferred stock, depositary shares and common stock may be issued from time to time at indeterminate prices, with an aggregate offering price not to exceed $50,000,000.

(3) This registration statement also covers an indeterminate amount of securities that may be issued in exchange for, or upon conversion or exercise of, as the case may be, any securities registered hereunder that provide for conversion, exercise or exchange. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.

(4) The depositary shares registered hereunder will be evidenced by depositary receipts issued pursuant to a depositary agreement. If the Registrant elects to offer to the public fractional interests in shares of preferred stock, then depositary receipts will be distributed to those persons purchasing the fractional interests and the shares will be issued to the depositary under the depositary agreement.

(5) Calculated pursuant to Rule 457(o) at the statutory rate of $39.30 per $1,000,000 of securities registered.

The information in this prospectus is incomplete and may be changed. The registrant may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS

$50,000,000

CRYOLIFE, INC.

Common Stock
Preferred Stock
Depositary Shares

We may from time to time offer and sell common stock, preferred stock and depositary shares.

This prospectus provides you with a general description of the securities that may be offered. Each time securities are sold, we will provide one or more supplements to this prospectus that will contain additional information about the specific offering and the terms of the securities being offered. The supplements may also add, update or change information contained in this prospectus. You should carefully read this prospectus and any accompanying prospectus supplement before you invest in any of our securities.

Our common stock is listed for trading on the New York Stock Exchange under the symbol “CRY.” Our executive offices are located at 1655 Roberts Boulevard, NW, Kennesaw, Georgia 30144. Our telephone number is (770) 419-3355. The last reported sale price of the common stock on November 18, 2008 was $9.68 per share.

This investment involves risks. See “RISK FACTORS” beginning on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2008.

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You should rely only on the information included or incorporated by reference in this prospectus and any accompanying prospectus supplement. We have not authorized any dealer, salesman or other person to provide you with additional or different information. This prospectus and any accompanying prospectus supplement are not an offer to sell or the solicitation of an offer to buy any securities other than the securities to which they relate and are not an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make an offer or solicitation in that jurisdiction. You should not assume that the information in this prospectus or any accompanying prospectus supplement or in any document incorporated by reference in this prospectus or any accompanying prospectus supplement is accurate as of any date other than the date of the document containing the information.

SUMMARY

This summary highlights information that we believe is especially important concerning our business and this offering. It does not contain all of the information that may be important to your investment decision. You should read the entire prospectus, including the documents incorporated herein by reference, "Risk Factors" and our financial statements and related notes, before deciding to purchase our securities.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, which we refer to as the "SEC," using a "shelf" registration process. Under this shelf process, we may, over time, sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of $50,000,000. This prospectus provides you with a general description of the securities we may offer pursuant to this prospectus. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of that offering. This prospectus does not contain all of the information included in the registration statement. For a complete understanding of the offering of securities, you should refer to the registration statement relating to this prospectus, including its exhibits. A prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any accompanying prospectus supplement together with the additional information described under the heading "Where You Can Find More Information."

ABOUT CRYOLIFE

CryoLife develops and commercializes biomaterials and medical devices and preserves and distributes human tissues for cardiac and vascular transplant applications. Our products are often sold in international markets several years before they can be marketed in the U.S Our biomaterials and medical devices include:

- BioGlue® Surgical Adhesive, or BioGlue,
- CryoLife-O'Brien® Stentless Porcine Aortic Bioprosthesis, and
- ProPatch™ Soft Tissue Repair Matrix.

Additionally, we distribute:

- Hemostase MPH®, an absorbable powder used to stop hemorrhaging, and
- CardioWrap®, a replacement for the pericardium used in cardiac surgery.

Products and Preservation Services

Tissue Preservation Services. We distribute preserved human cardiac and vascular tissue to implanting institutions throughout the U.S., Canada, and Europe. We preserve cardiac and vascular human tissue using special freezing techniques, or cryopreservation. Management believes the human tissues it distributes offer specific advantages over mechanical, synthetic, and animal-derived alternatives. Depending on the alternative, these advantages include more natural blood flow properties for its preserved human heart valves, the elimination of a long-term need for drug therapy to prevent excessive blood clotting, and a reduced risk of catastrophic failure, thromboembolism (stroke), or

calcification. On February 7, 2008 we received a Section 510(k) clearance from the U.S. Food and Drug Administration, or FDA, for our CryoValve® SG pulmonary human heart valve processed with our proprietary SynerGraft technology, which we began shipping late in the first quarter of 2008.

BioGlue. Our proprietary product BioGlue, designed for cardiac, vascular, pulmonary, and general surgical applications, is a polymer based on bovine blood protein and an agent for cross-linking proteins. We are authorized to distribute BioGlue throughout the U.S. and in more than 70 other countries for designated applications. In the U.S, BioGlue is FDA approved as an adjunct to sutures and staples for use in adult patients in open surgical repair of large vessels. We distribute BioGlue under Conformité Européene Mark, commonly referred to as CE Mark, product certification in the European Economic Area for soft tissue repair procedures, which include cardiac, vascular, pulmonary, and general surgery soft tissue repair procedures. We have also received approval and distribute BioGlue for soft tissue repair in Canada and Australia. Additional marketing approvals have been granted for specified applications in several other countries in Central and South America, and Asia.

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Hemostase MPH. On April 17, 2008 we signed an exclusive three-year agreement with Minneapolis-based Medafor, Inc. to distribute Hemostase MPH for cardiac and vascular surgery in the U.S. and for cardiac, vascular and general surgery, other than orthopaedic and ear, nose and throat surgery, internationally, with the exception of China and Japan. Hemostase MPH is a unique, absorbable powder that is able to stop bleeding or hemorrhaging, which received CE Mark approval in 2003 and FDA pre-market approval in September 2006.

CardioWrap. In 2007 we began exclusive distribution of CardioWrap, a product of MAST BioSurgery, Inc., in the U.S. and the United Kingdom. CardioWrap is a bioresorbable sheet used to replace the pericardium in cardiac reconstruction and other cardiac surgeries where the patient may face re-operation within six months.

CryoLife-O'Brien Stentless Porcine Aortic Bioprosthesis. We distribute a porcine heart valve, the CryoLife-O'Brien Stentless Porcine Aortic Bioprosthesis, in Europe. This valve contains minimal amounts of synthetic material compared to other glutaraldehyde-fixed porcine valves, which management believes decreases the risk of endocarditis, a debilitating and potentially fatal infection.

ProPatch. In December 2006 we received 510(k) clearance from the FDA for ProPatch. ProPatch, developed from bovine pericardial tissue, is used to reinforce weakened soft tissues and provides a resorbable scaffold that is replaced by the patient's own soft tissue. We are seeking commercialization for ProPatch, which may include partnering with third parties as well as obtaining clinical data to support applications that we would market directly.

Research and Development

Through continuing research and development activities, we endeavor to use our expertise in protein chemistry, biochemistry, and cell biology, and our understanding of the cardiac and vascular surgery medical specialties, to acquire and develop useful products and technologies. We seek to identify market areas that can benefit from preserved living tissues, medical devices, and other related technologies, to develop innovative techniques and products within these areas, to secure their commercial protection, to establish their efficacy, and then to market these techniques and products. In order to expand our service and product offerings, we are in the process of developing or investigating several technologies and products. The products in development have not been subject to completed clinical trials and have not received FDA or other regulatory approval, so we may not derive any revenues from them. We generally perform significant research and development work before offering our services and products, building on either existing proprietary and non-proprietary knowledge or acquired technology and know-how. Our current tissue preservation services were developed internally. We developed our BioGlue product from a substance originally developed by a third party that we acquired.

BioGlue is the first product to be developed from our Protein Hydrogel Technology, or PHT. Our PHT is the base for several potential products in development. We are researching the use of derivatives of PHT for use in trauma surgery and are undertaking clinical evaluations to determine its utility as a nucleus pulposus replacement in spinal disc repair. Potential product line extensions include modifications to the BioGlue delivery system.

Risk Factors

Our business is subject to a number of risks, including:

- the possibility of FDA actions and other regulatory actions,
- additional expenses and losses from product recalls,
- possible losses from product liability, securities, and other litigation,

- lower demand for our products and adverse publicity resulting from product recalls and other FDA activity,

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- the possible inability to obtain sufficient insurance coverage,
- the possible inability to protect our intellectual property rights,
- the possible inability to obtain necessary regulatory approvals,
- and possible future lack of adequate capital.

See “Risk Factors” below for a more detailed discussion of risks relating to our business and our securities.

CryoLife, Inc. was incorporated January 19, 1984 in Florida. All references to “CryoLife,” the “Company,” “we,” “us” or “our” in this prospectus mean CryoLife, Inc., a Florida corporation, and all entities owned or controlled by CryoLife, Inc., except where it is made clear that the term means only the parent company.

Our principal executive offices are located at 1655 Roberts Boulevard, NW, Kennesaw, Georgia 30144. Our telephone number is (770) 419-3355 and our Web site is located at www.cryolife.com. Information contained on our Web site is not part of this prospectus.

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RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED DIVIDENDS

For purposes of determining the ratio of earnings to combined fixed charges and preferred dividends, earnings are defined as the sum of pre-tax income (loss) from continuing operations, fixed charges and amortization of capitalized interest; less interest capitalized. Fixed charges means the sum of interest expensed and capitalized, amortized premiums, discounts and capitalized expenses related to indebtedness and an estimate of the interest within rental expense. For this purpose, we assumed one-third of rental expense should be included in fixed charges. Preferred stock dividend means the amount of pre-tax earnings that is required to pay the dividends on outstanding preference securities.

	Year Ended December 31,					Nine Months Ended Sept. 30,
	2003	2004	2005	2006	2007	2008
	(dollars in thousands)					
Ratio of earnings to fixed charges and preferred stock dividends	(a)	(a)	(a)	1.24	5.08	13.15
Deficiency of earnings to fixed charges and preferred stock dividends	($29,168)	($21,708)	($19,905)	N/A	N/A	N/A

(a) Earnings for this period were insufficient to cover fixed charges and preferred dividends.

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RISK FACTORS

You should carefully consider the following risk factors and all other information contained in this prospectus before you make any investment decisions with respect to our securities.

If any of the adverse events described in the following factors actually occur our business, financial condition and operating results could be materially and adversely affected, the value of your securities could decline and you could lose all or part of your investment.

Risks Relating To Our Business

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

BioGlue is a significant source of our revenues. Should the product be the subject of adverse developments with regard to its safety, efficacy, or reimbursement practices, or if a competitor's product obtains greater acceptance, or our rights to manufacture and market this product are challenged, the result could have a material adverse effect on our business, financial position, results of operations, and cash flows. Also, we have only two suppliers of bovine serum albumen, which is necessary for the manufacture of BioGlue. Furthermore, we presently have only one supplier for our BioGlue syringe. If we lose one or more of these suppliers, our ability to manufacture and sell BioGlue could be adversely impacted. We cannot be sure that we would be able to replace any such loss on a timely basis, if at all. In addition our U.S. patent for BioGlue expires in 2012 and our patents in the rest of the world expire in 2013. Following expiration of these patents, competitors may utilize the inventions disclosed in the BioGlue patents in competing products, which could materially reduce our revenues and income from BioGlue. See "Uncertainties Related To Patents And Protection of Proprietary Technology May Adversely Affect The Value Of Our Intellectual Property," below.

We May Receive A Form 483 Notice Of Observations, A Warning Letter, Or Other Similar Communication From The FDA And We May Be Unable To Address The Concerns Raised By The FDA In Such Correspondence or Communication, Or Addressing The Concerns May Be Costly Or Could Materially and Adversely Affect Our Operations.

The FDA has issued Form 483 Notices of Observations, or Form 483, and Warning Letters to us in the past that have noted deficiencies in our operations, including process validation, complaint handling, and reporting, and analysis of certain testing results, among other items. Although we have had positive FDA inspections recently, we could still be subject to an FDA inspection that results in a Form 483. If the FDA deems our responses to a Form 483 unsatisfactory, it could take further action, such as issuing us a Warning Letter, or in the alternative even before issuing a Form 483, the FDA could issue a Warning Letter or other similar communication directly to us. Corrective actions taken by us to address these regulatory actions could materially and adversely affect our business, results of operations, financial position, or cash flows. If we are unable to implement adequate corrective actions required by a Warning Letter or similar request made by the FDA, the FDA could institute additional recalls of tissues or products, require us to perform additional tests, begin to require prescriptions for tissues or products where they are not currently required, halt the shipping or processing of tissues or products, require additional approvals for marketing our tissue services or products or assess civil penalties, which could materially and adversely affect our revenues, profitability, and cash flows.

SynerGraft® Processed Human Pulmonary Heart Valves and Other SynerGraft Products May Not Be Accepted By The Marketplace.

CryoValve® SG pulmonary human heart valves may not perform as well as expected or provide all of the benefits anticipated by the marketplace and, as a result, the Company may not be able to continue to process a portion of its human pulmonary valves with its SynerGraft technology. If such an event were to occur, the Company would need to return to processing most or all of its pulmonary human heart valves without the SynerGraft technology, which could significantly reduce the expected benefits of the SynerGraft technology. In addition other products being developed for commercialization by CryoLife that utilize the SynerGraft process, such as ProPatch®, CryoLife's soft tissue repair matrix for use in hernia repair and certain orthopaedic related conditions, may not provide the anticipated benefits or otherwise achieve marketplace acceptance.

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SynerGraft Processed Human Pulmonary Heart Valves Have A One Year Shelf Life.

We are currently using the SynerGraft technology for a portion of our human pulmonary heart valve processing pursuant to the 510(k) clearance we have received for the SynerGraft treated valves. Our SynerGraft pulmonary human heart valves currently have a one year shelf life, whereas our non-SynerGraft processed pulmonary human heart valves have a five year shelf life. We are currently in discussions with the FDA to extend the shelf life of our SynerGraft pulmonary human heart valves. We do not know when the shelf life of the SynerGraft pulmonary human heart valves may be extended, if at all. Accordingly, if we do not implant our SynerGraft pulmonary human heart valves within one year of cryopreservation, we may be required to discard these valves, and as a result we may lose more tissues than before we started processing pulmonary human heart valves with the SynerGraft technology, which could have a material adverse effect on our revenues, profitability, and cash flows.

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

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

Our CryoValve SG Pulmonary Human Heart Valve Post-clearance Study May Not Provide Expected Results.

At the FDA's request, we are conducting a post-clearance study to seek evidence for the potential and implied long-term benefits of the SynerGraft process used to process the CryoValve SG pulmonary human heart valve. We expect the data to be collected to include long-term safety and hemodynamic function, immune response, and explant analysis. Although we believe that this information may help us ascertain whether the SynerGraft process reduces the immune response of the transplanted human heart valve and allows for the collagen matrix to recellularize with the recipient's own cells, it is possible that the results of the study will not be as expected. If this study shows that the SynerGraft process does not reduce immune response and/or cause the collagen matrix to recellularize with the recipient's cells, we may be unable to realize some or all of the long-term benefits that we anticipated for the use of this process.

The FDA Has Previously Issued A Recall Of Certain Of Our Products And Has The Ability To Inspect Our Facilities, Suspend Our Operations, And Issue A Recall Of Our Products In The Future.

On August 13, 2002 we received an order from the FDA regarding the non-valved cardiac, vascular, and orthopaedic tissues processed by the Company since October 3, 2001, referred to as the FDA Order. Pursuant to the FDA Order, we placed non-valve cardiac, vascular, and orthopaedic tissue processed since October 3, 2001 on quality assurance quarantine and recalled the portion of those tissues that had been distributed but not implanted. In addition we ceased processing non-valved cardiac and vascular tissues until mid-September 2002 and ceased processing orthopaedic tissues until 2003. The FDA Order resulted in the destruction of much of our tissue, required that we adjust revenue for tissue recall returns, curtailed our processing activities, and subjected us to intense FDA scrutiny and additional regulatory requirements that increased costs. We also suffered decreased revenues due to lack of processing ability and decreased market demand for our services. These challenges reduced our revenues, increased our costs to process tissues and our operating expenses, and strained management resources and available cash. Although we resumed processing and distribution of the types of tissues subject to the FDA Order and resolved many of the product liability suits pending against us, we incurred losses and did not produce cash from operations for many years. Any future recalls or other regulatory action by the FDA would likely have a material adverse impact on our revenues,

profitability, and cash flows.

The FDA can reinspect our facilities, review complaints against us, monitor the efficacy of our products and the claims we make regarding our products' benefits, and issue reports to us on areas that require improvement. If the FDA believes that we are not responsive to their requests for any suggested improvement or that our products are not in compliance with regulatory norms, the FDA has the ability to suspend our operations and issue an order for the recall of any or all of our products. If the FDA issues such an order, our revenues, profitability, and cash flows could be materially and adversely affected.

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Our Products And The Tissues We Process Allegedly Have Caused And May In The Future Cause Injury To Patients, And We Have Been And May Be Exposed To Product Liability Claims And Additional Regulatory Scrutiny As A Result.

The processing, preservation, and distribution of human tissue, bovine tissue products, porcine tissue products, and the manufacture and sale of medical devices entail inherent risks of medical complications for patients and have resulted and may result in product liability claims against us and adverse publicity. Plaintiffs have asserted that our tissue or medical devices have caused a variety of injuries, including death. When patients are injured, die, or have other adverse results following procedures using our tissue or medical devices, we have been and may be sued and our insurance coverage has been and may be inadequate. Adverse judgments and settlements in excess of our available insurance coverage could materially and adversely affect our business, financial position, results of operations, and cash flows.

As a result of medical complications that are alleged to have been caused by or occur in connection with medical procedures involving our tissue or medical devices, we have been and may be subject to additional FDA and other regulatory scrutiny and inspections and adverse publicity. For example, shortly after the FDA Order, the FDA posted a notice, now archived, on its website stating its concerns regarding our heart valve preservation services. As a result, some surgeons and hospitals decided not to use our heart valves. Cautionary statements from the FDA or other regulators regarding our tissue services or products, adverse publicity, changes to our labeling, or required prominent warnings or negative reviews from the FDA or regulators of our processing and manufacturing facilities have decreased and may in the future decrease demand for our tissue services or products and could reduce our revenues and materially and adversely affect our business, financial position, results of operations, and cash flows.

In addition to the recall resulting from the FDA Order, we have in the past suspended or recalled, and in the future may have to suspend the distribution of or recall, particular types of tissues as a result of reported adverse events in connection with our tissues. Suspension of the distribution of, or recall of, our tissue services or products could materially and adversely affect our revenues, profitability, and cash flows.

Key Growth Strategies Identified As A Result Of Our Strategic Review May Not Generate The Anticipated Benefits.

In January 2006 we engaged a financial advisor to assist our management and Board of Directors in identifying and evaluating potential strategies to enhance shareholder value. As a result of this review, the Board of Directors has directed management to actively pursue three key strategies to generate revenue and earnings growth in addition to continuing to focus on growing our business and leveraging our strengths and expertise in our core marketplaces. These three strategies are:

- Identifying and evaluating acquisition opportunities of complementary product lines and companies,
- Licensing our technology to third parties for non-competing uses, and
- Analyzing and identifying underperforming assets for possible sale or other disposition.

Although management has begun implementing these strategies, we cannot be certain that they will ultimately enhance shareholder value.

Our Ability To Borrow Under Our Credit Facility May Be Limited

Our credit facility contains a number of affirmative covenants that we must satisfy before we can borrow. For example, we must satisfy specified leverage ratios, and there are also increasing levels of adjusted earnings before interest taxes depreciation and amortization (“EBITDA”) under the credit facility that we have covenanted to maintain

during the term of the credit facility. Failure to satisfy any of these requirements could limit our borrowing ability and materially and adversely affect our liquidity. In addition, our credit facility does not obligate the lender to make funds available to us in a timely fashion or at all, even when requested. See “Financial and Credit Crisis May Adversely Affect Our Ability to Borrow Money or Raise Capital” below.

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Our Credit Facility Limits Our Ability To Pursue Significant Acquisitions.

Our credit facility prohibits mergers and acquisitions other than certain permitted acquisitions. Permitted acquisitions include non-hostile acquisitions that have been approved by the Board of Directors and/or the stockholders of the target company, if after giving effect to the acquisition, there is no event of default under the credit facility and there is still at least $1.5 million available to be borrowed under the credit facility. The total consideration that we pay or are obligated to pay for all acquisitions consummated during the term of the credit facility, less the portion of any such consideration funded by the issuance of common or preferred stock, may not exceed a specified aggregate amount. As a result, our ability to consummate acquisitions, and fully realize our growth strategy, may be materially and adversely affected.

The Financial and Credit Liquidity Crisis May Adversely Affect Our Ability to Borrow Money or Raise Capital.

If the financial and credit liquidity crisis were to continue or become more severe it may impact our ability to obtain money under our credit facility. Our credit facility does not require that funds be made available to us in a timely fashion when requested or at all, and if the current financial and credit liquidity crisis continues or worsens, our lender may be unable or unwilling to lend money pursuant to our line of credit. In addition, if we determined that it was appropriate or necessary to raise funds in the future, the financial and credit liquidity crisis, if it continues or worsens, may make the future cost of raising funds through the debt or equity markets more expensive or make those markets unavailable. If we were unable to use our line of credit or raise funds through debt or equity markets it could materially and adversely affect our liquidity or our ability to follow our key growth strategies outlined by our Board of Directors.

There Are Limitations On The Use Of Our Net Operating Loss Carryforwards.

We estimate that as of our last measurement date, December 31, 2007, we had approximately $37.0 million in U.S. Federal net operating loss carryforwards, which could be used to offset future taxable income. These carryforwards begin to expire in the 2023 tax year. We may be unable to generate enough profits, if any, prior to their expiration to utilize our net operating loss carryforwards.

In addition, the amount of net operating loss carryforwards that we can utilize on an annual basis is capped after an ownership change within the meaning of Section 382 of the Internal Revenue Code of 1986, as amended. Accordingly, a change in control of our Company within the meaning of Section 382 could substantially reduce the annual benefit of our net operating loss carryforwards and could, thereby, result in a portion of our net operating loss carryforwards expiring unused.

Continued Deflation Of Foreign Currencies Relative To The U.S. Dollar Could Materially and Adversely Impact Our Business

The majority of our foreign BioGlue revenues are denominated in British Pounds and Euros, and as such are sensitive to changes in exchange rates. In addition, a portion of our dollar-denominated BioGlue sales are made to customers in other countries who must convert local currencies into U.S. dollars in order to purchase BioGlue. We also have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency transactions and balances are sensitive to changes in exchange rates. The recent devaluation of British Pounds and Euros in relation to the U.S. dollar, should it continue or accelerate, or deflation of other currencies which affect our customers could materially reduce our fourth quarter 2008 and 2009 BioGlue revenue growth or could result in a material decrease in revenues in these periods as compared to the comparable prior periods. Should this occur, it could have a material and adverse impact on our revenues, profitability and cash flows.

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Regulatory Action Outside Of The U.S. Has Affected Our Business In The Past And May Also Affect Our Business In The Future.

After the FDA issued the FDA Order, discussed above, Health Canada also issued a recall of the same types of tissue. In addition, other countries have made inquiries regarding the tissues that we export, although these inquiries are now, to our knowledge, complete. In the event other countries raise additional regulatory concerns, we may be unable to export tissues to those countries. Regulatory concerns could also be raised regarding the other products we market internationally, including BioGlue. Revenue from international human tissue preservation services was approximately $896,000, $572,000, and $193,000 for the years ended December 31, 2007, 2006, and 2005, respectively, and approximately $898,000 for the nine months ended September 30, 2008. International revenue from product sales, which includes international BioGlue revenue, was approximately $12.8 million, $11.3 million, and $10.2 million for the years ended December 31, 2007, 2006, and 2005, respectively, and approximately $10.9 million for the nine months ended September 30, 2008. Loss of all or a material portion of our international revenues would have a material adverse impact on our revenues, profitability, and cash flows.

Physicians Have Been And May Continue To Be Reluctant To Implant Our Preserved Tissues Or Use Our Other Products.

Some physicians or implanting institutions have been reluctant to choose our preserved tissues for use in implantation, due to a perception that the tissue may not be safe or a belief that the implanting physician or hospital may be subject to a heightened liability risk if our tissues are used. In addition, for similar reasons, some hospital risk managers have not allowed implanting surgeons to utilize our tissues when alternatives are available. Several risk managers and physicians have refused to use our products due to these concerns. These conditions have materially and adversely affected demand for our preserved human tissues. If these conditions persist, our results of operations and cash flows will continue to be adversely affected. If additional implanting hospitals or physicians representing significant revenues refuse to use tissues that we preserve or our other products, including BioGlue, and we are unable to replace the revenues lost, our revenues and profitability would be materially and adversely affected.

Our Failure To Adequately Comply With Government Regulations Could Result In Loss Of Revenues And Customers As Well As Additional Compliance Expense.

The FDA, certain international governments, and some states regulate the facilities and processes that we use. For example, the FDA, pursuant to regulations it promulgated under the Public Health Service Act, currently regulates human tissue. These regulations establish requirements for donor testing and screening of human tissue and record keeping relating to these activities and impose certain registration and product listing requirements on establishments that process or distribute human tissue or cellular-based products. The FDA has also implemented good tissue practice regulations akin to good manufacturing practices, which must be followed by tissue banks and processors of human tissue. These regulations increase regulatory oversight of CryoLife and other processors of human tissue. The FDA also regulates BioGlue through its medical device regulations. These medical device regulations include the establishment of requirements for manufacturer registration, good manufacturing practices through the Quality System Regulations, premarket approval, and medical device reporting.

Our facilities are subject to periodic inspection by the FDA, state, and international regulatory authorities to ensure our compliance with applicable laws and regulations. Certain of our facilities and processes are subject to international standards set by the International Organization for Standardization with respect to which our compliance is reviewed by our Notified Body. If we fail to comply with these laws and regulations, we can be subject to sanctions, such as written observations of deficiencies made following inspections, warning letters, product recalls, fines, product seizures and consent decrees, all of which would be made available to the public. Such actions and

publicity could affect our ability to market our products and services. In the past, the FDA has sent us notifications and warning letters relating to deficiencies in our compliance with FDA requirements. We were required to take measures to respond, including labeling our processed tissue with a warning. We also were subject to the FDA Order, which decreased our revenues, increased our processing costs, and materially and adversely affected our business, financial position, results of operations, and cash flows. We cannot be certain that the FDA, or state or international regulatory authorities will not request that we take additional steps to correct deficiencies that may be raised in the future. Correcting any such deficiencies could materially and adversely affect our business.

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We Have Experienced Operating Losses And Negative Cash Flows, And We Must Continue To Address The Underlying Causes In Order To Continue To Operate Profitably And Generate Positive Cash Flows.

Due principally to factors mentioned above, we suffered net losses in the years ended December 31, 2002 through 2005 and generated negative operating cash flow each year in the five year period ended December 31, 2006. There is no guarantee that we can continue to address the causes of our previous losses.

Our Existing Insurance Policies May Not Be Sufficient To Cover Our Actual Claims Liability.

Our products and the tissues we process allegedly have caused and may in the future cause injury to patients using our products or tissues and we have been and may be exposed to product liability claims.

Following the FDA Order, lawsuits related to our tissue preservation services increased to unprecedented numbers for us. These claims involved assertions that infections and related morbidity, including death, were the result of inadequacies in our procedures. We maintain claims-made insurance policies to mitigate our financial exposure to product liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. Thus, a claims-made policy does not generally represent a transfer of risk for claims and incidents that have been incurred but not reported to the insurance carrier during the policy period.

As of September 30, 2008, we know of one pending lawsuit against us arising out of our allograft orthopaedic tissue preservation services. We believe that our product liability insurance covers this lawsuit. In addition other parties have made complaints against us that may result in lawsuits in future periods. We ceased accepting orthopaedic tissue for processing in January 2007.

Our September 30, 2008 Summary Consolidated Balance Sheet reflects a liability of approximately $330,000 for the estimated cost of resolving this claim. The amount recorded was an estimate and does not reflect actual settlement arrangements or final judgments, the latter of which could include punitive damages, nor does it represent cash set aside for the purpose of making payments. This balance sheet also reflects a $5.2 million liability which is included as a component of accrued expenses of $2.6 million and other long-term liabilities of $2.6 million for the estimated cost of resolving unreported product liability claims. We believe that the liability could be estimated to be as high as $10.3 million, after including a reasonable margin for statistical fluctuations. Based on an actuarial valuation, we estimated that as of September 30, 2008, $1.7 million of the accrual for unreported liability claims would be recoverable under our insurance policies. These amounts represent management's estimate of the probable losses and anticipated recoveries for unreported liability claims related to services performed and products sold prior to September 30, 2008. Actual results may differ from this estimate. Our product liability insurance policies do not include coverage for any punitive damages.

Several putative class action lawsuits were filed in July through September 2002 against us and certain of our officers, alleging violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, based on a series of purportedly materially false and misleading statements to the market. On July 21, 2005 we reached an agreement in principle to settle the securities class action lawsuit and the settlement became final later in the year. In August 2002 and January 2003 purported shareholder derivative actions were filed. A settlement was also reached in those cases and became final in 2005. Our insurance proceeds were insufficient to fund the costs of defending and settling the securities class action and derivative lawsuits.

If we are unsuccessful in arranging acceptable settlements of current or future product liability, or future securities class action or derivative claims, we may not have sufficient insurance coverage and liquid assets to meet these

obligations. Additionally, if one or more claims, in which we are a defendant, whether now pending or hereafter arising, should be tried with a substantial verdict rendered in favor of the plaintiff(s), such verdict(s) could exceed our available insurance coverage and liquid assets. If we are unable to meet required future cash payments to resolve the outstanding or any future claims, this will materially and adversely affect our financial position, results of operations, and cash flows. Further, if the costs of pending or incurred but unreported product liability claims exceed our current estimates, our business, financial position, and results of operations may be materially and adversely affected. If we do not have sufficient resources to pay the claims against us, we may be forced to cease operations or seek protection under applicable bankruptcy laws.

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We May Be Unable To Obtain Adequate Insurance At A Reasonable Cost, If At All.

If we are unable to obtain satisfactory insurance coverage in the future, we may be subject to additional future exposure from product liability claims. Additionally, insurance rates may be significantly higher than in the past, and insurers may provide less coverage, which may adversely impact our profitability. In addition, should we be subject to liability, whether imposed by a court or the result of a settlement that results in a large insurance claim, our insurance rates could increase significantly. Our current product liability insurance policy is a six-year claims-made policy covering claims incurred during the period April 1, 2003 through March 31, 2009 and reported during the period April 1, 2008 through March 31, 2009. Claims incurred prior to April 1, 2003 that have not been reported are uninsured. Any punitive damage components of claims are also uninsured.

We May Be Unable To Successfully Market Hemostase MPH.

Part of our plans for future growth involve anticipated revenues from the sale of Hemostase MPH, a private label hemostatic agent which we currently market, pursuant to a distribution agreement, for use in cardiac and vascular surgery in the U.S. and for cardiac, vascular, and general surgery, other than orthopaedic and ear, nose and throat surgery, in certain international markets, subject to certain exclusions. Our ability to successfully market Hemostase MPH is subject to a number of risks, including:

- The possibility that surgeons may not accept Hemostase MPH,
- We may be unable to effectively leverage our existing sales force to market Hemostase MPH,
- Hemostase MPH may not perform as expected or provide all expected benefits, and
- Other distributors of the Hemostase MPH product may interfere with or otherwise impede our ability to market the product to new or existing customers.

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

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

We have filed suit in Germany against Tenaxis, Inc. because we believe that Tenaxis is infringing one of our BioGlue patents in Germany. This company has filed a separate suit to nullify this same BioGlue patent in Germany. Should we be unsuccessful in our lawsuit regarding infringement of our BioGlue patent or in prohibiting any other infringements of our patents, or should this nullity lawsuit filed by Tenaxis be successful, or the validity of our patents be successfully challenged by a third party, our revenues and profitability could be materially and adversely affected. We continue to investigate potential infringements of our U.S. BioGlue patents.

We protect our proprietary technologies and processes in part by confidentiality agreements with our collaborative partners, employees, and consultants. We cannot be sure that these entities and persons will not breach these

agreements, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or independently discovered by competitors. If any of these events occur, they could result in our loss of the economic benefits associated with our key products and services and could materially and adversely affect our business, financial position, results of operations, and cash flows.

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Uncertainties Related To Patents and Protection Of Proprietary Technology For Products Distributed By CryoLife May Adversely Affect The Ability of CryoLife To Distribute Those Products.

We distribute two products, Hemostase MPH and CardioWrap, that are manufactured by third parties. These third parties have patents, licenses, and proprietary technologies that give their products competitive advantages. We cannot be certain that no one will challenge the validity or enforceability of any patent that they own. Our contracts require that these third parties pursue infringements of patents owned or licensed by them for the products that we distribute. We may choose to assist our third party manufacturers and may incur substantial costs in any efforts to uphold the validity and prevent infringement of a patent or to protect proprietary technologies and methods. We cannot be certain that if anyone does make such a challenge, that these third parties will be able to successfully defend that challenge, with or without our assistance. Furthermore, we cannot be certain that competitors will not independently develop similar technologies, duplicate technologies, design around the patented aspects of such technologies, or attempt to duplicate their proprietary technologies that have no patent protection. In addition, we cannot be sure that these third parties' technologies will not infringe patents or other rights owned by others, or that others will not infringe these third parties' patents or use their proprietary rights inappropriately.

We believe that an entity may be infringing the patent licensed by the company that supplies Hemostase MPH to us. We have notified the supplier of Hemostase MPH about this potential infringement. We are not able to predict what actions the supplier will take. If the supplier does not take any action or if they are ultimately unsuccessful in their attempt to halt the infringement or in prohibiting other infringements of their patents or inappropriate uses of their company's proprietary technology, or should the validity of their licensed patents be successfully challenged, our revenues and profitability could be materially and adversely affected.

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.

Our growth and profitability will depend, in part, upon our ability to complete development of and successfully introduce new products and services. We are uncertain whether we can develop new products and services to a commercially acceptable form. We must also expend much time and money to obtain the required regulatory approvals. Although we have conducted preclinical studies on certain products under development which indicate that such products may be effective in a particular application, we cannot be certain that the results we obtain from expanded clinical studies will be consistent with earlier trial results or be sufficient for us to obtain any required regulatory approvals or clearances. We cannot give assurance that we will not experience difficulties that could delay or prevent us from successfully developing, introducing, and marketing new products. We also cannot give assurance that the regulatory agencies will clear or approve these or any new products on a timely basis, if ever, or that the new products will adequately meet the requirements of the applicable market or achieve market acceptance.

Our ability to complete the development of any of our products is subject to all of the risks associated with the commercialization of new products based on innovative technologies. Such risks include unanticipated technical or other problems, manufacturing difficulties, and the possibility that we have allocated insufficient funds to complete such development. Consequently, we may not be able to successfully develop or manufacture our products which are under development. If we do develop or manufacture these products, we may not do so on a timely basis. These products may not meet price or performance objectives, and may not prove to be as effective as competing products.

If we are unable to successfully complete the development of a product, application, or service, or if we determine for financial, technical, or other reasons not to complete development or obtain regulatory approval of any product, application, or service, particularly in instances when we have expended significant capital, this could materially and adversely affect our business, financial position, results of operations, and cash flows. Research and development

efforts are time consuming and expensive and we cannot be sure that these efforts will lead to commercially successful products or services. Even the successful commercialization of a new service or product in the medical industry can be characterized by slow growth and high costs associated with marketing, under-utilized production capacity, and continuing research and development and education costs. The introduction of new products or services, which could include new indications for our BioGlue products, new products based on our Protein Hydrogel Technology, such as BioFoam and BioDisc, CryoValve SG aortic human heart valve, and other products such as ProPatch, SynerGraft processed animal heart valves and vascular tissue, and products related to the cold storage and preservation of internal organs prior to transport, may require significant physician training and years of clinical evidence derived from follow-up studies on human implant recipients in order to gain acceptance in the medical community.

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Intense Competition May Affect Our Ability To Operate Profitably.

We face competition from other companies engaged in the following lines of business:

- The processing of human tissue;
- The marketing of mechanical valves and synthetic and animal tissue for implantation; and
- The marketing of surgical adhesives, surgical sealants, and hemostatic agents.

Management believes that at least two domestic tissue banks offer preservation services for human heart valves and many companies offer processed porcine heart valves and mechanical heart valves, including St. Jude Medical, Inc., Medtronic, Inc., and Edwards Life Sciences.

Our BioGlue product competes with other surgical adhesives and surgical sealants, including Baxter International, Inc.’s Tisseel, FloSeal, and CoSeal, Ethicon, Inc.’s Evicel, Surgiflo, and Surgifoam, and Covidien, Ltd.’s Duraseal product. We are also aware that a few companies have surgical adhesive products under development. For example, Johnson & Johnson is under FDA review for a surgical adhesive for approval in vascular sealing that could compete with BioGlue in certain applications. Tenaxis, Inc. currently has approval for a surgical adhesive that could compete with BioGlue in certain applications. Other large medical device, pharmaceutical, and biopharmaceutical companies may also be developing competitive products. Our BioGlue product competes on the basis of its high tensile strength and ease of use.

Our Hemostase MPH product competes with thrombin products, including King Pharmaceuticals, Inc.'s Thrombin JMI, ZymoGenetics, Inc.'s Recothrom, and Omrix Biopharmaceuticals, Inc.'s Evithrom; and surgical hemostats, including Pfizer, Inc.'s Gelfoam, C.R. Bard, Inc.'s Avitene, Baxter International, Inc.’s FloSeal, and Ethicon, Inc.’s Surgicel, Surgiflo, and Surgifoam products. In addition, Starch Medical, Inc. has a hemostatic product that has CE approval and that will compete in the future in Europe. We are also aware that a few companies have surgical hemostat products under development. For example, Omrix Biopharmaceuticals, Inc. is currently developing a hemostatic patch for control of surgical bleeding that could compete with Hemostase MPH in certain applications. Other medical device, pharmaceutical, and biopharmaceutical companies may also be developing competitive products. Our Hemostase MPH product competes on the basis of its safety profile and ease of use.

Many of our competitors have greater financial, technical, manufacturing, and marketing resources than we do and are well established in their markets. We have increased fees and prices on a number of our services and products since January 1, 2008. This increase may provide an opportunity for our competitors to gain market share. If we are unable to continue to increase prices as planned and retain or improve our market share, our ability to grow revenues and profits may be adversely affected.

We cannot give assurance that our products and services will be able to compete successfully. Any products that we develop that gain regulatory clearance or approval will have to compete for market acceptance and market share. In addition, our competitors may gain competitive advantages that may be difficult to overcome. If we fail to compete effectively, this could materially and adversely affect our business, financial position, results of operations, and cash flows.

Our Products In Development May Never Generate Significant Revenues Or Income.

Our plans for future growth are also partially dependent upon our products in development, including, without limitation:

- Our BioDisc spinal disc nucleus replacement,
- Our CryoValve SG aortic human heart valve,
- Our BioFoam for hemostasis and trauma repair,
- Products related to the cold storage and preservation of internal organs during transport,

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- Our SynerGraft processed animal heart valves and vascular tissue, and
- Our ProPatch for hernia repair.
- BioGlue Aesthetic® to be distributed by a third party for plastic surgery indications,

These products are in various stages of testing and regulatory approval, and it is possible that some or all of them may not prove effective for the purposes that we have developed them, may not receive regulatory approval, or may not be accepted by the medical community. Should this be the case, these products may never generate significant revenues or profits.

Investments In New Technologies And Acquisitions Of Products Or Distribution Rights May Not Be Successful.

We may invest in new technology licenses, and acquire products or distribution rights that may not succeed in the marketplace. In such cases, we may be unable to recover our initial investment, which could include acquiring license or distribution rights, acquiring products, or purchasing initial inventory. Inability to recover our initial investment may adversely impact our profitability.

If We Are Not Successful In Expanding Our Business Activities In International Markets, We Will Not Be Able To Pursue One Of Our Strategies For Increasing Our Revenues.

Our international operations are subject to a number of risks which may vary from the risks we face in the U.S., including:

- Unexpected changes in regulatory requirements and tariffs;
- Difficulties and costs associated with staffing and managing foreign operations, including foreign distributor relationships;
- Longer accounts receivable collection cycles in certain foreign countries and additional cost of collection of those receivables;
- Adverse economic or political changes;
- More limited protection for intellectual property in some countries;
- Changes in currency exchange rates;
- Potential trade restrictions, exchange controls, and import and export licensing requirements; and
- Potentially adverse tax consequences of overlapping tax structures.

Future Health Care Reimbursement Methods And Policies May Affect The Availability, Amount, And Timing Of Our Revenues.

Even though we do not receive payments directly from third-party health care payors, their reimbursement methods and policies impact demand for our preserved tissue and other services and products. Our preservation services with respect to the cardiac and vascular tissues we preserve may be particularly susceptible to third-party cost containment measures. For example, the initial cost of a preserved human heart valve generally exceeds the cost of a mechanical, synthetic, or animal-derived valve. We are unable to predict what changes will be made in the reimbursement methods and policies utilized by third-party health care payors or their effect on us.

If third-party health care payors, including Medicare, change their reimbursement methods and policies with respect to preserved tissues provided for implant by us and other services and products that we offer, this could have a material and adverse effect on us. Significant uncertainty exists as to the reimbursement status of newly approved health care products and services, and there can be no assurance that adequate third-party coverage will be available for us to maintain price levels sufficient to realize an appropriate return on our investment in developing new products.

If government-mandated health insurance is adopted, the demand for and prices obtained for our services and products could be negatively impacted because government-mandated health insurance could result in higher cost surgeries not being approved or could limit the level of reimbursement for new products, such as the CryoValve SG pulmonary human heart valve.

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Government, hospitals, and other third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new products approved for marketing by the FDA. In some cases, these entities refuse to provide any coverage for uses of approved products for indications for which the FDA has not granted marketing approval. If government and other third-party payors do not provide adequate coverage and reimbursement levels for uses of our new products and services, market acceptance of these products would be adversely affected, which could negatively impact revenue growth and materially and adversely affect our business, financial position, results of operations, and cash flows.

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

The technologies underlying our products and services are subject to rapid and profound technological change. Competition intensifies as technical advances in each field are made and become more widely known. We can give no assurance that others will not develop products or processes with significant advantages over the products and processes that we offer or are seeking to develop. Any such occurrence could materially and adversely affect our business, financial position, results of operations, and cash flows.

Extensive Government Regulation May Adversely Affect Our Ability To Develop And Sell Products And Services.

Government regulation in the U.S. and in Europe, the Middle East, and Africa, and other jurisdictions can determine the success of our and our competitors' efforts to market and develop services and products. Most of our products and services in development and those of our competitors, if successfully developed, will require regulatory approvals from the FDA and perhaps other regulatory authorities before they may be commercially distributed. The process of obtaining premarket approvals from the FDA normally involves clinical trials as well as an extensive premarket approval application and often takes many years. In addition, the 510(k) notification process may also require clinical trials and take many years; for example the 510(k) clearance for the CryoValve SG pulmonary human heart valve took four years. The process for approval from the FDA is expensive and can vary significantly based on the type, complexity, and novelty of the product. We cannot give any assurance that any products developed by us or our competitors, independently or in collaboration with others, will receive the required approvals for manufacturing and marketing.

Delays in obtaining U.S. or foreign approvals could result in substantial additional cost and adversely affect our competitive position. The FDA may also place conditions on product approvals that could restrict commercial applications of our products. The FDA may withdraw product marketing approvals or clearances if we do not maintain compliance with regulatory standards or if problems occur following initial marketing. Delays imposed by the governmental clearance process may materially reduce the period during which we have the exclusive right to commercialize patented products.

Delays or rejections may also be encountered by us during any stage of the regulatory approval process if clinical or other data fails to satisfactorily demonstrate compliance with, or if the product fails to meet, the regulatory agency's requirements for safety, efficacy, and quality. Those requirements may become more stringent due to changes in applicable laws, regulatory agency policies, or the adoption of new regulations. Clinical trials may also be delayed due to unanticipated side effects, inability to locate, recruit, and qualify sufficient numbers of patients, lack of funding, the inability to locate or recruit clinical investigators, the redesign of clinical trial programs, the inability to manufacture or acquire sufficient quantities of the particular product or any other components required for clinical trials, changes in development focus, and disclosure of trial results by competitors.

Even if we or one of our competitors are able to obtain regulatory approval for any products or services offered, the scope of the approval may significantly limit the indicated usage for which such products or services may be

marketed. The unapproved use of our products or our preserved tissues could adversely affect the reputation of our Company and our products or services. Products or services marketed pursuant to FDA or foreign oversight or approvals are subject to continuing regulation and periodic inspections. Labeling and promotional activities are also subject to scrutiny by the FDA and, in certain instances, by the Federal Trade Commission. The export of devices and biologics is also subject to regulation and may require FDA approval. From time to time, the FDA may modify such regulations, imposing additional or different requirements. If we fail to comply with applicable FDA requirements, which may be ambiguous, we could face civil and criminal enforcement actions, warnings, citations, product recalls or detentions, and other penalties. This could materially and adversely affect our business, financial position, results of operations, and cash flows.

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In addition, the National Organ Transplant Act of 1984, or NOTA, prohibits the acquisition or transfer of human organs for "valuable consideration" for use in human transplantation. NOTA permits the payment of reasonable expenses associated with the removal, transportation, implantation, processing, preservation, quality control, and storage of human organs. We cannot be certain that restrictive interpretations of NOTA will not be adopted in the future which will challenge one or more aspects of industry methods of charging for preservation services. Our laboratory operations and those of our competitors are subject to the U.S. Department of Labor, Occupational Safety and Health Administration, and U.S. Environmental Protection Agency requirements for prevention of occupational exposure to infectious agents and hazardous chemicals and protection of the environment. Some states have enacted statutes and regulations which govern the processing, transportation, and storage of human organs and tissue.

U.S. and foreign governments and regulatory agencies may adopt more restrictive laws or regulations in the future that could materially and adversely affect our business, financial position, results of operations, and cash flows.

We Are Dependent On Our Key Personnel.

Our business and future operating results depend in significant part upon the continued contributions of our key technical personnel and senior management, many of whom would be difficult to replace, including our CEO, Steven G. Anderson. Our business and future operating results also depend in significant part upon our ability to attract and retain qualified management, processing, technical, marketing, sales, and support personnel for our operations. Competition for such personnel is intense and we cannot ensure that we will be successful in attracting and retaining such personnel. We do not have key life insurance policies on any of our key personnel. If we lose any key employees, if any of our key employees fail to perform adequately, or if we are unable to attract and retain skilled employees as needed, this could materially and adversely affect our ability to efficiently operate our business.

Risks Related To Our Common Stock

Trading Prices For Our Common Stock, And For The Securities Of Biotechnology Companies In General, Have Been, And May Continue To Be, Volatile.

The trading price of our common stock has been subject to wide fluctuations and may continue to be volatile in the future. Trading price fluctuations can be caused by a variety of factors, including variations in operating results, regulatory actions such as the adverse FDA activity, product liability claims, announcement of technological innovations or new products by us or our competitors, governmental regulatory acts, developments with respect to patents or proprietary rights, general conditions in the medical device or service industries, actions taken by government regulators, changes in earnings estimates by securities analysts, or other events or factors, many of which are beyond our control. If our revenues or operating results in future quarters fall below the expectations of securities analysts and investors, the price of our common stock would likely decline, perhaps substantially. Changes in the trading price of our common stock may bear no relation to our actual operational or financial results.
If our share prices do not meet the requirements of the New York Stock Exchange, our shares may be delisted. The closing price of our common stock has ranged from a high of $16.35 to a low of $2.99 in the period from January 1, 2005 to September 30, 2008.

The market prices of the securities of biotechnology companies have been highly volatile and are likely to remain highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. In the past, companies that experienced volatility in the market price of their securities have often faced securities class-action litigation. Moreover, market prices for stocks of biotechnology and technology companies frequently reach levels that bear no relationship to the operating performance of these companies. These market prices generally are not sustainable and are highly volatile. Whether or not meritorious, litigation brought against us

could result in substantial costs, divert our management's attention and resources, and materially and adversely affect our business, financial position, and results of operations.

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Anti-Takeover Provisions May Discourage Or Make More Difficult An Attempt To Obtain Control Of CryoLife.

Our Articles of Incorporation and Bylaws contain provisions that may discourage or make more difficult any attempt by a person or group to obtain control of our company, including provisions authorizing the issuance of preferred stock without shareholder approval, restricting the persons who may call a special meeting of the shareholders, and prohibiting shareholders from taking action by written consent. In addition, we are subject to certain provisions of Florida law that may discourage or make more difficult takeover attempts or acquisitions of substantial amounts of our common stock. Further, pursuant to the terms of a shareholder rights plan adopted in 1995 and amended in 2005, each outstanding share of common stock has one attached right. The rights will cause substantial dilution of the ownership of a person or group that attempts to acquire our company on terms not approved by the Board of Directors and may deter hostile takeover attempts. These provisions could potentially deprive our stockholders of opportunities to sell shares of our stock at above-market prices.

We Are Not Likely To Pay Common Stock Dividends In The Foreseeable Future, And We May Not Be Able To Pay Cash Dividends On Our Capital Stock Due To Legal or Contractual Restrictions And Lack Of Liquidity.

We have not paid, and do not presently intend to pay, cash dividends on our common stock. In addition our credit agreement prohibits us from paying cash dividends, and under Florida law we may not be able to pay cash dividends on our capital stock. Under Florida law, no distribution may be paid on our capital stock, if after giving it effect:

- We would not be able to pay our debts as they become due in the usual course of business; or
- Our total assets would be less than the sum of our total liabilities plus the amount that would be needed, if we were to be dissolved at the time of the distribution, to satisfy the preferential rights upon dissolution of any preferred shareholders whose preferential rights are superior to those receiving the distribution.

The terms of any future financing arrangements that we may enter into may also restrict our ability to pay dividends.

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FORWARD LOOKING STATEMENTS

This prospectus includes and incorporates by reference "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements give our current expectations or forecasts of future events. The words "could," "may," "might," "will," "would," "shall," "should," "pro forma," "potential," "pending," "intend," "believe," "expect," "anticipate," "estimate," "plan," "future" and other similar expressions generally identify forward-looking statements, including, in particular, statements regarding future services, market expansion, revenues, cost savings, regulatory activity, available funds and capital resources, and pending litigation. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned not to place undue reliance on these forward-looking statements, which are as of their respective dates. Such forward-looking statements reflect the views of our 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 "Risk Factors" and elsewhere in this prospectus.

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

- The Company's ability to increase, and methods for increasing, BioGlue, Hemostase MPH, and preserved tissue market penetration;
- Potential BioGlue product line extensions;
- The expected benefits of surgical adhesives and sealants;
- Expected usage of SynerGraft technology;
- The anticipated competitive advantages and potential impact on revenues of SynerGraft;
- Expectations that CryoValve SG will continue to command premium fees over the standard processed CryoValve;
- Expected continued increase in 2008 of cardiac preservation service revenues as a result of shipments of CryoValve SG;
- Expectations regarding the impact of CryoValve SG pulmonary human heart valve on cost of preservation services as a percentage of preservation services revenues;
- Expectations regarding the expected SynerGraft post-clearance study;
- The expected outcome of lawsuits filed by or against the Company;
- The Company's estimated future liability for existing product liability lawsuits and for product liability claims incurred but not yet reported;
- Expectations regarding, and possible increases in the cost and retention of, future insurance coverage;
- Anticipated future demand for cardiac and vascular tissues;
- Management's beliefs that current cardiac and vascular procurement levels are sufficient to support future demand;
- The Company's continued use of human tissue implant data;
- The Company's competitive position, including the impact of price increases;
- Competitive advantages offered by the Company's patents, trade secrets, trademarks, and technology licensing rights;
- The anticipated impact of the Company's strategic plans and its ability to implement them;
- Commercialization plans and potential benefits of our products in development;
- Expectations regarding capital expenditures;
- The amount and type of future research and development expenses;
- The ability to expand the Company's service and product offerings;
- Expected seasonality trends;
- Expected impact of adoption of new accounting pronouncements;
- Anticipated impact of changes in interest rates and foreign currency exchange rates;

- Expected continued decreases in revenues from the distribution of orthopaedic tissue;
- Expected increases in grant revenues;
- The receipt of governmental grants for BioFoam development;

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- The Company's plans to apply for further federal funding for the development of BioFoam;
- The adequacy of the Company's financial resources;
- Current intentions not to pay cash dividends on our common stock;
- Current intentions to retain future earnings for capital requirements;
- Expectations regarding the use of net operating loss carryforwards;
- Expectations regarding the ability of the Company to distribute Hemostase MPH;
- Expectations regarding the potential reversal of the valuation allowances on the Company's deferred tax assets and subsequent changes in our effective income tax rate;
- Issues that may impact the Company's future financial performance and cash flows;
- Estimated compensation payment obligations related to 2008 performance based bonus plans and post employment benefits; 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 the risk factors discussed in this prospectus and other factors, many of which are beyond the control of CryoLife. Consequently, all of the forward-looking statements made or incorporated by reference in this prospectus 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.

USE OF PROCEEDS

Except as may otherwise be described in an accompanying prospectus supplement, the net proceeds from the sale of the securities offered pursuant to this prospectus and any accompanying prospectus supplement will be used for general corporate purposes. Any specific allocation of the net proceeds of an offering of securities to a specific purpose will be determined at the time of the offering and will be described in an accompanying prospectus supplement.

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DESCRIPTION OF CAPITAL STOCK

Description Of Capital Stock

The Company is authorized to issue up to 75,000,000 shares of Common Stock, $.01 par value, and 5,000,000 shares of Preferred Stock, $.01 par value. As of November 18, 2008, there were 28,138,639 shares of Common Stock outstanding net of 955,396 treasury shares. They were held by approximately 443 shareholders of record. There were no shares of Preferred Stock outstanding as of November 18, 2008.

The following summary is qualified in its entirety by reference to the Company's Amended and Restated Articles of Incorporation, the Company's Amended and Restated Bylaws and the Florida Business Corporation Act (the "FBCA").

Common Stock

Holders of Common Stock are entitled to one vote per share of Common Stock held of record on all matters to be voted upon by the Company's shareholders generally. Holders of Common Stock are not entitled to cumulative voting rights. As a result, the holders of a majority of the shares of Common Stock voting for the election of directors may elect all of the Company's directors if they choose to do so, and, in such event, the holders of the remaining shares of Common Stock will not be able to elect any person or persons to the Board of Directors.

Holders of Common Stock are entitled to receive, on a pro rata basis, such dividends and distributions, if any, as may be declared from time to time by the Board of Directors out of funds legally available therefor, subject to any preferential dividend right of any issued and outstanding shares of Preferred Stock. In the event of liquidation, dissolution or winding up of the Company, after payment of creditors, holders of Common Stock are entitled to share ratably in all assets, subject to the payment of any liquidation preference of any issued and outstanding shares of Preferred Stock. The shares of Common Stock currently outstanding are validly issued, fully paid and non-assessable.

Preferred Stock

The Board of Directors of the Company is empowered, without approval of the Company's shareholders, to cause shares of Preferred Stock (the "Preferred Stock") to be issued in one or more series and to fix and determine the relative rights and preferences of the shares of any such series, subject to the limits of Florida law. Because the Board of Directors has the power to establish the preferences and rights of each series, it may afford the holders of any series of Preferred Stock preferences, powers and rights, voting or otherwise, senior to the rights of holders of Common Stock. The issuance of Preferred Stock could have the effect of delaying or preventing a change in control of CryoLife.

While providing desirable flexibility for possible acquisitions and other corporate purposes, and eliminating delays associated with a shareholder vote on specific issuances, the issuance of Preferred Stock could adversely affect the voting power of holders of common stock, as well as dividend and liquidation payments on both Common Stock and Preferred Stock. It also could have the effect of delaying, deferring or preventing a change in control.

The prospectus supplement relating to an offering of Preferred Stock will specify the terms of any series of Preferred Stock offered by it including:

- the series, the number of shares offered and the liquidation value of the Preferred Stock;
- the price at which the Preferred Stock will be issued;

- the dividend rate, the dates on which the dividends will be payable and other terms relating to the payment of dividends on the Preferred Stock;

- the liquidation preference of the Preferred Stock;

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- whether the Preferred Stock is redeemable or subject to a sinking fund, and the terms of any such redemption or sinking fund;

- whether the Preferred Stock is convertible into or exchangeable for any other securities, and the terms of any such conversion or exchange; and

    - any additional rights, preferences, qualifications, limitations or restrictions of the Preferred Stock.

The description of the terms of the Preferred Stock to be set forth in an applicable prospectus supplement will not be complete and will be subject to and qualified in its entirety by reference to the statement of resolution relating to the applicable series of Preferred Stock. The registration statement of which this prospectus forms a part will include the statement of resolution as an exhibit or incorporate it by reference.

Stock Options and Restricted Stock Awards

As of November 18, 2008, the Company had issued and outstanding options to purchase an aggregate of approximately 1,790,000 shares of Common Stock (net of forfeitures, expirations and cancellations) pursuant to its Stock Option Plans, at exercise prices between $4.25 and $30.86. Of such options, approximately 662,000 were exercisable as of November 18, 2008. As of November 18, 2008, the Company had issued and outstanding approximately 152,000 shares of restricted stock that are subject to future time-based vesting and a risk of forfeiture.

Articles Of Incorporation And Bylaws

Certain provisions of the Articles of Incorporation and Bylaws of the Company, which are summarized below, could have the effect of making it more difficult to change the composition of the Company's Board of Directors or for any person or entity to acquire control of the Company.

Special Meetings

Pursuant to the Company's Articles of Incorporation and Bylaws, special meetings of the shareholders may be called only by the President or Secretary at the request in writing of a majority of the Board of Directors then in office or at the request in writing of shareholders owning not less than 50% of all votes entitled to be cast at the special meeting.

Prohibition of Shareholder Action Without Meeting

Under the Company's Articles of Incorporation, the shareholders may not take action by written consent. Any and all action by the shareholders is required to be taken at the annual shareholders' meeting or at a special shareholders' meeting.

Anti-Takeover Statute

The Company is subject to FBCA Section 607.0901, which provides that, subject to certain exceptions, an "affiliated transaction" must be approved by the holders of two-thirds of the voting shares other than those beneficially owned by an "interested shareholder" unless the corporation has elected to opt out of this requirement in its Articles of Incorporation or its Bylaws. The Company has not elected to opt out of this requirement, which may have the effect of making it more difficult for any person or group to acquire the Company or substantial amounts of the Company's Common Stock.

Ability To Consider Other Constituencies

The Directors of the Company are subject to the "general standards for Directors" provisions set forth in Section 607.0830 of the FBCA. These provisions provide that, among other things, in discharging his or her duties and determining what is in the best interests of the Company, a Director may consider such factors as the Director deems relevant, including the long-term prospects and interests of the Company and its shareholders, and the social, economic, legal or other effects of any proposed action on the employees, suppliers or customers of the Company, the communities in which the Company operates and the economy in general. Consequently, in connection with any proposed corporate action, the Board of Directors is empowered to consider interests of other constituencies in addition to the interests of the Company's shareholders. Shareholders should be aware that Directors who take into account these other factors may make decisions which are less beneficial to the shareholders than if the law did not permit consideration of such other factors.

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Shareholder Rights Plan

In November 1995, the Board of Directors of the Company established a rights plan, pursuant to which one preferred share purchase right (a “Right”) is attached to each outstanding share of Common Stock. The description and terms of the Rights were set forth in a rights agreement dated as of November 27, 1995, between the Company and Chemical Mellon Shareholder Services, the original “Rights Agent.” The agreement was amended effective June 1, 1997, when the Company’s Board appointed American Stock Transfer and Trust Company successor Rights Agent. On November 2, 2005, the Company amended and restated the agreement to extend its expiration date to November 23, 2015, and make other changes. The First Amended and Restated Rights Agreement (the “Rights Agreement”) between the Company and American Stock Transfer and Trust Company became effective as of November 23, 2005.

Each share of Common Stock outstanding on December 11, 1995 (the "First Record Date") is entitled to one Right, as defined in and subject to the terms and conditions of the Rights Agreement. Under the Rights Agreement, a Right entitles the holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value $.01 per Share (the "Preferred Shares") at a price of $33.33 per one one-hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. Each share of Common Stock that becomes outstanding after the First Record Date is also entitled to a Right, subject to the terms of the Rights Agreement.

Currently, each Right is non-exercisable and is evidenced only by the certificate of Common Stock to which it is attached. The Rights will not be exercisable and will not be evidenced by separate certificates (“Right Certificates”, as further defined below) until the Distribution Date. Rights Certificates will be issued upon the “Distribution Date,” which will occur on the earlier of:

- 10 days following a public announcement that a person or group of affiliated or associated persons (with certain exceptions, an “Acquiring Person”) has acquired beneficial ownership of 15% or more of the outstanding Common Stock; or

- 10 business days following the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 15% or more of the outstanding Common Stock (except that the Board of Directors may extend the 10-business-day period before a person or group becomes an Acquiring Person).

Until the Distribution Date (or earlier redemption, exchange or expiration of the Rights), the Rights will be transferred with and only with the shares of common stock that are entitled to receive rights under the Rights Agreement (“Eligible Shares”).

The Rights entitle holders to acquire company securities under defined circumstances after the Distribution Date. Rights beneficially owned by an Acquiring Person (and its affiliates, associates, and transferees (collectively, the "Acquiring Persons")), however, become void from and after the time such persons become Acquiring Persons, and Acquiring Persons have no rights whatsoever under the Rights Agreement. The benefits of the Rights held by shareholders that are not Acquiring Persons and that are not so voided are described below. All references to Rights that follow refer only to Rights held by persons who are not Acquiring Persons.

As soon as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to holders of record of the Eligible Shares as of the close of business on the Distribution Date, and such separate Right Certificates will thereafter alone evidence the Rights. The Rights are not exercisable until the Distribution Date and expire on November 23, 2015 (the "Final Expiration Date"), unless the Final

Expiration Date is advanced or extended or unless the Rights are earlier redeemed or exchanged by the Company, in each case, as described below. Until a Right is exercised, the Right confers no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends.

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The Rights entitle holders to purchase Preferred Shares in certain circumstances. The Purchase Price payable, and the number of Preferred Shares or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution upon any of the following events:

- in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares;

- upon the grant to holders of the Preferred Shares of certain rights or warrants to subscribe for or purchase Preferred Shares at a price, or securities convertible into Preferred Shares with a conversion price, less than the then-current market price of the Preferred Shares; or

- upon the distribution to holders of the Preferred Shares of evidences of indebtedness or assets (excluding regular periodic cash dividends or dividends payable in Preferred Shares) or of subscription rights or warrants (other than those referred to above).

The number of outstanding Rights and the number of one one-hundredths of a Preferred Share issuable upon exercise of each Right are also subject to adjustment in the event of a stock dividend on the Common Shares payable in Common Shares or subdivisions, consolidations or combinations of the Common Shares occurring, in any such case, prior to the Distribution Date.

Preferred Shares purchasable upon exercise of the Rights will not be redeemable. Each Preferred Share will be entitled, when, as and if declared, to a minimum preferential quarterly dividend payment of $1.00 per share but will be entitled to an aggregate dividend of 100 times the dividend declared per Common Share. In the event of liquidation, the holders of the Preferred Shares will be entitled to a minimum preferential liquidation payment of $1.00 per share but will be entitled to an aggregate payment of 100 times the payment made per Common Share. Each Preferred Share will have 100 votes, voting together with the Common Shares. Finally, in the event of any merger, consolidation or other transaction in which Common Shares are exchanged, each Preferred Share will be entitled to receive 100 times the amount received per Common Share. These rights are protected by customary antidilution provisions.

Because of the nature of the Preferred Shares, dividend, liquidation and voting rights, the value of the one one-hundredth interest in a Preferred Share purchasable upon exercise of each Right should approximate the value of one Common Share. In the event that any person or group becomes an Acquiring Person, each holder of a Right will have the right to receive upon exercise of a Right, and in lieu of Preferred Shares, that number of Common Shares having a market value of two times the exercise price of the Right.

In the event that, after a person or group has become an Acquiring Person, the Company is acquired in a merger or other business combination transaction or 50% or more of its consolidated assets or earning power are sold, proper provision will be made so that each holder of a Right will thereafter have the right to receive, upon the exercise of a Right and in lieu of Preferred Shares or Common Shares of the Company, that number of shares of common stock of the person with whom the Company has engaged in the foregoing transaction (or its parent) that at the time of such transaction will have a market value of two times the exercise price of the Right.

At any time after any person or group becomes an Acquiring Person and prior to the acquisition by any person or group of 50% or more of the outstanding Common Shares, the Board of Directors of the Company may exchange the Rights, in whole or in part, at an exchange ratio of one Common Share, or a fractional share of Preferred Shares (or other preferred stock) equivalent in value thereto, per Right (subject to adjustment).

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least 1% in such Purchase Price. No fractional Preferred Shares will be issued (other than fractions which are integral multiples of one one-hundredth of a Preferred Share, which may, at the election of the Company, be evidenced by depository receipts) and in lieu thereof, an adjustment in cash will be made based on the current market price of the Preferred Shares or the Common Shares.

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At any time prior to the time an Acquiring Person becomes such, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of $.001 per Right (the "Redemption Price") payable, at the option of the Company, in cash, Common Shares or such other form of consideration as the Board of Directors of the Company shall determine. The redemption of the Rights may be made effective at such time on such basis with such conditions as the Board of Directors in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

The Company may amend the Rights Agreement in any manner, provided, after (a) such time as a person or group becomes an Acquiring Person, or (b) the Distribution Date, whichever is earlier, the Company may not amend the Rights Agreement in any manner that adversely affects the interests of the holders of the Rights (other than the interests of an Acquiring Person or an affiliate or associate of an Acquiring Person).

The description of the Rights contained herein is qualified in its entirety by reference to the First Amended and Restated Rights Agreement, which is incorporated by reference into the registration statement of which this Prospectus forms a part.

Shareholder Action

Except as otherwise provided by law or in our articles of incorporation or bylaws, the approval by holders of a majority of the shares of common stock present in person or represented by proxy at a meeting and entitled to vote is sufficient to authorize, affirm, ratify or consent to a matter voted on by shareholders. The FBCA requires the approval of the holders of a majority of the outstanding stock entitled to vote for certain extraordinary corporate transactions, such as a merger, sale of substantially all assets, dissolution or amendment of the articles of incorporation.

Transfer Agent And Registrar

The Transfer Agent and Registrar for the Common Stock is American Stock Transfer & Trust Company. It is located at 59 Maiden Lane, Plaza Level, New York, NY 10038, and its telephone number is (718) 921-8124.

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DESCRIPTION OF DEPOSITARY SHARES

General

We may offer fractional shares of preferred stock, rather than full shares of preferred stock. If we decide to offer fractional shares of preferred stock, we will issue receipts for depositary shares. Each depositary share will represent a fraction of a share of a particular series of preferred stock. The prospectus supplement will indicate that fraction. The shares of preferred stock represented by depositary shares will be deposited under a depositary agreement between us and a bank or trust company that meets certain requirements and is selected by us (the "Bank Depositary"). Each owner of a depositary share will be entitled to all the rights and preferences of the preferred stock represented by the depositary share. The depositary shares will be evidenced by depositary receipts issued pursuant to the depositary agreement. Depositary receipts will be distributed to those persons purchasing the fractional shares of preferred stock in accordance with the terms of the offering.

We have summarized selected provisions of a depositary agreement and the related depositary receipts. The summary is not complete. The forms of the deposit agreement and the depositary receipts relating to any particular issue of depositary shares will be filed with the SEC on a Current Report on Form 8-K prior to our offering of the depositary shares, and you should read such documents for provisions that may be important to you.

Dividends and Other Distributions

If we pay a cash distribution or dividend on a series of preferred stock represented by depositary shares, the Bank Depositary will distribute such dividends to the record holders of such depositary shares. If the distributions are in property other than cash, the Bank Depositary will distribute the property to the record holders of the depositary shares. If the Bank Depositary, however, determines that it is not feasible to make the distribution of property, the Bank Depositary may, with our approval, sell such property and distribute the net proceeds from such sale to the record holders of the depositary shares.

Redemption of Depositary Shares

If we redeem a series of preferred stock represented by depositary shares, the Bank Depositary will redeem the depositary shares from the proceeds received by the Bank Depositary in connection with the redemption. The redemption price per depositary share will equal the applicable fraction of the redemption price per share of the preferred stock. If fewer than all the depositary shares are redeemed, the depositary shares to be redeemed will be selected by lot or pro rata as the Bank Depositary may determine.

Voting the Preferred Stock

Upon receipt of notice of any meeting at which the holders of the preferred stock represented by depositary shares are entitled to vote, the Bank Depositary will mail the notice to the record holders of the depositary shares relating to such preferred stock. Each record holder of these depositary shares on the record date (which will be the same date as the record date for the preferred stock) may instruct the Bank Depositary as to how to vote the preferred stock represented by such holder's depositary shares. The Bank Depositary will endeavor, insofar as practicable, to vote the amount of the preferred stock represented by such depositary shares in accordance with such instructions, and we will take all action which the Bank Depositary deems necessary in order to enable the Bank Depositary to do so. The Bank Depositary will abstain from voting shares of the preferred stock to the extent it does not receive specific instructions from the holders of depositary shares representing such preferred stock.

Amendment and Termination of the Depositary Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the depositary agreement may be amended by agreement between the Bank Depositary and us. However, any amendment that materially and adversely alters the rights of the holders of depositary shares will not be effective unless such amendment has been approved by the holders of at least a majority of the depositary shares then outstanding. The depositary agreement may be terminated by the Bank Depositary or us only if (i) all outstanding depositary shares have been redeemed or (ii) there has been a final distribution in respect of the preferred stock in connection with any liquidation, dissolution or winding up of our company and such distribution has been distributed to the holders of depositary receipts.

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Charges of Bank Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the Bank Depositary in connection with the initial deposit of the preferred stock and any redemption of the preferred stock. Holders of depositary receipts will pay other transfer and other taxes and governmental charges and any other charges, including a fee for the withdrawal of shares of preferred stock upon surrender of depositary receipts, as are expressly provided for their accounts in the depositary agreement.

Withdrawal of Preferred Stock

Upon surrender of depositary receipts at the principal office of the Bank Depositary, subject to the terms of the depositary agreement, the owner of the depositary shares may demand delivery of the number of whole shares of preferred stock, represented by those depositary shares. Partial shares of preferred stock will not be issued. If the depositary receipts delivered by the holder evidence a number of depositary shares in excess of the number of depositary shares representing the number of whole shares of preferred stock to be withdrawn, the Bank Depositary will deliver to such holder at the same time a new depositary receipt evidencing the excess number of depositary shares. Holders of preferred stock thus withdrawn may not thereafter deposit those shares under the depositary agreement or receive depositary receipts evidencing depositary shares therefor.

Resignation and Removal of Bank Depositary

The Bank Depositary may resign at any time by delivering to us notice of its election to do so, and we may at any time remove the Bank Depositary. Any such resignation or removal will take effect upon the appointment of a successor Bank Depositary and its acceptance of such appointment. Such successor Bank Depositary must be appointed within 60 days after delivery of the notice of resignation or removal and must be a bank or trust company meeting the requirements of the depositary agreement.

PLAN OF DISTRIBUTION

Any of the securities being offered hereby may be sold in any one or more of the following ways from time to time:

- through agents;
- to or through underwriters;
- through dealers; or
- directly by us.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

Offers to purchase securities may be solicited by agents designated by us from time to time. Any such agent involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the applicable prospectus supplement. Unless otherwise indicated in such prospectus supplement, any such agent will be acting on a reasonable best efforts basis for the period of its appointment. Any such agent may be deemed to be an underwriter, as that term is defined in the Securities Act of 1933, of the securities so offered and sold. We may periodically engage agents or underwriters in connection with

at-the-market offerings or negotiated transactions involving our common stock.

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If securities are sold by means of an underwritten offering, we will execute an underwriting agreement with an underwriter or underwriters at the time an agreement for such sale is reached, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, the respective amounts underwritten and the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement that will be used by the underwriters to make resales of the securities in respect of which this prospectus is being delivered to the public. If underwriters are utilized in the sale of any securities in respect of which this prospectus is being delivered, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices or at varying prices determined by the underwriters at the time of sale. Securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more underwriters. If any underwriter or underwriters are utilized in the sale of securities, unless otherwise indicated in the applicable prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters with respect to a sale of such securities will be obligated to purchase all such securities if any are purchased.

We may grant to the underwriters options to purchase additional securities, to cover over-allotments, if any, at the price at which securities are first offered to the public (with additional underwriting commissions or discounts), as may be set forth in the prospectus supplement relating thereto. If we grant any over-allotment option, the terms of such over-allotment option will be set forth in the prospectus supplement for such securities.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. Any such dealer may be deemed to be an underwriter, as such term is defined in the Securities Act of 1933, of the securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the prospectus supplement relating thereto.

Offers to purchase securities may be solicited directly by us and the sale thereof may be made by us directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act of 1933 with respect to any resale thereof. The terms of any such sales will be described in the prospectus supplement relating thereto.

If so indicated in the applicable prospectus supplement, we may authorize agents and underwriters to solicit offers by certain institutions to purchase securities from us at the public offering price set forth in the applicable prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the applicable prospectus supplement. Such delayed delivery contracts will be subject to only those conditions set forth in the applicable prospectus supplement. A commission indicated in the applicable prospectus supplement will be paid to underwriters and agents soliciting purchases of securities pursuant to delayed delivery contracts accepted by us.

Agents, underwriters and dealers may be entitled under relevant agreements with us to indemnification by us against certain liabilities, including liabilities under the Securities Act of 1933, or to contribution with respect to payments that such agents, underwriters and dealers may be required to make in respect thereof.

Each series of securities will be a new issue and, other than our common stock, which is listed on The New York Stock Exchange, will have no established trading market. We may elect to list any series of securities on an exchange, and in the case of common stock, on any additional exchange, but, unless otherwise specified in the applicable prospectus supplement, we shall not be obligated to do so. No assurance can be given as to the liquidity of the trading market for any of the securities.

Agents, underwriters and dealers may be customers of, engage in transactions with, or perform services for, us and our subsidiaries in the ordinary course of business.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy and information statements and other information with the Securities and Exchange Commission. We have filed a registration statement on Form S-3 with the SEC to register under the Securities Act of 1933 the common stock offered hereby. This prospectus constitutes a part of that registration statement. As allowed by the SEC's rules, this prospectus does not contain all of the information set forth in the registration statement, certain parts of which have been omitted in accordance with the rules and regulations of the SEC. Please refer to the registration statement and related exhibits and schedules filed therewith for further information with respect to us and the securities offered hereby. Although the prospectus describes the material provisions of documents referenced herein and filed as exhibits, statements contained herein concerning the provisions of any such document are not necessarily complete. In each instance, reference is made to the copy of such document filed as an exhibit to the registration statement or otherwise filed by us with the SEC and each such statement is qualified in its entirety by such reference.

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The following documents, which we have filed with the SEC (file number 001-13165), are incorporated by reference in and made a part of this prospectus:

- The Registrant's Annual Report on Form 10-K filed with respect to the Registrant's fiscal year ended December 31, 2007.

- The Registrant's Quarterly Reports on Form 10-Q filed with respect to the three month periods ended March 31, 2008, June 30, 2008, and September 30, 2008.

- The Registrant's Current Reports on Forms 8-K filed on February 12, 2008, February 25, 2008, March 28, 2008, April 21, 2008, October 28, 2008 and November 3, 2008.

- The description of the Registrant's Common Stock contained in the Registrant's Registration Statement filed under Section 12 of the Securities Exchange Act of 1934, including any amendment or report filed for the purpose of updating such description.

We are also incorporating by reference any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering. These documents will be deemed to be incorporated by reference in this prospectus and to be a part of it from the date they are filed with the SEC. You may read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public from commercial document retrieval services and at the Web site maintained by the SEC at http://www.sec.gov. This information is also available without charge upon written or oral request to:

CryoLife, Inc.
Attn: Secretary
1655 Roberts Boulevard, NW
Kennesaw, Georgia 30144
(770) 419-3355

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. We may not make an offer of securities in any state where the offer is not permitted. The delivery of this prospectus does not, under any circumstances, mean that there has not been a change in our affairs since the date of this prospectus. It also does not mean that the information in this prospectus is correct after this date.

LEGAL MATTERS

The validity of the common stock (including any common stock issuable upon the conversion of any preferred stock), preferred stock (including any preferred stock underlying any depositary shares) and the depositary shares offered by this prospectus have been passed upon for us by Arnall Golden Gregory LLP. Legal counsel to any underwriters may pass upon legal matters for such underwriters.

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EXPERTS

The consolidated financial statements and the related financial statement schedule incorporated in this Registration Statement on Form S-3 by reference from Cryolife's Annual Report on Form 10-K for the year ended December 31, 2007 and the effectiveness of Cryolife’s internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference (which report on the consolidated financial statements expressed an unqualified opinion and includes an explanatory paragraph relating to the Company’s adoption on October 1, 2005 of Statement of Financial Accounting Standards No. 123R, “Share Based Payment,” and on January 1, 2007 of Financial Accounting Standards Board Interpretation No. 48, “Accounting for Uncertainty in Income Taxes”). Such financial statements and financial statement schedule have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

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CRYOLIFE, INC.

$50,000,000

Common Stock
Preferred Stock
Depositary Shares

P R O S P E C T U S

_____, 2008

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PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. Other Expenses of Issuance and Distribution

All expenses, other than fees and expenses of legal or other advisors to the selling shareholders, will be paid by CryoLife. Such expenses are as follows:*

SEC registration fee	$ 1,965
NYSE listing fee	25,000
Printing expenses	25,000
Accounting fees and expenses	150,000
Legal fees and expenses	125,000
Miscellaneous	15,000
Total	$ 341,965

*The amounts set forth, except for the filing fees for the SEC, are estimated.

ITEM 15. Indemnification of Directors and Officers

The Registrant is a Florida corporation. The following summary is qualified in its entirety by reference to the complete text of the Florida Business Corporation Act (the "FBCA"), the Registrant's Amended and Restated Articles of Incorporation, and the Registrant's Amended and Restated Bylaws.

Under Section 607.0850(1) of the FBCA, a corporation may indemnify any of its directors and officers against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding (including any appeal thereof) (i) if such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and (ii) with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. In actions brought by or in the right of the corporation, however, Section 607.0850(2) provides that no indemnification shall be made in respect of any claim, issue or matter as to which the director or officer shall have been adjudged to be liable unless, and only to the extent that, the court in which such proceeding was brought, or any other court of competent jurisdiction, shall determine upon application that, despite the adjudication of liability but in view of all circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper. Article X of the Registrant’s Restated Articles of Incorporation requires that, if in the judgment of the majority of the Board of Directors (excluding from such majority any director under consideration for indemnification) the criteria set forth under Section 607.0850 have been met, then the Registrant shall indemnify its directors and officers for certain liabilities incurred in the performance of their duties on behalf of the Registrant in the manner and to the extent contemplated by Section 607.0850 of the FBCA (formerly Section 607.014 of the Florida General Corporation Act). Article VI of the Registrant’s Amended and Restated Bylaws provides that indemnification is available to directors and officers only if the person to be indemnified acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interest of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe

that his or her conduct was unlawful. The Registrant will have no obligation to provide indemnification until a determination has been made that the appropriate standard of conduct has been met and that indemnification is not prohibited by relevant law. With respect to proceedings brought by or in the right of the Registrant, no indemnification shall be made if the officer or director is adjudged to be liable unless a court of competent jurisdiction shall determine that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification. The Registrant's Amended and Restated Bylaws also state that the rights to indemnification are binding contract rights which are binding on the Registrant with respect to any conduct that takes place while the provision remains in place, even if the provision is later amended, and that the rights continue as to a person who has ceased to be an officer or director. Expenses, including reasonable attorneys' fees and court costs, incurred by a director or officer in defending a proceeding for which indemnification is provided will be paid by the Registrant in advance of the final disposition of such proceeding provided that the director or officer represents that he or she has met the applicable standard of conduct in relation to the proceeding and will repay such amount if he or she is ultimately found not to be entitled to indemnification.

The Registrant has purchased insurance to insure (i) the Registrant's directors and officers against damages from actions and claims incurred in the course of their duties, and (ii) the Registrant against expenses incurred in defending lawsuits arising from certain alleged acts of its directors and officers.

The Registrant has entered into indemnification agreements with each of its directors and its Executive Vice President, Chief Operating Officer and Chief Financial Officer ("Indemnitees"). Pursuant to such agreements, the Registrant shall indemnify each Indemnitee whenever he or she is or was a party or is threatened to be made a party to any proceeding, including without limitation any such proceeding brought by or in the right of the Registrant, because he or she is or was a director or officer of the Registrant or is or was serving at the request of the Registrant as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or because of anything done or not done by the Indemnitee in such capacity, against expenses and liabilities (including the costs of any investigation, defense, settlement or appeal) actually and reasonably incurred by the Indemnitee or on his or her behalf in connection with such proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that an Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Registrant, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful. Unless a determination has been made that the Indemnitee is not entitled to indemnification pursuant to the agreement, all reasonable expenses incurred by or on behalf of such Indemnitee shall be advanced from time to time by the Registrant to the Indemnitee within thirty (30) days after the Registrant's receipt of a written request for an advance of expenses by such Indemnitee, whether prior to or after final disposition of a proceeding. If required by law, Indemnitee shall agree, at the time of such advance, to repay the amounts advanced if it is ultimately determined that Indemnitee is not entitled to be indemnified under the terms of the agreement. Any advances made shall be unsecured and no interest shall be charged thereon.

ITEM 16. Exhibits

Exhibit No.	Exhibit
3.1	Amended and Restated Articles of Incorporation of the Company. (Incorporated herein by reference to Exhibit 3.1 to the Registrant’s Form 10-K for the year ended December 31, 2007.)
3.2	Amended and Restated ByLaws of the Company. (Incorporated by reference to Exhibit 3.1 to the Registrant’s Report on Form 8-K filed October 28, 2008.)
4.1	Form of Certificate for the Company’s Common Stock. (Incorporated by reference to Exhibit 4.2 to the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 1997.)
4.2	First Amended and Restated Rights Agreement, dated as of November 2, 2005, between CryoLife, Inc. and American Stock Transfer & Trust Company. (Incorporated herein by reference to Exhibit 4.1 to Registrant’s Current Report on Form 8-K filed November 3, 2005.)
4.3+	Form of Depositary Agreement.
4.4+	Form of Depositary Receipt.

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5.1*	Opinion of Arnall Golden Gregory LLP regarding legality of the common stock, preferred stock and depositary shares.
12.1*	Computation of Ratio of Earnings to Fixed Charges.
23.1*	Consent of Arnall Golden Gregory LLP (included as part of Exhibit 5 hereto.)
23.2*	Consent of Deloitte & Touche LLP.
24.1*	Power of Attorney (included in the signature pages of this registration statement.)
99.1	Form of Indemnification Agreement entered into with each of the Registrant's directors, except Harvey Morgan, and its Executive Vice President, Chief Operating Officer and Chief Financial Officer (Incorporated herein by reference to Exhibit 99.1 to the Form S-3/A filed by Registrant on January 4, 2005.)
99.2*	Form of Indemnification Agreement entered into with Harvey Morgan.

+ To be filed by amendment or as an exhibit to a Current Report on Form 8-K of the Registrant
* Filed with this Form S-3

ITEM 17. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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(4) That for the purpose of determining liability under the Securities Act of 1933 to any purchaser.

(i) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed tobe part of the registration statement as of the date the filed prospectus was deemed part ofand included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;
ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;
iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and
iv. Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a

director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Kennesaw, State of Georgia on November 21, 2008.

CRYOLIFE, INC.

By: /s/ Steven G. Anderson
Steven G. Anderson
President, Chief Executive Officer
and Chairman of
the Board of Directors

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Steven G. Anderson and Jeffrey W. Burris and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments and amendments pursuant to Rule 462(b)) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

PRINCIPAL EXECUTIVE, FINANCIAL & ACCOUNTING OFFICERS AND DIRECTORS:

Name	Title	Date
/s/ Steven G. Anderson Steven G. Anderson	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	November 21, 2008
/s/ D. A. Lee D. Ashley Lee	Executive Vice President, Chief Operating Officer and Chief Financial Officer (Principal Financial Officer)	November 21, 2008
/s/ Amy D. Horton	Chief Accounting Officer (Principal Accounting Officer)	November 21, 2008

Amy D. Horton		
/s/ Thomas F. Ackerman Thomas F. Ackerman	Director	November 21, 2008
/s/ James S. Benson James S. Benson	Director	November 21, 2008
/s/ Daniel J. Bevevino Daniel J. Bevevino	Director	November 21, 2008

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/s/ John M. Cook John M. Cook	Director	November 21, 2008
/s/ Ronald C. Elkins, M.D. Ronald C. Elkins, M.D.	Director	November 21, 2008
/s/ Ronald D. McCall Ronald D. McCall	Director	November 21, 2008
/s/ Harvey Morgan Harvey Morgan	Director	November 21, 2008

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