



DIVISION OF
CORPORATION FINANCE

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

October 13, 2010

Mr. Robert S. Corrigan
Chief Executive Officer
AcuNetx, Inc.
2301 W. 205th Street
Suite 102
Torrance, CA 90501

Re: AcuNetx, Inc.
Form 10-K/A for the fiscal year ended December 31, 2009
Filed September 9, 2010
File No. 000-27857

Dear Mr. Corrigan:

We have reviewed your response dated October 8, 2010 and related filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Mr. Robert S. Corrigan
AcuNetx, Inc.
October 13, 2010
Page 2

Form 10-K/A for the fiscal year ended December 31, 2009

1. We reissue prior comment 2 in our letter dated September 9, 2010. We note that your internal controls over financial reporting were assessed effective at December 31, 2009. However, in light of your prior disclosure of areas that could be improved, including your small number of employees and the control and evaluation of finances for your partially owned subsidiary out of state, please tell us how you determined that ICOFR is effective at that date. Refer to Rule 308(T)(a)(3).

You may contact Leigh Ann Schultz at 202-551-3628 or Kristin Lochhead at 202-551-3664 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3676.

Sincerely,

for

Brian Cascio
Accounting Branch Chief