VIA EDGAR

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

Re: Cryoport, Inc.

Registration Statement on Form S-1

Filed March 25, 2015 File No. 333-203006

Dear Ms. Long:

On behalf of Cryoport, Inc. (the "Company"), we are submitting this letter in response to the comments received from the staff of the Securities and Exchange Commission (the "Commission" and the "Staff") in a letter dated April 8, 2015 (the "Comment Letter") with respect to the filing referenced above (the "Form S-1"). The Company has reviewed the Comment Letter and its responses are set forth below. The Company also filed today Amendment No. 1 to the Form S-1, reflecting the changes discussed herein and update for certain recent sales of unregulated securities. For your convenience, the headings and paragraph numbers in this letter correspond to the headings and paragraph numbers in the Comment Letter and the Commission's comments have been repeated herein in bold, with the Company's response immediately following each of the Commission's comments.

Calculation of Registration Fee, page ii

General

- 1. We note from the disclosure in your legal opinion that you are registering the following securities:
- Units (consisting of one share of common stock and one warrant to purchase one share of common stock);
- · Common stock included in the units;
- · Warrants included in the units; and
- · Common stock underlying the warrants included in the units.

Please revise your registration fee table to separately list each of the securities being registered.

The Company has revised the Calculation of Registration Fee Table to separately list of the securities being registered, as noted in your comment above.

2. Please register all of the common stock underlying the warrants included in your underwriter's overallotment. The current amount registered with respect to this common stock only corresponds to 5%, rather than 15%, of the offering of the \$16,500,000 of shares underlying the warrants.

The Company has revised the Calculation of Registration Fee Table to register all of the common stock underlying the warrants included in the underwriters' overallotment which now corresponds to 15% of the offering of the \$16,500,000 of shares underlying the warrants.

Preliminary Prospectus, page iii

3. Please revise this page and your prospectus cover page to reflect that you are also registering the units since the units constitute a separate security. See Item 501(b)(2) of Regulation S-K.

The Company has revised page iii of the Preliminary Prospectus and the prospectus cover page to reflect that the Company is also registering the units.

Executive Compensation, page 61

4. Please update your executive compensation disclosure to provide the information called for by Item 402 of Regulation S-K for your fiscal year ended March 31, 2015. For guidance, please refer to Question 117.05 of our Regulation S-K Compliance and Disclosure Interpretations.

The Company has revised the Executive Compensation section on page 61 of the Preliminary Prospectus to provide the information called for by Item 402 of Regulation S-K for the Company's fiscal year ended March 31, 2015.

Description of Securities, page 71

5. Please provide a description of the units in accordance with Item 202(d) of Regulation S-K.

The Company has revised its Description of Securities on page 71 of the Preliminary Prospectus to provide a description of the units in accordance with Item 202(d) of Regulation S-K.

Legal Matters, page 80

6. Please revise your disclosure to state that Snell & Wilmer LLP has passed on the validity of each of the separate securities covered by your registration statement.

The Company has revised the Legal Matters section on page 80 of the Preliminary Prospectus to state that Snell & Wilmer L.L.P. has passed on the validity of each of the separate securities covered by the Company's registration statement.

<u>Part II, Information Not Required in the Prospectus</u> <u>Item 17, Undertakings</u>

7. Please include the undertakings in Item 512(a)(6) of Regulation S-K.

The Company has revised Item 17 of Part II of the Preliminary Prospectus to include the undertakings in Item 512(a)(6) of Regulation S-K.

Exhibit 5.1 - Legal Opinion

8. Please arrange for Snell & Wilmer LLP to opine on the legality of your units.

The Company filed an updated Exhibit 5.1 from Snell & Wilmer L.L.P. that includes an opinion on the legality of the Company's units.

If you have any questions regarding the Company's responses set forth above, please contact me at (714) 427-7409.

Sincerely,

Snell & Wilmer L.L.P.

/s/ Anthony Ippolito

cc: Robert Stefanovich, Chief Financial Officer, Cryoport, Inc.