

CRYOLIFE, INC.
1655 Roberts Boulevard,
NW Kennesaw, Georgia 30144

March 25, 2016

VIA EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
100 F. Street, N.E.
Washington, D.C. 20549

Attn: Heather Percival

**Re: CryoLife, Inc.
Registration Statement on Form S-3
File No. 333-210046
Acceleration Request**

Ladies and Gentlemen:

Pursuant to Rules 460 and 461 of the Securities Act of 1933, as amended, CryoLife, Inc., a Florida corporation (the “**Issuer**”), hereby respectfully requests that the effectiveness of the above captioned registration statement be accelerated so that it becomes effective at 4:05 p.m., Eastern Time, on March 29, 2016, or as soon thereafter as practicable.

The Issuer hereby acknowledges the following:

- should the Securities and Exchange Commission (the “**Commission**”) or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Issuer from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Issuer may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Paul R. Tobias of Wilson Sonsini Goodrich & Rosati, Professional Corporation at (512) 338-5401 with any questions you may have concerning this request. In addition, please provide a copy of the Commission’s order declaring the registration statement effective to Mr. Tobias via facsimile at (512) 338-5499 or via email at ptobias@wsgr.com and via mail at Wilson Sonsini Goodrich & Rosati, Professional Corporation, 900 South Capital of Texas Highway, Las Cimas IV, Fifth Floor, Austin, Texas 78746.

Sincerely,

CRYOLIFE, INC.

By: /s/ J. Patrick Mackin

Name: J. Patrick Mackin

Title: President, Chief Executive Officer, and Chairman
of the Board of Directors