

SENT VIA EDGAR

March 31, 2009

United States Securities and Exchange Commission  
Division of Corporate Finance  
100 F Street, N.E.  
Mail Stop 6010  
Washington, D.C. 20549

Attention: James Rosenberg, Senior Assistant Chief Accountant  
Mary Mast, Senior Staff Accountant  
Vanessa Robertson, Staff Accountant

Re: ADVENTRX Pharmaceuticals, Inc.  
File Number: 001-32157  
Form 10-K for the Fiscal Year Ended December 31, 2007  
Filed March 17, 2008

Dear Mr. Rosenberg, Ms. Mast and Ms. Robertson:

We submit to you the following information in response to oral comments we received on March 24, 2009. For your convenience, we have transcribed each of the oral comments below and set forth our response immediately after the transcription.

Transcription:

**Please confirm whether Board action is required in concluding whether previously issued financial statements should be relied upon. If not, please confirm that management is authorized to take such action in accordance with Item 4.02(a) of Form 8-K. In addition, please explain why management did not conclude the financial statements should no longer be relied upon until March 20, 2009 given the fact that management had previously concluded that it was necessary to restate the financial statements due to the correction of an error.**

Company Response:

The Company's internal policies do not require action by the Company's Board of Directors prior to concluding that previously issued financial statements should not be relied upon; the Company's management is authorized to make such conclusions if warranted under the circumstances. However, in determining that the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2007 (the "2007 10-K") and the Company's quarterly reports on Form 10-Q for the periods ended March 31, June 30 and September 30, 2007 and March 31, June 30 and September 30, 2008 (the "2007 and 2008 10-Qs") should not be relied upon as a result of the error of retrospective application of the provisions of FSP EITF 00-19-2 to the years ended December 31, 2005 and December 31, 2006 and the resulting misstatements in the financial statements contained in the 2007 10-K and the 2007 and 2008 10-Qs, the Company's management had discussions (including by email) with members of the Audit Committee and the Board of Directors, and informal agreement from both, regarding management's conclusion that the financial statements contained in the 2007 10-K and the 2007 and 2008 10-Qs should not be relied upon. We note that, due to time constraints and scheduling conflicts, formal meetings were not convened.

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The Company became aware of misstatements in the financial statements contained in the 2007 10-K and the 2007 and 2008 10-Qs in November 2008 following receipt of the SEC's original comment letter to the 2007 10-K. Following a consideration of all relevant circumstances, quantitative and qualitative, and the significance of the misstatements in the financial statements contained in the 2007 10-K and the 2007 and 2008 10-Qs to the Company's stockholders and other users of its financial statements, after consultation with its independent registered public accounting firm, the Company did not (and currently does not) believe that there was a substantial likelihood a reasonable person would consider the misstatements significant to an investment decision in the Company. Accordingly, despite the misstatements in previously issued financial statements, the Company initially did not believe that those financial statements should not be relied upon. However, following numerous discussions with the SEC staff (in particular, during the week of March 16), and discussions with outside legal counsel and further discussion with the Company's independent registered public accounting firm, the Company later concluded that the financial statements contained in the 2007 10-K and the 2007 and 2008 10-Qs should not be relied upon.

Transcription:

**Please include restated quarterly results for 2007 and 2008 in your restatement footnote.**

Company Response:

We have included restated quarterly results for 2007 and 2008 in Note 3 to the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 that we filed on March 27, 2009 (the "2008 10-K").

Transcription:

**Please ensure your auditor references the restatement in its report.**

Company Response:

The report of our independent registered public accounting firm included in the 2008 10-K indicates that certain prior year amounts have been restated.

As requested in the original comment letter, the Company acknowledges:

- 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.

If you have any further questions or wish to discuss the responses we have provided above, please call me at 858-552-0866 at your convenience.

Sincerely,

/s/ Patrick Keran

Patrick Keran

Vice President, Legal

cc: Brian Culley, interim principal executive officer  
Mark Bagnall, interim principal financial and accounting officer  
Priscilla Lewis, interim Vice President, Finance