[ADVENTRX LETTERHEAD]

Mark Bagnall, CPA
Executive Vice President and CFO

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

November 12, 2008

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:

Thank you for your comment letter of November 3, 2008 on our Annual Report on Form 10-K (the "Form 10-K") for the year ended December 31, 2007 (the "Comment Letter"). We submit to you the following information in response to the Comment Letter. For your convenience, we have repeated each comment and set forth our response immediately after each comment.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 43

Contractual Obligations, page 50

1. We note your reference to potential milestone payments to a consultant based on the regulatory success of CoFactor. Please provide us with a description of the material terms of the agreement, including the identity of the consultant, a description of the services provided by the consultant, payment arrangements including potential milestone payments and royalties, expiration and termination provisions, amounts paid to date, and any other material terms. Additionally provide us with an analysis supporting your determination not to describe the agreement in your 10-K and file it as an exhibit.

Response:

The potential milestone payments to a consultant based on the regulatory success of CoFactor and our ability to partner CoFactor relate to a Consulting Agreement, effective as of January 1, 2005 (the "Agreement"), by and among Bengt G. Gustavsson, M.D., Ph.D., Biofol AB ("Biofol"), and ADVENTRX Pharmaceuticals, Inc. (the "Company"). During the term of the Agreement, Dr. Gustavsson controlled Biofol and provided his consulting services to the Company through Biofol. The Agreement expired pursuant to its terms on January 1, 2008.

Pursuant to the Agreement, Biofol agreed to provide Dr. Gustavsson's services to the Company in connection with the research, development and commercialization of CoFactor. The Company had no obligation to utilize Dr. Gustavsson's services or to guarantee any minimum quantity of work; however, the Company had an obligation to pay a minimum cash fee of $5,000 per month during the term of the Agreement for Dr. Gustavsson's services, and over the term of the Agreement, the Company paid a total of $145,000 to Biofol, as consulting services commenced

in August 2005. As additional compensation pursuant to the Agreement, in July 2005, the Company issued to Biofol 100,000 shares of its common stock and an option to purchase up to an additional 100,000 shares of its common stock at an exercise price of $2.50 per share, which became exercisable in three equal annual installments on January 1, 2006, 2007 and 2008. (To date, this option has not been exercised.) At July 31, 2005, the number of outstanding shares of the Company's common stock was 66,028,312 and 200,000 shares was less than one-half percent of the Company's outstanding shares. In July 2005, neither Biofol nor Dr. Gustavsson beneficially owned any other shares of the Company's common stock or securities convertible into or exercisable for the Company's common stock.

Pursuant to the Agreement, the Company is obligated to make additional payments to Biofol or Dr. Gustavsson (payable in cash and stock) upon the occurrence of certain regulatory and partnering milestones related to the commercialization of CoFactor. These milestone payment obligations survive expiration of the Agreement. The milestone events consist of (1) the Company entering into a partnership agreement that provides for the sublicensing and commercialization of CoFactor with a marketing partner; (2) the Company's submission of a New Drug Application (a "NDA") to the U.S. Food and Drug Administration ("FDA") seeking approval to market CoFactor in the United States; (3) the Company's submission of a NDA or its equivalent to the European Medicines Agency ("EMEA"), or equivalent agency in Sweden, seeking approval to market CoFactor in Europe or Sweden; (4) the Company's obtaining approval from the FDA to market CoFactor in the United States; and (5) the Company's obtaining approval from the EMEA to market CoFactor in Europe. The payments related to each of the above-listed milestones consist of (i) $125,000 cash and $125,000 worth of shares of the Company's common stock, calculated based on a 10-day trailing average of the closing price of the common stock; (ii) $125,000 cash; (iii) $125,000 cash; (iv) $125,000 worth of shares of the Company's common stock, calculated based on the greater of (A) a 10-day trailing average of the closing price of the common stock and (B) $3.00 per share; (v) $125,000 worth of shares of the Company's common stock, calculated based on the greater of (A) a 10-day trailing average of the closing price of the common stock and (B) $3.00 per share.

At the time the Company entered into the Agreement, CoFactor was in Phase 2 clinical trials and, assuming success in additional clinical trials and manufacturing activities, the Company anticipated it was approximately five years from submitting an NDA or its equivalent to the FDA or EMEA, which are the first regulatory milestones under the Agreement. In addition, while the Company had held preliminary discussions with potential commercialization and marketing partners, it had not entered into any agreements with partners or potential partners and had no immediate serious prospects for such a partnering arrangement for CoFactor.

In October 2007, the Company announced results from its Phase 2b clinical trial of CoFactor for the treatment of metastatic colorectal cancer. CoFactor did not demonstrate statistically significant improved safety in the trial's primary endpoint. In addition, no statistically significant differences between the arms were observed across overall safety and efficacy variables. In November 2007, the Company announced that it would discontinue enrolling patients in its Phase 3 clinical trial of CoFactor for the treatment of metastatic colorectal cancer. The Company determined that these developments combined with its decision to focus its capital and other resources on other of its product candidates instead of CoFactor, significantly decreased the likelihood of triggering any of the milestone payments under the Agreement in the near term.

In determining that the Agreement was not required to be described in the Company's Annual Report on Form 10-K for the year ended December 31, 2007, the Company took into account that (1) the Agreement was entered into in the ordinary course of its business based on the fact that the Company regularly engaged consultants to provide services in connection with the development of its product candidates, (2) the Agreement is not material to the Company, and (3) the Agreement does not fall into any of the specific categories of contracts required to be filed under Item 601(b)(ii) or (iii) of Regulation S-K. The Company determined that the Agreement was not material to it because (a) it expired on January 1, 2008 and (b) the likelihood of triggering any of the milestone payments in the near term was slim. Because the milestone payments survive the expiration of the Agreement, the Company will continue to periodically assess whether the Agreement is material to it in order to determine its obligations to describe the Agreement in its reports filed with the Securities and Exchange Commission and file it as an exhibit to such reports.

(2) Summary of Significant Accounting Policies

Change in Accounting Principle for Registration Payment Arrangement, page F-11

2. Paragraph 22 of FSP EITF 00-19-2 states that retrospective application is not permitted. Therefore, please explain to us why the financial statements for the years ended December 31, 2006 and 2005 were adjusted retrospectively. In addition, please explain to us why you reversed the loss on the fair value of warrants for 2006 and 2005. Include any reference to the specific authoritative literature that supports this treatment.

Response:

Effective 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"), to account for the Registration Payment Arrangement. FSP EITF 00-19-2 provides that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement should be separately recognized and measured in accordance with Statement of Financial Accounting Standards ("FAS") No. 5, *Accounting for Contingencies*, which provides that loss contingencies should be recognized as liabilities if they are probable and reasonably estimable.

As reported in our Form 10-K for the year ended December 31, 2007, management determined that it was not probable that we would have any payment obligation under the Registration Payment Arrangement as of January 1, 2007 and December 31, 2007; therefore, no accrual for the contingent obligation was required under the provisions of FSP EITF 00-19-2.

Pursuant to paragraphs 17-19 of FSP EITF 00-19-2, the difference of $12,239,688 between the carrying amount of the July 2005 Registration Payment Arrangement warranty liability as of December 31, 2006 of $30,356,439 and the amount reclassified to equity upon the adoption of this FSP at January 1, 2007 of $18,116,751 was recognized as a cumulative-effect adjustment. Following Example 7 from the Appendix of FSP EITF 00-19-2, the Company recorded the following journal entry for the fair value of the July 2005 Registration Payment Arrangement as of the adoption date:

Dr. Warrant Liability	$30,356,439	
Cr. Retained Earnings		$12,239,688
Cr. Additional Paid in Capital		$18,116,751

The Company also adjusted the comparative financial statements of prior periods to apply the new method retrospectively. This resulted in the warranty liability being removed from the balance sheet and the loss on the fair value of the warrants being removed from the income statements for 2006 and 2005. The adjustments were done based on the Company's interpretation of paragraph 21 of FSP EITF 00-19-2 and paragraphs 17-18 of Financial Accounting Standard No. 154 *Accounting Changes and Error Corrections* ("FAS 154").

Upon current review of paragraph 22 of FSP EITF 00-19-2, it appears that retrospective application was not appropriate. The Company will update its disclosure in the earlier of: 1) any SEC filing related to a debt or equity offering or 2) our Annual Report on Form 10-K for the year ended December 31, 2008, and will remove the retrospective adjustments from any prior years presented.

Reference to Accounting Literature:

FSP EITF 00-19-2, Paragraphs 17, 18 and 21:

> *"17. For registration payment arrangements and financial instruments subject to those arrangements that were entered into prior to the issuance of this FSP and that continue to be outstanding at the beginning of the period of adoption, transition shall be achieved by reporting a change in accounting principle through a cumulative-effect adjustment to the opening balance of retained earnings, or other appropriate components of equity or net assets in the statement of financial position, as of the first interim period for*

the fiscal year in which this FSP is initially applied. However, an entity shall not apply the guidance in this FSP to registration payment arrangements that are no longer outstanding upon adoption of this FSP."

18. For purposes of measuring the component of the cumulative-effect adjustment relating to the recognition of a contingent liability under Statement 5, an entity shall evaluate whether the transfer of consideration under a registration payment arrangement is probable and can be reasonably estimated as of the adoption date of this FSP. If prior to adoption of this FSP a registration payment arrangement was separately recognized at its fair value, the cumulative-effect adjustment shall be the difference between (a) the carrying amount of the registration payment arrangement immediately prior to adoption of this FSP and (b) the measurement of the contingent liability, if any, that must be recognized under Statement 5 upon adoption. The carrying amounts of other instruments that were originally issued together with a registration payment arrangement that was separately recognized and measured at fair value prior to adoption of this FSP shall not be adjusted upon adoption."

21. An entity shall separately disclose (a) the portion of the cumulative-effect adjustment resulting from the recognition and measurement of a contingent liability under Statement 5 and (b) the portion of the cumulative-effect adjustment resulting from the reclassification of a financial instrument subject to the registration payment to equity (or the recombination of an embedded derivative). Examples of the transition provisions of this FSP are provided in Appendix A.

FAS 154, Paragraphs 17 and 18:

17. An entity shall disclose the following in the fiscal period in which a change in accounting principle is made:

a. The nature of and reason for the change in accounting principle, including an explanation of why the newly adopted accounting principle is preferable.

b. The method of applying the change, and:

(1) A description of the prior-period information that has been retrospectively adjusted, if any.

(2) The effect of the change on income from continuing operations, net income (or other appropriate captions of changes in the applicable net assets or performance indicator), any other affected financial statement line item, and any affected per-share amounts for the current period and any prior periods retrospectively adjusted. Presentation of the effect on financial statement subtotals and totals other than income from continuing operations and net income (or other appropriate captions of changes in the applicable net assets or performance indicator) is not required.

(3) The cumulative effect of the change on retained earnings or other components of equity or net assets in the statement of financial position as of the beginning of the earliest period presented.

(4) If retrospective application to all prior periods (paragraph 7) is impracticable, disclosure of the reasons therefore, and a description of the alternative method used to report the change (paragraphs 8 and 9).

c. If indirect effects of a change in accounting principle are recognized:

(1) A description of the indirect effects of a change in accounting principle, including the amounts that have been recognized in the current period, and the related per-share amounts, if applicable.

(2) Unless impracticable, the amount of the total recognized indirect effects of the accounting change and the related per-share amounts, if applicable, that are attributable to each prior period presented.

Financial statements of subsequent periods need not repeat the disclosures required by this paragraph. If a change in accounting principle has no material effect in the period of change but is reasonably certain to have a material effect in later periods, the disclosures required by paragraph 17(a) shall be provided whenever the financial statements of the period of change are presented.

18. In the fiscal year in which a new accounting principle is adopted, financial information reported for interim periods after the date of adoption shall disclose the effect of the change on income from continuing operations, net income (or other appropriate captions of changes in the applicable net assets or performance indicator), and related per-share amounts, if applicable, for those post-change interim periods."

Additionally, as requested in the 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/ Mark N.K. Bagnall
Mark N.K. Bagnall
Executive Vice President and Chief
Financial Officer

cc: Patrick Keran, Vice President, Legal and General Counsel