

Mail Stop 4561

January 13, 2009

Kendall Larsen
Chief Executive Officer
VirnetX Holding Corporation
5615 Scotts Valley Drive, Suite 110
Scotts Valley, CA 95066

**Re: VirnetX Holding Corporation
Amendment No. 6 to Form S-1
Filed January 2, 2009
File No. 333-153645**

Dear Mr. Larsen:

We have reviewed the above-referenced filing and have the following comments.

General

1. In light of the changes in the underwriting arrangements in this offering, please be sure that we receive a copy of the letter, or a call, from FINRA, stating that FINRA has finished its review and has no additional concerns with respect to the proposed underwriting arrangements.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources, page 29

2. We note that the company now expects that the net proceeds from this offering, in combination with the available cash on hand, will only be sufficient to fund operations for the next five months and that the company is counting on generating revenue from collaborative agreements with corporate partners to have sufficient capital to fund operations for a full 12 months. Please disclose the status of any collaborative agreements with corporate partners. Please also disclose how you anticipate funding your operations for the next 12 months if you are not able to generate your forecasted revenue from such collaborative agreements. In addition, please revise your disclosure in the summary, risk factors and use of proceeds sections of the prospectus to indicate that the full proceeds of this offering may be used to fund your operations and that such

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proceeds, in addition to cash on hand, may only be sufficient to fund your operations for the next five months.

Compensation Discussion and Analysis

Named Executive Officers' Compensation

Base Salary, page 48

3. We note that both of your named executive officers received significant increases in their base salaries for fiscal year 2008. Please discuss the factors the compensation committee considered in determining the increases in your officers' base salaries.

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As appropriate, please amend your registration statement in response to our comments. You may contact Matt Crispino at (202) 551-3456 if you have questions. If you require further assistance, please contact me at (202) 551-3735.

Sincerely,

Barbara C. Jacobs
Assistant Director

cc: Via Facsimile: (650) 614-7401
Lowell D. Ness
Orrick, Herrington & Sutcliffe LLP
Telephone: (650) 614-7455