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 18, 2010

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida	**1-13165**	**59-2417093**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(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 1Registrant's Business and Operations

Item 1.02Termination of a Material Definitive Agreement.

CryoLife, Inc. ("CryoLife") and Medafor, Inc. ("Medafor") are parties to an exclusive distribution agreement (the "Agreement") whereby CryoLife distributes HemoStase, an absorbable blood clotting agent manufactured by Medafor, in certain markets and certain fields. On March 18, 2010, Medafor informed CryoLife that it is treating the Agreement as terminated. Medafor alleges that it had reasonable grounds to demand, pursuant to Georgia law, that CryoLife provide adequate assurances that it would perform under the Agreement and that CryoLife has repudiated the Agreement by not providing adequate assurances.

This is Medafor's fourth attempt to terminate the Agreement . After completing its preliminary analysis, CryoLife believes that Medafor's alleged request that CryoLife give adequate assurance of due performance under the Agreement was not reasonable or made in good faith, and that Medafor's position that it may treat the Agreement as terminated is not valid.

CryoLife is currently evaluating all of its options related to this most recent termination attempt by Medafor.

On March 16, 2010, CryoLife placed a purchase order of approximately $500,000 of HemoStase product to be delivered to CryoLife on April 15, 2010. On March 18, 2010 after notifying CryoLife that it was treating the EDA as terminated, Medafor notified CryoLife that it would not fulfill this order because CryoLife submitted the order 30 days prior to shipment, instead of the minimum 35 days set forth in the Agreement and the amount requested was more than CryoLife had forecasted as set forth in the Agreement. Assuming Medafor's effort to deem the Agreement as being terminated is not successful, CryoLife may simply submit a new purchase order.

If the Agreement is ultimately terminated by Medafor due to its decision to deem the Agreement terminated or if Medafor fails to ship HemoStase as ordered by CryoLife, CryoLife's previously issued financial guidance for fiscal 2010 may be materially affected.

On March 19, 2010, CryoLife issued a press release regarding the Agreement, Medafor's actions described above and the litigation regarding the Agreement described below. The press release is attached hereto as Exhibit 99.1.

The Agreement has a three-year term from its effective date of May 1, 2008 and will automatically renew for an additional three-year period if CryoLife makes minimum purchases as designated under the Agreement; however, there is no contractual obligation for CryoLife to make minimum purchases. Per the terms of the Agreement, CryoLife is a distributor of HemoStase and is the exclusive distributor of the product in the U.S. for all applications in cardiac and vascular surgery (excluding Department of Defense hospitals) and the exclusive distributor internationally (excluding China and Japan) for cardiac, vascular, and general surgery, explicitly excluding orthopedic, ear, nose and throat surgery, neurosurgery and topical applications. A copy of the Agreement is filed as Exhibit 10.1 to CryoLife's Form 10-Q for the quarter ended June 30, 2008 and is incorporated herein by reference.

As previously discussed in CryoLife's Form 10-K for the year ended December 31, 2009 and its Forms 10-Q for the quarters ended March 31, 2009, June 30, 2009 and September 30, 2009, CryoLife has filed a lawsuit against Medafor for, among other things, breach of contract, fraud, negligent misrepresentation, and violations of Georgia Racketeer Influenced and Corrupt Organizations Act ("Georgia RICO"), alleging that Medafor has violated the Agreement by, among other things, allowing other companies to distribute HemoStase in territories and medical fields reserved exclusively for CryoLife per the terms of the Agreement. CryoLife's lawsuit alleges that Medafor, contrary to its representations in the Agreement, had numerous distribution agreements regarding HemoStase with other distributors in the U.S. and internationally, allowing them to market and distribute HemoStase in the territory and field given exclusively to CryoLife. Medafor is alleged to have knowingly and purposefully withheld from CryoLife disclosure of all but three of these agreements; to have knowingly and purposefully misrepresented that the three distributors with these agreements would not be allowed to compete with CryoLife after the effective date of the Agreement except in several explicitly identified facilities, and then only for a short period of time; and to have intentionally misrepresented to CryoLife that no such contracts existed with any other distributors, and that no such contracts would exist after CryoLife's exclusive rights commenced. The lawsuit also alleges that Medafor has failed to take reasonable steps to prevent other distributors from distributing HemoStase in CryoLife's exclusive field and territory, and that Medafor breached its contractual obligation to prevent competing products from violating Medafor's intellectual property rights in HemoStase, thereby impairing the value of CryoLife's exclusive distributorship.

As specified in the lawsuit, CryoLife brought these transgressions to Medafor's attention on numerous occasions and attempted to work with Medafor to secure its compliance with the terms of the parties' Agreement, but was unable to get Medafor to follow the terms of the Agreement. CryoLife believes that Medafor's actions have deprived CryoLife of significant sales volume and have impaired and delayed CryoLife's development of relationships with customers in its exclusive territory.

In addition, CryoLife recently announced that it has acquired approximately 10.3% of Medafor's outstanding common stock, and offered to engage in negotiations with the Medafor board to purchase the remaining shares at $2 per share, to be paid in a combination of cash and stock. The Medafor board has rejected CryoLife's offer and has refused to negotiate with it. On March 12, 2010, Medafor announced an agreement with Magle Life Sciences ("Magle") whereby it diluted Medafor stock by distributing 1.8 million shares to Magle. In response to the dilution of Medafor's outstanding shares, CryoLife announced that it intends to withdraw its proposal at 5:00 PM on March 24, 2010.

On March 2, 2010, CryoLife accepted service of a new lawsuit filed against it by Medafor in state court in Minnesota. The lawsuit seeks a declaratory judgment that Medafor is entitled to a protective order prohibiting CryoLife from obtaining, in its capacity as a Medafor shareholder, information that Medafor contends is confidential, privileged and competitive information that is (a) contained in Medafor's board minutes and board committee minutes requested by CryoLife or (b) contained in any other document that CryoLife may request from Medafor. Medafor similarly seeks an order prohibiting CryoLife from using documents it has obtained, in its capacity as a Medafor shareholder, in the Georgia lawsuit unless and until Medafor produces the documents in discovery in that lawsuit. Although CryoLife's answer is not yet due, CryoLife intends to defend its rights to receive information it is entitled to receive as a Medafor shareholder.

Although CryoLife is not a party to the lawsuit, Medafor has brought suit against Steven G. Anderson, the Chairman, Chief Executive Officer and President of CryoLife, alleging tortious interference with contract in connection with Mr. Anderson's purchase of 1,000 shares of common stock from a Medafor shareholder who is a former officer of Medafor. Mr. Anderson has filed counterclaims against Medafor, requesting that Medafor be ordered to transfer the 1,000 shares to Mr. Anderson, grant him all of the rights of a Medafor shareholder, and reimburse his legal expenses. Mr. Anderson also has asserted third-party claims against Gary J. Shope, Medafor's CEO, and Gavin Thomson, Medafor's CFO, requesting that they be ordered to facilitate the transfer of the 1,000 shares to Mr. Anderson and reimburse his legal expenses. The third-party claims also assert that Messrs. Shope and Thomson have tortiously interfered with contract in connection with Mr. Anderson's contract to purchase the 1,000 shares from the Medafor shareholder.

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
99.1	Press Release dated March 19, 2010

Except for the historical information contained in this report, the statements made by CryoLife are forward-looking statements that involve risks and

uncertainties. All such statements are subject to the safe harbor created by the Private Securities Litigation Reform Act of 1995. These statements include CryoLife's belief that termination of the Agreement and/or Medafor's rejection of purchase orders may have a material affect on previously announced financial guidance, CryoLife's belief that Medafor does not have a valid reason to terminate the Agreement and CryoLife's intention to withdraw its proposal to acquire all outstanding Medafor stock. These statements are subject to a number of risks that are outside CryoLife's control, including the risk that Medafor will not act reasonably in this matter or that a court could disagree with CryoLife's interpretation of the Agreement and its rights thereunder. Also, previously announced anticipated revenue for fiscal 2010 includes revenue from the Agreement and termination of the Agreement would reduce those revenues and the related profits. These risks and uncertainties also include the risk factors detailed in our Securities and Exchange Commission filings, including our Form 10-K filing for the year ended December 31, 2009. The Company does not undertake to update its forward-looking statements. In addition, the calculation of the estimated percentage of Medafor's outstanding shares owned by CryoLife is based on 22,795,779 shares outstanding, the number of outstanding shares shown on Medafor's shareholder list as updated on February 19, 2010 plus the announced issuance of 1.8 million shares to Magle. This calculation does not take into account any shares that may have been repurchased or issued by Medafor since that date. As a result, CryoLife's actual percentage ownership of Medafor's outstanding common stock may be greater or less than 10.3%.

Additional Important Information

This filing is provided for informational purposes only and is not an offer to purchase nor a solicitation of offers to sell shares of Medafor or CryoLife. Subject to future developments, CryoLife may file a registration statement and/or tender offer documents and/or proxy statement with the SEC in connection with the proposed combination. Shareholders should read those filings, and any other filings made by CryoLife with the SEC in connection with the combination, as they will contain important information. Those documents, if and when filed, as well as CryoLife's other public filings with the SEC, may be obtained without charge at the SEC's website at www.sec.gov and at CryoLife's website at www.cryolife.com.

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 19, 2010

By: /s/ D. Ashley Lee

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

CryoLife®

Life Restoring Technologies®

NEWS RELEASE

FOR IMMEDIATE RELEASE

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CryoLife Comments on Status of Medafor Distribution Agreement

ATLANTA, GA (March 19, 2010) -- CryoLife, Inc. (NYSE: CRY), an implantable biological medical device and cardiovascular tissue processing company, today responded to Medafor's allegation that it has repudiated the Exclusive Distribution Agreement ("Agreement") between the two companies.

On March 18, 2010, Medafor informed CryoLife that it is treating the Agreement as terminated.

Medafor alleges that it had reasonable grounds, pursuant to Georgia law, to demand that CryoLife provide adequate assurances that it would perform under the Agreement and that CryoLife has repudiated the Agreement by not providing adequate assurances. After completing its preliminary analysis, CryoLife believes that Medafor's position that it may treat the Agreement as terminated is not valid and that Medafor's request that CryoLife give adequate assurance of due performance under the Agreement was not reasonable or made in good faith.

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About CryoLife, Inc.

Founded in 1984, CryoLife, Inc. is a leader in the processing and distribution of implantable living human tissues for use in cardiac and vascular surgeries throughout the U.S. and Canada. The Company's CryoValve® SG pulmonary heart valve, processed using CryoLife's proprietary SynerGraft® technology, has FDA 510(k) clearance for the replacement of diseased, damaged, malformed, or malfunctioning native or prosthetic pulmonary valves. The Company's

CryoPatch® SG pulmonary cardiac patch has FDA 510(k) clearance for the repair or reconstruction of the right ventricular outflow tract (RVOT), which is a surgery commonly performed in children with congenital heart defects, such as Tetralogy of Fallot, Truncus Arteriosus, and Pulmonary Atresia. CryoPatch SG is distributed in three anatomic configurations: pulmonary hemi-artery, pulmonary trunk, and pulmonary branch. The Company's BioGlue® Surgical Adhesive is FDA approved as an adjunct to sutures and staples for use in adult patients in open surgical repair of large vessels. BioGlue is also CE marked in the European Community and approved in Canada and Australia for use in soft tissue repair. The Company's BioFoam™ Surgical Matrix is CE marked in the European Community for use as an adjunct in the sealing of abdominal parenchymal tissues (liver and spleen) when cessation of bleeding by ligature or other conventional methods is ineffective or impractical. BIOGLUE *Aesthetic*® Medical Adhesive is CE marked in the European Community for periosteal fixation following endoscopic browplasty (brow lift) in reconstructive plastic surgery and is distributed by a third party for this indication. CryoLife distributes HemoStase, a hemostatic agent, in much of the U.S. for use in cardiac and vascular surgery and in many international markets for cardiac, vascular, and general surgery, subject to certain exclusions.

Except for the historical information contained in this press release, the statements made by CryoLife are forward-looking statements that involve risks and uncertainties. All such statements are subject to the safe harbor created by the Private Securities Litigation Reform Act of 1995. These statements include CryoLife's belief that termination of the Agreement and/or Medafor's rejection of purchase orders may have a material affect on previously announced financial guidance, CryoLife's belief that Medafor does not have a valid reason to terminate the Agreement and CryoLife's intention to withdraw its proposal to acquire all outstanding Medafor stock. These statements are subject to a number of risks that are outside CryoLife's control, including the risk that Medafor will not act reasonably in this matter or that a court could disagree with CryoLife's interpretation of the Agreement and its rights thereunder. Also, previously announced anticipated revenue for fiscal 2010 includes revenue from the Agreement and termination of the Agreement would reduce those revenues and the related profits. These risks and uncertainties also include the risk factors detailed in our Securities and Exchange Commission filings, including our Form 10-K filing for the year ended December 31, 2009. The Company does not undertake to update its forward-looking statements.

For additional information about the company, visit CryoLife's Web site:
www.cryolife.com.

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