UNITED STATES SECURITIES AND EXCHANGE COMMISSION washington, d.c. 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): March 7, 2012

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida (State or Other Jurisdiction of Incorporation) 1-13165 (Commission File Number) **59-2417093** (IRS Employer Identification No.)

1655 Roberts Boulevard, N.W., Kennesaw, Georgia 30144 (Address of principal executive office) (zip code)

Registrant's telephone number, including area code: (770) 419-3355

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 5 Corporate Governance and Management

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On March 7, 2012, the Compensation Committee (the "Committee") of the Board of Directors of CryoLife, Inc. (the "Company") approved awards of performance shares to its named executive officers pursuant to a Form of Restricted Performance Share Award Agreement (the "Grant Agreement"), attached hereto as Exhibit 10.1 and incorporated herein by reference.

CryoLife's named executive officers, as named in CryoLife's 2011 Proxy Statement, other than Albert E. Heacox, Ph.D, who retired from the Company effective December 31, 2011, received the following target number of performance shares:

- Steven G. Anderson, Chairman of the Board, President, and Chief Executive Officer 41,667 performance shares;
- D. Ashley Lee, Executive Vice President, Chief Operating Officer and Chief Financial Officer 16,667 performance shares;
- Gerald B. Seery, Senior Vice President, Sales and Marketing 11,667 performance shares; and
- Jeff Burris, Vice President and General Counsel 11,667 performance shares.

The grants to Messrs. Anderson and Lee were made pursuant to the Company's 2009 Employee Stock Incentive Plan and the grants to Messrs. Seery and Burris were made pursuant to the Company's 2004 Employee Stock Incentive Plan.

Each performance share represents the right to receive one share of the Company's common stock ("Common Stock"), subject to adjustment up or down from the target level based upon CryoLife's adjusted EBITDA performance for fiscal 2012. Adjusted EBITDA is calculated as net income before interest, taxes, depreciation and amortization, as further adjusted by removing the impact of the following: stock-based compensation, R&D (excluding salaries and related expense), grant revenue, litigation expense or revenue, acquisition, license, and business development expense, integration costs (including any litigation costs or revenue related to assumed litigation), and other income or expense, and by including the impact of the change in deferred preservation costs, change in inventory, and change in trade receivables.

The performance shares will vest based on a combination of the Company attaining specified levels of adjusted EBITDA for fiscal 2012 and the passage of time. The vesting schedule will be determined on and as of the date of the filing of the Company's Form 10-K for fiscal 2012 with the Securities and Exchange Commission. The number of shares of Common Stock awarded and the vesting schedule will be based on the following levels of the Company's adjusted EBITDA for fiscal 2012:

Depending upon the 2012 adjusted EBITDA achieved, we will issue to the named executive officers from 0 to 150% of the target number of shares. Adjusted EBITDA performance at or above 107% of the target EBITDA level is required in order for more than 100% of the target number of shares to be issued. Of the shares issued, 50% will vest immediately, 25% will vest on the second anniversary of the grant date of the performance shares, and the remaining 25% will vest on the third anniversary of the grant date of the performance shares.



The Grant Agreement provides that, even if the Company's adjusted EBITDA for fiscal 2012 exceeds target, the Committee has the discretion to reduce the payout for each named executive officer to 100% of the target number of shares. The named executive officer must be an employee of the Company on the applicable vesting date to be entitled to vesting, and the vesting of the performance shares may be accelerated upon a Change of Control of the Company, pursuant to the terms of the Grant Agreement and the plan under which the performance shares were granted.

The decision to grant performance shares to the named executive officers resulted from the Committee's review of CryoLife's executive pay practices following the non-binding vote of the Company's shareholders at the 2011 Annual Meeting to approve the compensation paid to the Company's named executive officers. In order to continue to implement executive pay practices that more closely align executive pay with the Company's performance, CryoLife adjusted the equity grant component of its executive pay for fiscal 2012 so that executives received the equity portion of their compensation in the form of approximately one-third restricted stock, one-third options and one-third performance shares, based on the number of shares at the target level. In prior years, executives received approximately one-third of their equity grants in the form of restricted stock and two-thirds in the form of options.

Section 9 Financial Statements and Exhibits. Item 9.01(d) Exhibits.

(a) Financial Statements. Not applicable.

(b) Pro Forma Financial Information. Not applicable.

(c) Shell Company Transactions. Not applicable.

(d) Exhibits.

Exhibit Number Description

10.1 Form of Restricted Performance Share Award Agreement

-3-

SIGNATURES

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

CRYOLIFE, INC.

Date: March 13, 2012

By: /s/ D.A. Lee Name:D. Ashley Lee Title: Executive Vice President, Chief Operating Officer and Chief Financial Officer

Your Name:

Number of Target

Shares:

CRYOLIFE RESTRICTED PERFORMANCE SHARE AWARD AGREEMENT

CRYOLIFE, INC. ("CryoLife") is pleased to grant you the performance award described below ("Performance Share Award"). This grant is made subject to the further terms and conditions set forth in this Agreement and the terms of the CryoLife, Inc. _____ Employee Stock Incentive Plan (the "Plan").

Grant Date: ______ Target Number of Shares of Performance Share ______ Award:

Vesting:

The performance shares will vest based on a combination of attaining specified levels of ______ and the passage of time, as more specifically described on Exhibit "A". We calculate ______ as _____.

The following documents accompany this Award Agreement:

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

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

The Plan Prospectus Document covering the Performance Share Award contains important information, including federal income tax consequences.

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

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

GRANTEE:

By: Name: Steven G. Anderson Its: President and CEO Date:

Print Your Name: Date:

ADDITIONAL TERMS AND CONDITIONS OF YOUR PERFORMANCE SHARE AWARD

EFFECT OF TERMINATION OF SERVICE. You must be an employee of CryoLife, Inc. or another Eligible Employer on the applicable vesting date to be entitled to the vesting of your Performance Share Award on such date. If you cease to be an employee for any reason, and your Performance Share Award has not vested as of the date of termination of your employment, your Performance Share Award shall automatically be forfeited and cancelled as of the date of such termination of employment.

CRVOLIFE'S 's OBLIGATION TO PAY. Each Performance Share represents the right to receive one (1) share of CryoLife, Inc. common stock ("Stock") at the target level, and subject to adjustment up or down based upon CryoLife's ______ performance for _____, as further described on Exhibit "A", on the date it vests based on CryoLife's ______ performance (or at such later time as indicated in this Agreement or the Plan). Unless and until the Performance Shares will have vested based on CryoLife's ______ performance, you will have no right to payment of shares of Stock with respect to any such Performance Shares. Prior to actual payment of any shares of Stock with respect to any Performance Shares, such Performance Shares will be determined on and as of the date of filing of CryoLife's Form 10-K for fiscal 2012 with the Securities and Exchange Commission. Shares will be rounded down to the nearest whole number of shares of Stock. No fractional shares will be issued. Notwithstanding anything to the contrary contained herein, at any time prior to the issuance of shares of Stock pursuant to this Agreement, the Compensation Committee, in its sole discretion, may reduce the number of shares to be issued hereunder, but in no event may the number of shares to be issued be reduced below the target number of shares. You will receive written notice of any such reduction.

VESTING. Subject to the provisions of this Agreement and the Plan, the Performance Shares awarded pursuant to this Agreement will vest according to the vesting schedule set forth on Exhibit "A".

TIME OF PAYMENT.

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

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

<u>RIGHTS WITH RESPECT TO PERFORMANCE SHARE AWARD PRIOR TO VESTING.</u> You may not transfer or otherwise assign your Performance Share Award or the shares to be issued hereunder prior to vesting. Once this Performance Share Award vests, you may receive certificates representing the vested portion or the shares of Stock to be issued to you may be issued in uncertificated form. Any such shares of Stock that remain subject to time vesting requirements as specified on the first page of this Agreement and on Exhibit "A" will not be transferable, however, unless and until such time vesting has been satisfied. Prior to issuance of shares of Stock, you are not entitled to any rights as a shareholder with respect to the shares underlying the Performance Share Award. As a result, subject to the provisions of the Plan, you will have no rights to vote such shares or to receive dividends or other distributions, if any, payable with respect to such shares after the date of grant of the Performance Share Award but prior to the issuance of the shares subsequent to vesting.

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

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

To CryoLife:	CryoLife, Inc. 1655 Roberts Blvd., NW Kennesaw, GA 30144 Attention: Secretary
To you:	The address set forth in the Agreement

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

SECTION 409A. This Agreement and the Performance Shares granted hereunder are intended to comply with, or otherwise be exempt from, Section 409A of the Code. This Agreement and the Performance Shares shall be administered, interpreted and construed in a manner consistent with such Code section. Should any provision of this Agreement or the Performance Shares be found not to comply with, or otherwise be exempt from, the provisions of Section 409A of the Code, it shall be modified and given effect, in the sole discretion of the Committee and without requiring your consent (notwithstanding any other provisions hereof), in such manner as the Committee determines to be necessary or appropriate to comply with, or effectuate an exemption from, Section 409A of the Code. Each amount payable under this Agreement as a payment upon vesting of a Performance Share is designated as a separate identified payment for purposes of Section 409A of the Code.

Exhibit "A"

Vesting Schedule

- If _______ of at least \$_______ but less than \$_______ is achieved, we will issue 50% of the target number of shares; 50% of the issued shares will be vested upon issuance, 25% will vest on the second anniversary of the original grant date, and the final 25% will vest on the third anniversary of the original grant date;
- If _______ of at least \$_______ but less than \$_______ is achieved, we will issue 75% of the target number of shares; 50% of the issued shares will be vested upon issuance, 25% will vest on the second anniversary of the original grant date, and the final 25% will vest on the third anniversary of the original grant date;
- If _______ of at least \$_______ but less than \$_______ is achieved, we will issue 100% of the target number of shares; 50% of the issued shares will be vested upon issuance, 25% will vest on the second anniversary of the original grant date, and the final 25% will vest on the third anniversary of the original grant date; and
- If ______ of \$_____ or more is achieved the number of shares earned will be calculated on a sliding scale; the scale will begin with ______ \$____ (or 107% of the target EBITDA of \$_____) earning 110% of the target number of shares, and the scale will end with ______ of \$_____ (or 115% of the target EBITDA of \$_____) earning 150% of the target number of shares; accordingly, we will issue a number of shares calculated as follows:
 - o actual ______ divided by target ______ of \$_____,
 - o minus 1.07,
 - o times 5,
 - o plus 1.10,
 - o times the target number of shares,

up to a maximum number of shares equal to 150% of the target number of shares. 50% of the issued shares will be vested upon issuance, 25% will vest on the second anniversary of the original grant date, and the final 25% will vest on the third anniversary of the original grant date.