

Mail Stop 6010

February 4, 2008

Mr. Daniel K. Spiegelman
Chief Financial Officer
CV Therapeutics, Inc.
3172 Porter Drive
Palo Alto, California 94304

**Re: CV Therapeutics, Inc.
Supplemental Response to Comments regarding Form 10-K for Fiscal
Year ended December 31, 2006
Filed January 11, 2008
File No. 0-21643**

Dear Mr. Spiegelman:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 filing. 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 10-K for the year ended December 31, 2006

Financial Statements

Note 1. Summary of Significant Accounting Policies

Concentrations of Risk, page 86

1. We note your response to Comment 1 and reissue the comment in part. We note your previous disclosure that in 2006, McKesson Corporation accounted for 40% of your gross product sales, Cardinal Health, Inc. accounted for 34% of your gross product sales; and Amerisource Bergen accounted for 19% of your gross product sales. You state in your response letter that you declined to file the agreements with these distributors because you believe they regard arrangements that are made in the ordinary course of business and your business is not substantially dependent on any one agreement. However, on page 32 of your filing you state, “Our ability to distribute our products, including Ranexa, to retail pharmacy chains and to recognize revenues on a timely basis will be substantially dependent on our ability to maintain commercially reasonable agreements with each of these wholesale distributors and the extent to which these distributors, over whom we have no control, comply with such agreements. The loss or bankruptcy of any of these customers could materially and adversely affect our future results of operations, financial condition and our ability to distribute our products.” Please clarify the apparent inconsistency between the statements in your response letter and your filing, and provide us with your analysis as to why the company is not substantially dependent upon these agreements or file them as exhibits.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please provide us any requested information. Detailed cover letters greatly facilitate our review. Please file the letter on EDGAR under the form type label CORRESP.

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 all information required under 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 facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a 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

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- 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.

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 our review of your filing or in response to our comments on your filing.

You may contact Rose Zukin at (202) 551-3239 or Mike Reedich at (202) 551-3612 if you have questions regarding the comment and related matters. In this regard, please do not hesitate to contact me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director