



DIVISION OF
CORPORATION FINANCE

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

May 31, 2013

Via Email

Seth Lederman
Chief Executive Officer
Tonix Pharmaceuticals Holding Corp.
509 Madison Avenue, Suite 306
New York, New York 10022

**Re: Tonix Pharmaceuticals Holding Corp.
Registration Statement on Form S-1
Filed May 10, 2013
File No. 333-188547**

Dear Mr. Lederman:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. Where 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. We note there are many blanks throughout your registration statement. With your next amendment, please include all the information which is not covered by Securities Act Rule 430A.

Calculation of Registration Fee

2. We note that the Series A Warrants which consist of a portion of your offered Units will be immediately exercisable. Please revise your registration fee table so that it reflects payment for all immediately exercisable securities including your warrants. For guidance, please refer to Securities Act Rules C&DI Question No. 240.05 available at <http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm>

3. Your disclosure on page 86 indicates that you are not registering the shares of common stock issuable from time to time upon exercise of the Series A Warrants offered hereby. Please tell us whether you are registering the conversion of the Series A Warrants and revise the disclosure throughout your prospectus to clarify. If you do not intend to register your Series A Warrants, please tell us the exemption from registration under the Securities Act upon which you intend to rely for the conversion and provide an analysis of the applicability of that exemption to your offering.

Prospectus Cover Page

4. Please revise your prospectus cover page and your plan of distribution to describe the nature of your underwriting arrangement. For example, given your disclosure on page 88 which states that your underwriters are offering the units subject to acceptance from you and subject to prior sale, it is unclear whether you intend for your offering to be a firm commitment. Please include all of the information required by Items 501(b)(8) and 508 of Regulation S-K which is applicable to your offering.
5. We note your disclosure that on May 9, 2013, the last reported sale price of your common stock was \$10.00 per share. Please update this disclosure in future amendments to reflect the most recently available price for your shares.

Risk Factors, page 9

Risks Related to Our Stock, page 27

6. We note your risk factor on page 27 regarding your limited trading market, and that you have applied to list your shares on the NASDAQ Capital Market. Please expand this risk factor or include a separate risk factor describing the consequences should NASDAQ not accept your shares for listing.

Use of Proceeds, page 33

7. We note your Calculation of Registration Fee table implies that the proceeds from your offering will be \$12 million. However, the disclosure within this section states that the net proceeds of this offering may be less than \$6 million. Please revise or advise. Ensure your response is consistent with the type of underwriting arrangement you have selected for your offering.

Undertakings, page II-6

8. Given that you are registering warrants, the conversion of which may not take place immediately, please provide the undertakings required by Item 512(a) of Regulation S-K.

Exhibits

9. Please file the form of your underwriting agreement with your next amendment. Note we will need time to review the document prior to the effectiveness of your registration statement.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- 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;
- 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
- the company may not assert staff comments and 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Seth Lederman
Tonix Pharmaceuticals Holding Corp.
May 31, 2013
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Please contact Adam F. Turk at (202) 551-3657 or James Lopez at (202) 551-3536 with any questions.

Sincerely,

/s/ James Lopez (for)

John Reynolds
Assistant Director

cc: Marc J. Ross
Sichenzia Ross Friedman Ference LLP