Snell & Wilmer L.L.P. 600 Anton Boulevard Suite 1400 Costa Mesa, California 92626

August 4, 2016

Via EDGAR

Division of Corporation Finance Securities and Exchange Commission 100 F. Street, N.E. Washington, D.C. 20549-7010 Attn.: Jay Ingram, Legal Branch Chief

RE: Cryoport, Inc.

Registration Statement on Form S-1

Filed June 30, 2016 File No. 333-212364

Dear Mr. Ingram:

On behalf of our client, Cryoport, Inc. (the "Company"), we are responding to the comments of the Staff of the Securities and Exchange Commission (the "Commission") as set forth in your letter dated July 18, 2016 to Jerrell W. Shelton, Chief Executive Officer of the Company, with respect to the Company's Registration Statement on Form S-1, as filed with the Commission on June 30, 2016. For your convenience, the Commission's comments have been repeated herein in bold, with the Company's response immediately following each of the Commission's comments.

General

1. We note that this registration statement serves as a post-effective amendment to your Form S-1 (File No. 333-180326), which was post-effectively amended on September 5, 2014 and declared effective on September 18, 2014. That filing contained audited financial statements for the fiscal year ended March 31, 2014. Under Section 10(a)(3) of the Securities Act, "when a prospectus is used more than nine months after the effective date of the registration statement, the [audited financial] information contained therein shall be as of a date not more than sixteen months prior to such use." Please tell us whether you have made any offers and/or sales of your common stock using the prospectus contained in the referenced filing from July 31, 2015 to June 30, 2016, during which time the audited financial statements in the prospectus were not current. If yes, please provide us with an analysis of your compliance with Section 5 of the Securities Act.

August 4, 2016 Page 2

This firm has confirmed with the Company and the Company's transfer agent that no shares of common stock of the Company were transferred pursuant to the prospectus made part of the Registration Statement on Form S-1 (File No. 333-180326) (the "Registration Statement") during the periods in which the audited financial statements contained therein were not current under Section 10(a)(3) of the Securities Act of 1933. We believe all sales of the Company's restricted securities during such period by selling stockholders identified in the Registration Statement were eligible for exemption under Section 4(1) of the Securities Act and the safe harbor provided by Rule 144

* * *

As part of this response letter, the Company acknowledges that:

- · should 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 company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company 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.

If you have any questions regarding the above, please do not hesitate to contact the undersigned at (714) 427-7409.

Very truly yours,

Snell & Wilmer

/s/ Anthony J. Ippolito
Anthony J. Ippolito

cc: Robert Stefanovich Chief Financial Officer