

May 18, 2012

**Via Federal Express and EDGAR**

Division of Corporation Finance  
Securities and Exchange Commission  
100 F. Street, N.E.  
Washington, D.C. 20549-7010  
Attn.: Ms. Pam Long, Associate Director

**RE: CryoPort, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed April 27, 2012  
File No. 333-180326**

Dear Ms. Long:

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 May 7, 2012 to Robert Stefanovich, Chief Financial Officer of the Company, with respect to the Company's Amendment No. 1 to Registration Statement on Form S-1, as filed with the Commission on April 27, 2012. We have enclosed for your reference Pre-Effective Amendment No. 2 to Form S-1/A which has been revised to reflect the Commission's comments (the "Amended Form S-1") and has been filed with the Commission on the date hereof. 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 your response to comment one in our letter dated April 12, 2012, where you state among other things that "the current public information requirements of Rule 144(c) of the Securities Act had been satisfied" with respect to the shares of outstanding common stock eligible for resale under Rule 144(b)(1). Please tell us how you have satisfied the requirements of Rule 144(c)(1)(ii) under the Securities Act. Please note that we were unable to locate on your website any information required to be submitted and posted pursuant to Rule 405 of Regulation S-T.**

The Company notes the Commission's comment and advises the Commission as follows. Upon becoming required, pursuant to Rule 144(c)(1)(ii) under the Securities Act of 1933, as amended (the "Act"), to submit electronically and post on its corporate Web site every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T, the Company engaged a third party service provider to provide a feed of the required data to its corporate Web site. In reliance on the third party service provider providing such feed, the Company believed that it was in compliance with Rule 144(c)(1)(ii) and consequently checked the appropriate box on the cover page of its Form 10-Qs for the quarters ended June 30, 2011, September 30, 2011 and December 31, 2011. In this regard, with respect to the stockholders who sold shares of the Company's common stock following January 28, 2012 (the date after which the financial statements included in the prior registration statement's prospectus), pursuant to the Note to Paragraph (c) of Rule 144, such stockholders would be able rely on the checked box (indicating that the Company had submitted and posted on its Web site the Interactive Data File) in connection with sales pursuant to Rule 144. The fact that the Company had not actually posted such Interactive Data Files to its Web site, which the Company did not realize until receipt of the Commission's comment letter (which oversight the Company has since remedied), would not have precluded such reliance on Rule 144 unless such stockholders knew or had reason to know (which we are not aware is the case) that the Company had not complied with the requirement under Rule 144 (c)(1)(ii).

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2. **We note your revised disclosure in response to comment two in our letter dated April 12, 2012. Please revise your tabular disclosure to identify the Deerfield Funds, and not James E. Flynn, as beneficial owners.**

The Company notes the Commission's comment and has revised its tabular disclosure to identify the Deerfield Funds, and not James E. Flynn, as the beneficial owners.

**Signatures**

3. **Please have the registration statement signed by the parties identified in Instruction 1 to Signatures in the Form S-1. Refer to Rule 471 under the Securities Act and Section 6(a) of the Securities Act.**

The Company notes the Commission's comment and advises the Commission that its Amended Form S-1 has been executed by the parties identified in Instruction 1 to the Signatures in the Form S-1.

If you have any questions regarding the above, please do not hesitate to give me a call at (714) 427-7402.

Very truly yours,

/s/ Mark R. Ziebell  
Mark R. Ziebell

cc: Robert S. Stefanovich  
Chief Financial Officer