

VIA FACSIMILE AND EDGAR

October 12, 2011

Johnny Gharib
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549
Facsimile: (202) 772-9198

**Re: ADVENTRX Pharmaceuticals, Inc.
Registration Statement on Form S-3, as amended by Amendment No. 1 filed on
October 6, 2011 (File No. 333-174203)**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, ADVENTRX Pharmaceuticals, Inc. (the "Company") hereby requests acceleration of the above-referenced registration statement on Form S-3, so that it will become effective at 8:00 a.m., Eastern time, on Thursday, October 13, 2011, or as soon thereafter as practicable.

The Company hereby acknowledges that: (i) should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and (iii) the Company may not assert the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Thank you for your assistance. If you should have any questions, please call Shana Hood, the Company's Associate General Counsel, at (858) 768-6338.

Very truly yours,

ADVENTRX Pharmaceuticals, Inc.

By: /s/ Patrick L. Keran

Patrick L. Keran
President and Chief Operating Officer

cc: Shana Hood, Associate General Counsel
Jeff Thacker, DLA Piper LLP (US)