

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

September 29, 2011

Via E-mail
Christopher P. Schnittker
Chief Financial Officer
Echo Therapeutics, Inc.
8 Penn Center
1628 JFK Blvd, Suite 300
Philadelphia, PA 19103

Re: Echo Therapeutics, Inc.

Form 10-K for the fiscal year ended December 31, 2010

Filed March 18, 2011 File No. 000-23017

Dear Mr. Schnittker:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Gary Todd for

Brian Cascio Accounting Branch Chief