

SENT VIA FACSIMILE: 202-772-9217
AND VIA EDGAR

February 13, 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:

This letter supplements our letter dated January 14, 2009 (the "January 2009 Response"). The January 2009 Response was provided in connection with your comment letter of November 3, 2008 related to our Annual Report on Form 10-K for the year ended December 31, 2007 (the "2007 Form 10-K"). Upon further review of the January 2009 Response, we wish to submit to you the following supplemental and clarifying comments. For your convenience, we have repeated the pertinent portion of the January 2009 Response below.

January 2009 Response:

The Company believes that prior period financial statements previously filed with the SEC do not need to be amended to reflect this correction of an error. However, we will restate the 2006 financial information in the earlier of (a) any SEC filing related to a debt or equity offering that requires disclosure of 2006 financial information or (b) our upcoming Form 10-K for the year ended December 31, 2008. In reaching this determination, the Company took into account the following:

- (1) The entry recorded in our most recent annual financial statements (and documented in our original response above) was appropriate. Notably, our balance sheet as of December 31, 2007 and our statement of operations for the year then ended are presented appropriately in our 2007 Form 10-K.
- (2) The changes we made to the originally filed financial statements in our 2007 Form 10-K, including the effect of removal of the warrant liability from the balance sheet for the year ended December 31, 2006 and the loss on the fair value of the warrants from the statement of operations for the years ended December 31, 2006 and 2005, respectively, were documented (with both the original and adjusted balances) in Note 2 to the financial statements in our 2007 Form 10-K.

We believe that amending prior period financial statements previously filed with the SEC to reflect their original disclosure will be confusing to investors, particularly in light of the fact that certain of the affected financial statements will not be included in our upcoming Form 10-K for the year ended December 31, 2008 (i.e., the balance sheet reflected in the Company's Form 10-K for the year ended December 31, 2008 will present only the years ended December 31, 2008 and 2007; 2005 financial information will not be presented).

With respect to prior period financial statements included in future filings with the SEC, we believe that investors are better-served and our financial statements will be more understandable if we include a note to the financial statements in future filings, as applicable, addressing the correction. In particular, in the statement of operations included in our upcoming Form 10-K for the year ended December 31, 2008, we will restate the loss on the fair value of the warrants for the year ended December 31, 2006 to its original reported amount and will include a description of the change, substantially as set forth below, in the notes to the financial statements:

Note [x]:

Correction of an Error

On January 1, 2007, we adopted the provisions of FASB Staff Position on No. EITF 00-19-2, *Accounting for Registration Payment Arrangements* (“FSP EITF 00-19-2”). In December 2007, management determined that it was not probable that we would have any payment obligation under the July 2005 Registration Payment Arrangement; therefore, no accrual for contingent obligation was required under the provisions of FSP EITF 00-19-2. Accordingly, the warrant liability account was eliminated and the comparative condensed consolidated financial statements of the prior periods and as of December 31, 2006 were adjusted to apply the new method retrospectively.

The Company accounted for FSP EITF 00-19-2 appropriately by eliminating the warrant liability as of December 31, 2007, but upon further review in 2008, management determined that it was not correct to adjust the prior period comparative financial statements. Accordingly, the loss on the fair value of the warrants has been revised to its original balance for the year ended December 31, 2006 in the statement of operations.

Supplement to January 2009 Response:

We wish to clarify that we intend to make appropriate changes to all financial information and statements included in future filings with the SEC and not restate only 2006 financial information and/or the statement of operations in our upcoming Form 10-K for the year ended December 31, 2008, as may have been suggested in the January 2009 Response. For instance, we note that, as a development stage company, our financial statements (other than the balance sheet) include inception-to-date financial information that may be affected by reversing retroactive application of FSP EITF 00-19-2. Likewise, aspects of future financial statements (e.g., opening balances to 2007 retained earnings in the statement of stockholders’ equity and total liabilities in the balance sheet) may be affected. To confirm, all financial information and statements in our future filings with the SEC will reflect restated amounts. As a result, we have amended our proposed footnote describing the change (above) to the following:

Note [x]:

Correction of an Error

On January 1, 2007, we adopted the provisions of FASB Staff Position on No. EITF 00-19-2, *Accounting for Registration Payment Arrangements* (“FSP EITF 00-19-2”). In December 2007, management determined that it was not probable that we would have any payment obligation under the July 2005 Registration Payment Arrangement; therefore, no accrual for contingent obligation was required under the provisions of FSP EITF 00-19-2. Accordingly, the warrant liability account was eliminated and the comparative condensed consolidated financial statements of the prior periods and as of December 31, 2006 were adjusted to apply the new method retrospectively.

The Company accounted for FSP EITF 00-19-2 appropriately by eliminating the warrant liability as of December 31, 2007, but upon further review in 2008, management determined that it was not correct to adjust the prior period comparative financial statements. Accordingly, for the years ended December 31, 2005 and 2006, the Company has made the appropriate adjustments to reinstate the warrant liability accounting as originally recorded.

We note that currently we qualify as a smaller reporting company. We have not yet determined the extent to which we will avail ourselves of the scaled-disclosure available to us, so that the exact language of the last paragraph may be modified depending on whether we include comparative 2006 statements of operations.

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: Mark Bagnall, interim principal financial and accounting officer
Priscilla Lewis, interim Vice President, Finance

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