Via Facsimile and U.S. Mail Mail Stop 6010

March 21, 2006

Ms. Carrie E. Carlander Chief Financial Officer, VP Finance, Secretary and Treasurer ADVENTRX Pharmaceuticals, Inc. 6725 Mesa Ridge Road, Suite 100 San Diego, CA 92121

Re: ADVENTRX Pharmaceuticals, Inc. Item 4.02(a) Form 8-K filed March 20, 2006 Form 10-Q/A for the Fiscal Quarter Ended September 30, 2005 filed March 20, 2006 File No. 001-32157

Dear Ms. Carlander:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or revisions are unnecessary.

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 number listed at the end of this letter.

Item 4.02 (a) Form 8-K filed March 20, 2006

1. Please revise your disclosure to specify whether you have reconsidered the adequacy of your previous assertions regarding disclosure controls and procedures in light of the material errors and issues that you have described.

Ms. Carrie E. Carlander ADVENTRX Pharmaceuticals, Inc. March 21, 2006 Page 2

Form 10-Q/A for the Fiscal Quarter Ended September 30, 2005

2. We note that you filed a Form 10-Q/A on March 20, 2006 related to the restatement outlined in your Item 4.02(a) Form 8-K (filed on that same date). However, you did not include a revised Part I, Item 4 that describes the effect of the restatement on your officers' conclusions regarding the effectiveness of the company's disclosure controls and procedures. Refer to Item 307 of Regulation S-K and revise your Form 10-Q/A accordingly. If the officers' conclude that your disclosure controls and procedures were effective, despite the restatement, describe the basis for the officers' conclusions.

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Please provide us the information requested within 5 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 5-day period. Please furnish a letter with your response that keys your response to our comments. Detailed letters greatly facilitate our review. You should file the letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your response to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that they have provided 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 your letter, 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
- 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. Ms. Carrie E. Carlander ADVENTRX Pharmaceuticals, Inc. March 21, 2006 Page 3

If you have any questions, please do not hesitate to call me at (202) 551-3657.

Sincerely,

Amy C. Bruckner Staff Accountant