

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

FORM 8-A

**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
(State of Incorporation or Organization)

59-2417093
(I.R.S. Employer Identification No.)

Steven G. Anderson, President, Chief Executive
1655 Roberts Boulevard, NW
Kennesaw, Georgia
(Address of Principal Executive Offices)

30144
(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: **333-121406 (if applicable)**

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

**% Convertible 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

A description of the Registrant's preferred stock is set forth under the caption "Description of Preferred Stock" contained in the prospectus supplement included in the Company's Registration Statement on Form S-3 (File No. 333-121406) as originally filed with the Securities and Exchange Commission on December 17, 2004 or as subsequently amended (the "Registration Statement"), is hereby incorporated by reference in response to this item.

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 Current Report on Form 8-K filed with the Securities and Exchange Commission on December 8, 2004.)
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**	Preferred Stock Articles of Amendment to the Articles of Incorporation of the Registrant to be filed and effective upon completion of this offering.
4.1**	Specimen Convertible Preferred Stock Certificate.

** To be filed by amendment

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[ITEM 2. EXHIBITS](#)

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