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December 29, 2005

VIA FEDERAL EXPRESS AND EDGAR

Mr. Jim B. Rosenberg
Senior Assistant Chief Accountant
Division of Corporate Finance
Mail Stop 3-9
U.S. Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, DC 20549-0305

Re: CryoLife, Inc.
Form 10-K for the year ended December 31, 2004
Filed March 3, 2005
File No. 001-13165

Dear Mr. Rosenberg:

Our client, CryoLife, Inc. ("CryoLife") has received your letter dated December 16, 2005. CryoLife is preparing its response and expects to deliver it on or before January 13, 2006.

If you have any questions, please do not hesitate to contact me at (404) 873-8622.

Very truly yours,

ARNALL GOLDEN GREGORY LLP

/s/ T. Clark Fitzgerald, III
T. Clark Fitzgerald III

cc: Sasha Parikh, Staff Accountant
Mary Mast, Review Accountant
Steven G. Anderson