

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

February 8, 2011

Mr. Robert Andrade Chief Financial Officer Adherex Technologies, Inc. 501 Eastowne Drive, Suite 140 Chapel Hill, NC 27514

Re: Adherex Technologies, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2010

Definitive Proxy Statement on Schedule 14A

Forms 10-Q for Quarterly Periods Ended March 31, 2010, June 30, 2010

and September 30, 2010

File No. 001-32295

Dear Mr. Andrade:

We have completed our review of the above referenced filings and have no further comments at this time.

Sincerely,

Melissa N. Rocha Branch Chief