

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

FORM 8-A/A
AMENDMENT NO. 1

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(B) OR 12(G) OF THE
SECURITIES EXCHANGE ACT OF 1934

CRYOLIFE, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

FLORIDA 59-2417093
(STATE OF INCORPORATION OR ORGANIZATION) (I.R.S. EMPLOYER IDENTIFICATION NO.)

STEVEN G. ANDERSON, PRESIDENT,
CHIEF EXECUTIVE OFFICER
1655 ROBERTS BOULEVARD, NW
KENNESAW, GEORGIA 30144
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES) (ZIP CODE)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box. []

If this Form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box. []

Securities Act registration statement file number to which this form relates (IF APPLICABLE) N/A

Securities to be registered pursuant to Section 12(b) of the Act:

TITLE OF EACH CLASS TO BE SO REGISTERED	NAME OF EACH EXCHANGE ON WHICH EACH CLASS IS TO BE REGISTERED
Series A Junior Participating Preferred Stock, \$0.01 par value per share	New York Stock Exchange

Securities to be registered pursuant to Section 12(g) of the Act:

NONE

(TITLE OF CLASS)

ITEM 1. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED

The Company has amended and restated its Rights Agreement, which was entered into on November 27, 1995, to extend its expiration date to November 23, 2015, and make other changes. The instrument of this amendment and restatement is a First Amended and Restated Rights Agreement entered into as of November 2, 2005, with such amendments becoming effective as of 5:00 p.m. Eastern Standard Time on November 23, 2005 (as the same may be amended from time to time, the "Rights Agreement") between the Company and American Stock Transfer & Trust Company, as Rights Agent.

The following summarizes the principal terms of the Rights Agreement and is qualified in its entirety by reference to the detailed terms and conditions of the Rights Agreement, a copy of which is attached hereto as Exhibit 4.1 and is incorporated herein by reference. Unless the context otherwise requires, the capitalized terms used below have the meanings ascribed to them in the Rights

Agreement.

Each share of Common Stock, par value \$.01 per share (the "Common Shares"), outstanding on December 11, 1995 (the "First Record Date") is entitled to one right (a "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.

Each share of 6% Convertible Preferred Stock, par value \$.01 per share (the "Convertible Shares") of the Company outstanding on November 23, 2005 (the "Second Record Date"), is entitled to one Right for each share of Common Stock into which the Convertible Share is convertible as of the Distribution Date (as defined in the Rights Agreement), subject to the terms and conditions of the Rights Agreement. Each Convertible Share that becomes outstanding after the Second Record Date is also entitled to a Right, subject to the terms of the Rights Agreement. The Common Shares and Convertible Shares that are entitled to receive Rights under the Rights Agreement are referred to as Eligible Shares.

The Rights are evidenced by the certificates for Eligible Shares until the earlier of (i) 10 business days following a public announcement that a person or group of affiliated or associated persons (with certain exceptions, an "Acquiring Person") have acquired beneficial ownership of 15% or more of the outstanding Common Shares or (ii) 10 business days (or such later date as may be determined by action of the Board of Directors prior to such time as any person or group of affiliated persons becomes an Acquiring Person) 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 Shares (the earlier of such dates being called the "Distribution Date").

Until the Distribution Date (or earlier redemption, exchange or expiration of the Rights), the Rights will be transferred with and only with the 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.

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 (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares, (ii) 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 (iii) 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-hundredth 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.

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).

ITEM 2. EXHIBITS

The following exhibits are filed or incorporated by reference as a part of

this Registration Statement:

EXHIBIT NO. -----	DESCRIPTION -----
3.1	Restated Articles of Incorporation of the Registrant, as amended. (Incorporated by reference to Exhibit 3.1 to Form 10-Q for the quarter ended March 31, 2003.)
3.2	ByLaws of the Registrant, as amended. (Incorporated by reference to Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005.)
3.3	Articles of Amendment to the Articles of Incorporation of the Registrant. (Incorporated by reference to Exhibit 3.3 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2000.)
3.4	Articles of Amendment to Articles Incorporation of the Registrant. (Incorporated by reference to Exhibit 3.4 filed with the Registrant's Registration Statement on Form 8-A filed on March 15, 2005.)
3.5	Articles of Amendment to Articles Incorporation of the Registrant. (Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed November 3, 2005.)
4.1	First Amended and Restated Rights Agreement, dated as of November 2, 2005, between CryoLife, Inc. and American Stock Transfer & Trust Company, which includes the Form of Articles of Amendment to Amended and Restated Articles of Incorporation of CryoLife, Inc. at Exhibit A, the Form of Right Certificate at Exhibit B and the Summary of Rights to Purchase Preferred Shares as Exhibit C. (Incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed November 3, 2005.)

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

CRYOLIFE, INC.

By: /s/ Steven G. Anderson

STEVEN G. ANDERSON
CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Dated: November 3, 2005