



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 26, 2012

Via E-mail

Steven A. Kriegsman
President and Chief Executive Officer
CytRx Corporation
11726 San Vicente Blvd., Suite 650
Los Angeles, CA 90049

**Re: CytRx Corporation
Preliminary Proxy Statement on Schedule 14A
Filed March 21, 2012
File No. 000-15327**

Dear Mr. Kriegsman:

We have limited our review of your filing to the issue addressed in the following comment.

Please respond to this letter by amending your filing and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to our comment, we may have additional comments.

Proposal 2

Authorized Shares, page 34

1. You disclose that the number of authorized shares of common stock that are not issued or outstanding will increase as a result of the proposed reverse stock split. Please disclose whether you currently have, or do not have, any plans with respect to the increased number of authorized unissued shares of common stock that will result upon the realization of the proposed reverse stock split. If such plans exist, please disclose all material information.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Karen Ubell at (202) 551-3873 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Jeffrey Riedler

Jeffrey Riedler
Assistant Director