

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

January 10, 2012

Via E-mail
Seth Lederman
President, Chief Executive Officer and Chairman
Tonix Pharmaceuticals Holding Corp.
509 Madison Avenue, Suite 306
New York, New York 10022

Re: Tonix Pharmaceuticals Holding Corp. Current Report on Form 8-K/A Filed December 27, 2011 File No. 333-150149

Dear Mr. Lederman:

We have reviewed your amended filing and have the following comments. 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 days by amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing an amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Business Overview, page 4

- 1. It appears that you have not provided the overview as to the anticipated timeline and costs for each of your products to reach commercialization as you state in response to prior comment 5. Please provide such an overview as requested in our prior comment. Ensure your revisions also address your other principal products.
- 2. You continue to state in the first bullet point on page 5 and elsewhere that you believe the therapeutic uses you target are new uses, notwithstanding your response to prior comment 8. Please revise.

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Drug Delivery Technology, page 11

3. We note your response to prior comment 12. We may have further comment upon resolution of your request for confidential treatment.

Intellectual Property, page 14

4. It remains unclear from your response to prior comment 14 whether there any patents or patent applications relating to TNX-201 were transferred to you by Lederman & Co. Please clarify. Also, please revise the statement that "[w]e have been granted numerous patent applications..." to clarify (1) the extent to which you received patents or patent applications as opposed to acquiring them from affiliates or other third parties and (2) the difference between a patent and a patent application.

Risk Factors, page 20

5. Refer to prior comment 16. It remains unclear how you determined that there is no material risk that the projected sales from 2015 to 2018 will not materialize. Please address the risk that these sales will not materialize in your risk factor disclosure or tell us why you believe that such disclosure is not appropriate.

Financial Statements and Exhibits, page 55

- 6. We note that you filed a PDF format exhibit in response to prior comment 22. Please note that unofficial PDF documents may not be submitted to EDGAR without their official ASCII/HTML versions. Refer to section 5.2.3 of Volume II of the EDGAR Filer Manual for guidance. Accordingly, please file an official version of Exhibit 10.20 in the correct format.
- 7. Please address the final clause of prior comment 24, regarding Rule 436.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- 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

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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.

You may contact Joanna Lam, Staff Accountant, at (202) 551-3476 or John Archfield, Senior Staff Accountant, at (202) 551-3315 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan, Staff Attorney, at (202) 551-3269 or James Lopez, Branch Chief, at (202) 551-3536 with any other questions.

Sincerely,

/s/ James Lopez (for)

John Reynolds Assistant Director

cc: (via e-mail) Harvey Kesner, Esq.
Sichenzia Ross Friedman Ference Anslow LLP