

Mail Stop 4561

October 17, 2008

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

**Re: VirnetX Holding Corporation
Registration Statement on Form S-1
Filed September 24, 2008
File No. 333-153645**

**Form 10-Q for the quarterly period ended June 30, 2008
Filed August 14, 2008
File No. 001-33852**

Dear Mr. Larsen:

We have limited our review of the above-referenced filings to those issues addressed in our comments below. Where indicated, we think you should revise your filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form S-1

General

1. Your disclosure throughout the prospectus assumes that you will receive the full amount of the offering. Revise your disclosure to show the impact of receiving proceeds at varying levels, e.g., 10%, 25%, 50%, 75% and 100% of the shares being sold. Please revise the table on the prospectus cover page, the Use of Proceeds section, Capitalization section, Dilution section, the liquidity discussion in MD&A and other relevant sections accordingly.

Cover Page

2. Please delete the words "Lead Placement Agent" from the outside front cover page of the prospectus. The meaning and significance of this reference to potential investors is unclear and an explanation would not be consistent with Rule 421(d).

Fee Table

3. Please tell us how you calculated the proposed maximum offering price of \$30,000,000. Please revise the fee table to provide all required information. Please also ensure that the footnotes to the table are accurate. It appears that footnote 1 may be in the wrong column. In regard to footnote 3, please advise how Rule 457(f) applies to this offering.

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

Recent Developments, page 24

4. We note your statement in this section that a third party has estimated that your business model and intellectual property represent "a multi-billion dollar market opportunity." Please provide factual support for the claim or remove it from the prospectus.

Business, page 30

5. With respect to third-party statements in your prospectus, such as the statistics attributed to Infonetics Research, Inc., please supplementally provide us with support for such statements. To expedite our review, please clearly mark each source to highlight the applicable portion or section containing the information and cross-reference it to the appropriate location in your prospectus. Also, supplementally tell us whether you commissioned any of the referenced sources.

Customers, page 36

6. We note that you have provided a list of the types of companies to which you intend to license your patents. Providing such a list in this section is inappropriate, however, as it may suggest to potential investors that the companies named are presently your customers. Please remove from this section the name of any company that is not currently your customer.

Security Ownership of Certain Beneficial Owners and Management, page 53

7. Please update the beneficial ownership information in this section to the latest practicable date. See Item 403(a) of Regulation S-K.

Plan of Distribution, page 67

8. We note the disclosure on the cover page that the underwriters will use their “reasonable efforts” to sell the securities being offered. We also note the disclosure on page 67 that the underwriters will use their “best efforts” to solicit offers to purchase the securities being offered and will use “reasonable efforts” to arrange for the sale of all securities being offered. We are unfamiliar with the term “reasonable efforts” in connection with a best efforts offering. Please explain what is meant by the term. Also, please file a validly executed placement agent agreement as exhibit 1.1.

Form 10-Q

Item 4. Controls and Procedures, page 13

9. In your conclusion regarding the effectiveness of your disclosure controls and procedures, you recite only the latter portion of the definition of disclosure controls and procedures provided in Rule 13a-15(e). We note that the first part of the definition is recited in the opening sentence of the section. However, the effectiveness conclusion should recite the entire definition. In your response letter, please confirm, if true, that your disclosure controls and procedures for the period covered by your Form 10-Q met all of the requirements of Rule 13a-15(e). In future filings, either recite the entire definition, or simply refer to the rule that contains the definition. Also, in regard to your disclosure on changes in your internal controls, in future filings please begin this subsection with a statement indicating whether or not there has been any change in your internal control over financial reporting that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, your internal control over financial reporting.

As appropriate, please amend your filings in response to these comments. Your responsive amendments should also include marked copies of the amended filings that conform with the provisions of Rule 310 of Regulation S-T. Marked copies such as those in HTML format that show changes within paragraphs help us to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Securities Act of 1933 and the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all the facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

Kendall Larsen
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We direct your attention to Rule 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

If you have any questions regarding these comments, you may contact Matthew Crispino at (202) 551-3456 or 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