

Tonix Pharmaceuticals Holding Corp.
509 Madison Avenue, Suite 306
New York, New York 10022

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February 21, 2013

VIA EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549

Attn: John Reynolds, Assistant Director
Division of Corporation Finance

James Lopez, Esq.
Erin Wilson, Esq.

Re: Tonix Pharmaceuticals Holding Corp.
Registration Statement on Form S-1
Filed January 25, 2013
File No. 333-186223

Ladies and Gentlemen:

The following responses address the comments of the reviewing staff of the Commission as set forth in a comment letter dated February 19, 2013 (the "Comment Letter") relating to the Registration Statement on Form S-1 filed on January 25, 2013 (the "Registration Statement") by Tonix Pharmaceuticals Holding Corp. (the "Company"). The numbers of the responses in this letter correspond to the numbers of the staff's comments as set forth in the Comment Letter.

1. We note that you are filing a combined prospectus pursuant to Rule 429 of Regulation C. We further note that your prospectus does not appear to include all of the information that currently would be required in a prospectus relating to the offerings that it covers. For instance, your cover page and selling shareholder table do not appear to reflect your previous offering (333-180964). Please revise accordingly.

Response:

We have revised our registration statement, including our cover page and selling stockholder table to reflect the combined prospectus with the previous offering. Attached hereto as Exhibit A are the marked changes we propose to make to reflect compliance with Rule 429 of Regulation C. For ease of review, each marked section is included in its entirety and the page references for each section heading refer to the page numbers in the Registration Statement. Please note, however, that as a result of the amount and extent of redlining makes of the selling stockholder table and footnotes thereto from the integration of two sets of selling stockholders into one table, we can only provide a clean copy of the combined selling stockholder table and footnotes.

2. Please revise to provide the interactive data required by Item 601(b)(101) of Regulation S-K.

Response:

We will revise our registration statement to file as exhibits the interactive data files required by Item 601(b)(101) of Regulation S-K. Attached hereto as Exhibit B are the marked changes to the exhibit index list to show the inclusion of the interactive data files.

3. We note that you have not included all required undertakings in your filing. In this regard, we note that you have not provided the undertaking set forth in Item 512(a)(5)(ii) of Regulation S-K. Please revise to include all relevant undertakings required by Item 512.

Response:

We have reviewed the undertakings set forth in Item 512 of Regulation S-K, and believe that all required undertakings, including those set forth in Item 512(a)(5)(ii), are included in our Registration Statement and no changes are required.

We trust that the foregoing appropriately addresses the issues raised by your recent Letter of Comment. Thank you in advance for your prompt review and assistance.

Very truly yours,

/s/ SETH LEDERMAN

Seth Lederman
Chief Executive Officer

Cc: Marc J. Ross, Esq.
Harvey Kesner, Esq.
James M. Turner, Esq.

EXHIBIT A

Calculation of Registration Fee and Prospectus Cover Page (no page numbers)

CALCULATION OF REGISTRATION FEE

Title of Each Class Of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Security (2)	Proposed Maximum Aggregate Offering Price	Amount Of Registration Fee
Common Stock, \$.001 par value	8,904,167	\$ 0.50	\$ 4,452,083.50	\$ 607.26
Common Stock, \$.001 par value issuable upon exercise of warrants exercisable at \$0.60 per share	8,904,167	\$ 0.60	\$ 5,342,500.20	\$ 728.72
Total	17,808,334		\$ 9,794,583.70	\$ 1,335.98(3)

- (1) Includes shares of our common stock, par value \$0.001 per share, which may be offered pursuant to this registration statement, which shares are issuable upon exercise of warrants held by the selling stockholders. In addition to the shares set forth in the table, the amount to be registered includes an indeterminate number of shares issuable upon exercise of the warrants, as such number may be adjusted as a result of stock splits, stock dividends and similar transactions in accordance with Rule 416. The number of shares of common stock registered hereunder represents a good faith estimate by us of the number of shares of common stock issuable upon exercise of the warrants. For purposes of estimating the number of shares of common stock to be included in this registration statement, we calculated a good faith estimate of the number of shares of our common stock that we believe will be issuable upon exercise of the warrants to account for market fluctuations, and antidilution and price protection adjustments, respectively. Should the conversion ratio result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary. In addition, should a decrease in the exercise price as a result of an issuance or sale of shares below the then current market price, result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary.
- (2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) and Rule 457(g) under the Securities Act of 1933, using the average of the high and low price as reported on the OTCQB on January 24, 2013, which was \$0.50 per share.

(3) [Fee previously paid.](#)

~~Pursuant to Rule 429 promulgated under the Securities Act of 1933, the enclosed prospectus constitutes a combined prospectus also relating to an aggregate of up to 14,543,807 shares of our common stock that were previously registered for sale in a Registration Statement on Form S-1, Registration No. 333-180964. As such, this prospectus also constitutes post-effective amendment No. 1 to the Registration Statement on Form S-1, Registration No. 333-180964, which shall hereafter become effective concurrently with the effectiveness of this Registration Statement on Form S-1 in accordance with Section 8(c) of the Securities Act of 1933.~~

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

Tonix Pharmaceuticals Holding Corp. (the "Company") previously filed a Registration Statement on Form S-1 (File No. 333-180964) with the U.S. Securities and Exchange Commission (the "SEC") on April 26, 2012, which was declared effective on June 6, 2012 (the "Prior Registration Statement"). The Prior Registration Statement registered up to 14,543,807 shares of our common stock for resale by the selling stockholders named therein, including (a) 585,750 shares and warrants to purchase 275,000 shares issued to investors in our 2011 Financing (as hereinafter defined), (b) warrants to purchase 30,750 shares issued to placement agents in connection with the 2011 Financing, (c) 6,592,765 shares and warrants to purchase 6,592,765 shares were issued to investors in our March 2012 Financing (as hereinafter defined), and (d) warrants to purchase 466,777 shares issued to a placement agent in connection with the 2012 March Financing.

Pursuant to Rule 429 under the Securities Act of 1933, the prospectus included in this Registration Statement is a combined prospectus and also relates to 14,543,807 shares of common stock registered under the Prior Registration Statement. Accordingly, this Registration Statement, which is a new registration statement, constitutes a Post-Effective Amendment to the Prior Registration Statement. As such, this prospectus also constitutes post-effective amendment No. 1 to the Prior Registration Statement, which shall hereafter become effective concurrently with the effectiveness of this Registration Statement on Form S-1 in accordance with Section 8(c) of the Securities Act of 1933.

This new Registration Statement is being filed to register up to 17,808,334 shares (the "Additional Shares") of our common stock for resale by the selling stockholders named therein, including (a) 8,904,167 shares of common stock issued to investors in our December 2012 Financing (as hereinafter defined) and (b) 8,904,167 shares of common stock issuable upon exercise of warrants to purchase 8,904,167 shares issued to investors in our December 2012 Financing. Accordingly, the combined prospectus that is part of this Registration Statement relates to (i) the 14,543,807 shares of common stock from the Prior Registration Statement and (ii) the 17,808,334 Additional Shares. None of the Additional Shares have been registered previously.

All filing fees payable in connection with the Prior Registration Statement were previously paid at the time of the initial filing. A registration fee in respect of the Additional Shares of our common stock being registered in this Registration Statement on Form S-1 was paid in connection with the original filing of this Registration Statement on Form S-1.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities under this prospectus until the registration statement of which it is a part and filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED ~~JANUARY 25,~~ MARCH 11, 2013

PROSPECTUS



Up to ~~17,808,334~~ 32,352,141 Shares of Common Stock

This prospectus relates to the offering by the selling stockholders of Tonix Pharmaceuticals Holding Corp. of up to ~~17,808,334~~ 32,352,141 shares of common stock, par value \$0.001 per share. All of the shares of common stock offered by this prospectus are being sold by the selling stockholders. These shares consist of ~~(i)~~:

- 585,750 shares of common stock issued to investors in our 2011 Financing;
- 275,000 shares of common stock issuable upon exercise of warrants to purchase 275,000 shares issued to investors in our 2011 Financing;
- 30,750 shares of common stock issuable upon exercise of warrants to purchase 30,750 shares issued to placement agents in connection with our 2011 Financing;
- 6,592,765 shares of common stock issued to investors in our March 2012 Financing;
- 6,592,765 shares of common stock issuable upon exercise of warrants to purchase 6,592,765 shares issued to investors in our March 2012 Financing;
- 466,777 shares of common stock issuable upon exercise of warrants to purchase 466,777 shares issued to a placement agent in connection with our March 2012 Financing
- 8,904,167 shares of common stock issued to investors in our December 2012 Financing; and ~~(ii)~~
- 8,904,167 shares of common stock issuable upon exercise of warrants to purchase 8,904,167 shares issued to investors in our December 2012 Financing.

The selling stockholders have advised us that they will sell the shares of common stock from time to time in the open market, on the OTCQB, in privately negotiated transactions or a combination of these methods, at market prices prevailing at the time of sale or at prices related to the prevailing market prices or at negotiated prices.

The selling stockholders may sell the common shares to or through underwriters, brokers or dealers or directly to purchasers. Underwriters, brokers or dealers may receive discounts, commissions or concessions from the selling stockholders, purchasers in connection with sales of the common shares, or both. Additional information relating to the distribution of the common shares by the selling stockholders can be found in this prospectus under the heading "Plan of Distribution." If underwriters or dealers are involved in the sale of any securities offered by this prospectus, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in a supplement to this prospectus. We will pay the expenses of registering these shares.

We will not receive any proceeds from the sale of common stock by the selling stockholders. We will receive proceeds from the selling stockholders from any exercise of their warrants on a cash basis.

We are a reporting company pursuant to Section 12(g) of the Securities Exchange Act of 1934, or the Exchange Act, and our common stock is traded on the OTCQB under the symbol "TNXP". On ~~January 22~~, [March 11](#), 2013, the closing price of our common stock was \$0.~~55~~.[11](#) per share.

Investing in our common stock involves a high degree of risk. Before making any investment in our common stock, you should read and carefully consider the risks described in this prospectus under "Risk Factors" beginning on page 8 of this prospectus.

You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated __ , 2013

Prospectus Summary – The Offering (pages 6-7)

The Offering

Common stock offered by the selling stockholders	Up to 17,808,334 <u>32,352,141</u> shares of common stock, including the following: <ul style="list-style-type: none">- 8,904,167<u>16,082,682</u> shares of common stock,- <u>up to 305,750 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of \$1.00 per share (includes a good faith estimate of the shares underlying warrants to account for antidilution protection adjustments);</u>- <u>up to 7,059,542 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of \$1.25 per share (includes a good faith estimate of the shares underlying warrants to account for antidilution protection adjustments);</u> and- up to 8,904,167 shares of common stock issuable upon the exercise of class A common stock purchase warrants at an exercise price of \$0.60 per share (includes a good faith estimate of the shares underlying warrants to account for antidilution protection adjustments).
Common stock to be outstanding after the offering	Up to 52,086,766 <u>59,452,058</u> shares.
Use of proceeds	We will not receive any proceeds from the sale of the common stock. However, we will receive the exercise price of any common stock we sell to the selling stockholder upon exercise of the Class A Warrants. The Class A Warrants entitle the holder to exercise their warrants on a cashless basis under certain conditions. In the event that any selling stockholder exercises their Class A Warrants on a cashless basis, then we will not receive any proceeds from the exercise of those warrants. We expect to use the proceeds received from the exercise of the Class A Warrants, if any, for general working capital purposes.
OTCQB symbol	TNXP

The above information regarding common stock to be outstanding after the offering is based on 43,182,599 shares of common stock outstanding as of ~~January 22, March 11~~, 2013 and includes the ~~8,904,167~~16,269,459 shares of common stock that are issuable upon the exercise of warrants that are registered pursuant to the registration statement that this prospectus is part of but does not include any shares of common stock issuable upon exercise of other outstanding warrants or options.

The following is a summary of the transactions relating to the securities being registered hereunder.

2011 Private Placement

- Between October and November, 2011 we consummated a private placement financing (the “2011 Financing”) pursuant to which we sold \$2,075,000 principal amount of Debentures for aggregate cash proceeds of \$1,575,000 and the exchange of \$500,000 in previously issued Notes of Tonix Sub that were converted into Debentures in the principal face amount of \$500,000.

The Debentures matured on the earlier of (i) the one year anniversary of the date of issuance or (ii) the date of closing of a private placement of equity, equity equivalent, convertible debt or debt financing in which we receive gross proceeds, in one or more transactions, of at least \$3,875,000 (a "2011 Subsequent Financing"). The Debentures bore interest at 8% per annum and were convertible at the holder's option into a 2011 Subsequent Financing. In the event that a 2011 Subsequent Financing did not occur within 12 months from the date of issuance of the Debenture, the holder had the option to convert the Debenture into the Conversion Shares. In addition, upon conversion or repayment of the Debenture, the holders were entitled to receive, at the holder's option, either (i) a warrant (the "Conversion Warrant") to purchase such number of shares of common stock equal to the principal amount of the Debenture divided by the offering price in a 2011 Subsequent Financing (the "Warrant Shares") or (ii) shares of our common stock equal to 33% of the principal amount of the Debenture divided by the offering price in a 2011 Subsequent Financing (the "Incentive Shares"). The private placement that closed in January 2012 met the requirements of a 2011 Subsequent Financing, therefore, the holders of the Debentures elected to receive 275,000 Conversion Warrants and 594,000 Incentive Shares. The Conversion Warrants have three year term and \$1.00 exercise price.

In connection with the 2011 Financing, we made cash payments to WFG Investments and Seagate of \$40,000 and \$14,000, respectively, as commissions and attorney fees of \$20,000. In addition, WFG Investments and Seagate earned an aggregate of 30,750 placement agent warrants (the "2011 Agent Warrants"), which have terms similar to the Conversion Warrants.

The Incentive Shares and shares underlying the Conversion Warrants and 2011 Agent Warrants are registered pursuant to this prospectus.

March 2012 Private Placement

Between January and March, 2012, we consummated a private placement financing transaction (the "March 2012 Financing") pursuant to which we issued an aggregate of 264,7106 units (the "March 2012 Units") to certain investors for aggregate cash proceeds of \$4,692,765 and the exchange of \$1,925,000 in previously issued debentures that were converted into March 2012 Units. The March 2012 Financing satisfied the requirements for the 2011 Subsequent Financing discussed above.

Each March 2012 Unit had a purchase price of \$25,000 per March 2012 Unit and consisted of twenty five thousand (25,000) shares of our Common Stock, a Class A warrant to purchase twenty five thousand (25,000) shares of common stock (the "March 2012 Class A Warrants"), and a Class B warrant to purchase up to twenty five thousand (25,000) shares of common stock (the "March 2012 Class B Warrants" and together with the March 2012 Class A Warrants, the "March 2012 Warrants").

The March 2012 Class A Warrants have an exercise price of \$1.25 per share of Common Stock and will be exercisable for a period of five years from the date of issuance. The March 2012 Class B Warrants expired unexercised effective April 24, 2012.

In connection with the March 2012 Financing, we paid Dawson James Securities, Inc., a FINRA registered broker-dealer ("Dawson James") a cash payment of \$466,777, which represented an 8% commission and a 2% non-accountable expense allowance of the gross proceeds delivered by investors in the March 2012 Financing. In addition, Dawson James earned warrants to purchase 466,777 shares of Common Stock (the "March 2012 Agent Warrants"), which have an exercise price of \$1.25 per share of common stock, will be exercisable for a period of seven years, contain customary anti-dilution protection and are entitled to piggy-back registration rights.

The shares included in the Units and shares underlying the Class A Warrants and 2012 Agent Warrants are registered pursuant to this prospectus.

December 2012 Private Placement

In December 2012, we issued an aggregate of 8,904,167 units ("Units") to certain accredited investors (the "Purchasers") for aggregate cash proceeds of \$2,615,000, at a price per Unit of \$0.40, and the exchange of \$710,000 in previously issued convertible debentures (the "Prior Debentures") of the Company that were converted into Units at a price of \$0.30 per Unit (the "December 2012 Financing").

Each Unit consisted of one share of our common stock, \$0.001 par value (the “Common Stock”), a Class A Warrant to purchase one share of Common Stock (the “Class A Warrants”), and a Class B Warrant to purchase one share of Common Stock (the “Class B Warrants” and together with the Class A Warrants, the “Warrants”). The Class A Warrants have an exercise price of \$0.60 per share of Common Stock and will be exercisable for a period of five years from the date of issuance. The Class A Warrants may be exercised on a cashless basis under certain circumstances. The Class B Warrants have an exercise price of \$0.40 per share of Common Stock and will be exercisable for a period of one year from the date of issuance.

In connection with the December 2012 Financing, we granted each Purchaser registration rights. We are obligated to use our best efforts to cause a registration statement registering for resale the Common Stock included in the Units and the Common Stock underlying the Class A Warrants to be filed no later than 60 days from the date of the last closing of the December 2012 Financing and must be declared effective no later than 120 days from the date of the last closing of the December 2012 Financing. Moreover, we will maintain the effectiveness of the registration statement from its effective date unless all securities registered under the registration statement have been sold or are otherwise able to be sold pursuant to Rule 144 of the Securities Act of 1933, as amended (the “Securities Act”). If we fail to comply with the registration statement filing or effective date requirements, we are required to pay the investors a fee equal to 1.0% of the Purchaser’s investment, for each 30-day period of delay, subject to a maximum payment of 10% to each Purchaser.

In connection with the December 2012 Financing, we paid Kema Partners LLC, a FINRA registered broker-dealer (“Kema Partners”) a cash payment of \$70,000, which represented a 7% commission of the gross proceeds delivered by Purchasers introduced by Kema Partners in the December 2012 Financing.

The shares included in the Units and shares underlying the Class A Warrants are registered pursuant to this prospectus.

Plan of Distribution

This offering is not being underwritten. The selling stockholders will sell their shares of our common stock at prevailing market prices or privately negotiated prices. The selling stockholders themselves directly, or through their agents, or through their brokers or dealers, may sell their shares from time to time, in (i) privately negotiated transactions, (ii) in one or more transactions, including block transactions in accordance with the applicable rules of the OTCQB or (iii) otherwise in accordance with the section of this prospectus entitled “Plan of Distribution.” To the extent required, the specific shares to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, broker or dealer and any applicable commission or discounts with respect to a particular offer will be described in an accompanying prospectus supplement. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this prospectus.

For additional information on the methods of sale, you should refer to the section of this prospectus entitled “Plan of Distribution,” beginning on page 76.

USE OF PROCEEDS

We will not receive any proceeds from the sale of common stock offered by the selling stockholders under this prospectus. However, we will receive up to \$~~5,342,500~~14,472,678 in the aggregate from the selling stockholders if they exercise in full, on a cash basis, the ~~Class-A Warrants~~warrants to purchase ~~8,904,167~~16,269,459 shares of common stock issued to the selling stockholders that are being offered by the selling stockholders under this prospectus. All but 30,750 of the ~~Class-A Warrants~~warrants entitle the holder to exercise their warrants on a cashless basis under certain conditions. In the event that any selling stockholder exercises their ~~Class-A Warrants~~warrants on a cashless basis, then we will not receive any proceeds from the exercise of those warrants. We would use such proceeds from the exercise of the ~~Class-A Warrants~~warrants for working capital and other corporate purposes.

The warrant holders may exercise their ~~Class-A Warrants~~warrants at any time until their expiration, as further described under "Description of Capital Stock." Because the warrant holders may exercise the ~~Class-A Warrants~~warrants in their own discretion, if at all, we cannot plan on specific uses of proceeds beyond application of proceeds to general corporate purposes. We have agreed to bear the expenses (other than any underwriting discounts or commissions or agent's commissions) in connection with the registration of the common stock being offered hereby by the selling stockholders.

PLAN OF DISTRIBUTION

We are registering the shares of common stock previously issued and the shares of common stock issuable upon exercise of the warrants to permit the resale of these shares of common stock by the holders of the common stock and warrants from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of common stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

In addition, the selling stockholders may transfer the shares of common stock by other means not described in this prospectus. If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The selling stockholders may pledge or grant a security interest in some or all of the warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

The following selling stockholders are deemed an “underwriter” as that term is defined under the Securities Exchange Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the rules and regulations of such acts, in connection with the sale of their common stock under this prospectus: Dawson James Securities, Inc., a registered broker-dealer; WFG Investments, Inc., a registered broker-dealer; Seagate Advisors Inc., an offshore registered broker-dealer; Thomas Hands, Donald Shek, Tom Curtis, Bret Shapiro, Joseph Balagot and Jonathan Blum; all of whom were employees or affiliates of Dawson James Securities, Inc. at the time they received their shares. With the exception of the foregoing, no other underwriter or person has been engaged to facilitate the sale of shares of common stock in this offering.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, estimated to be approximately \$106,336 in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

Selling Stockholders (pages 78-80)

SELLING STOCKHOLDERS

This prospectus relates to the offering by the selling stockholders ~~identified in the table below~~ of [Tonix Pharmaceuticals Holding Corp.](#) of up to ~~17,808,334~~[32,352,141](#) shares of common stock, par value \$0.001 per share. All of the shares of common stock offered by this prospectus are being sold by the selling stockholders. These shares consist of ~~(+)~~:

- [585,750 shares of common stock issued to investors in our 2011 Financing;](#)
- [275,000 shares of common stock issuable upon exercise of warrants to purchase 275,000 shares issued to investors in our 2011 Financing;](#)
- [30,750 shares of common stock issuable upon exercise of warrants to purchase 30,750 shares issued to placement agents in connection with our 2011 Financing;](#)
- [6,592,765 shares of common stock issued to investors in our March 2012 Financing;](#)
- [6,592,765 shares of common stock issuable upon exercise of warrants to purchase 6,592,765 shares issued to investors in our March 2012 Financing;](#)
- [466,777 shares of common stock issuable upon exercise of warrants to purchase 466,777 shares issued to a placement agent in connection with our March 2012 Financing](#)
- [8,904,167 shares of common stock issued to investors in our December 2012 Financing;](#) and ~~(+)~~
- [8,904,167 shares of common stock issuable upon exercise of warrants to purchase 8,904,167 shares issued to investors in our December 2012 Financing.](#)

The table below has been prepared based upon the information furnished to us by the selling stockholders. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from, or not subject to, the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly. We cannot provide an estimate as to the number of shares of common stock that will be held by the selling stockholders upon termination of the offering covered by this prospectus because the selling stockholders may offer some or all of their shares of common stock under this prospectus. The selling stockholders may also sell, transfer or otherwise dispose of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act or pursuant to another effective registration statement covering those shares.

[The following selling stockholders are deemed an "underwriter" as that term is defined under the Securities Exchange Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the rules and regulations of such acts, in connection with the sale of their common stock under this prospectus: Dawson James Securities, Inc., a registered broker-dealer; WFG Investments, Inc., a registered broker-dealer; Seagate Advisors Inc., an offshore registered broker-dealer; Thomas Hands, Donald Shek, Tom Curtis, Bret Shapiro, Joseph Balagot and Jonathan Blum; all of whom were employees or affiliates of Dawson James Securities, Inc. at the time they received their shares. With the exception of the foregoing, no other underwriter or person has been engaged to facilitate the sale of shares of common stock in this offering.](#)

The following table sets forth, based on information provided to us by the selling stockholders or known to us, the name of each selling stockholder, the nature of any position, office or other material relationship, if any, which the selling stockholder has had, within the past three years, with us or with any of our predecessors or affiliates, and the number of shares of our common stock beneficially owned by the stockholder before this offering. The number of shares owned are those beneficially owned, as determined under the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares of common stock as to which a person has sole or shared voting power or investment power and any shares of common stock which the person has the right to acquire within 60 days through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement.

We have assumed all shares of common stock reflected on the table will be sold from time to time in the offering covered by this prospectus. Because the selling stockholders may offer all or any portions of the shares of common stock listed in the table below, no estimate can be given as to the amount of those shares of common stock covered by this prospectus that will be held by the selling stockholders upon the termination of the offering.

Selling Stockholder	Shares of Common Stock Owned Before this Offering	Shares of Common Stock Underlying Warrants Owned Before this Offering (1)	Percentage of Common Stock Beneficially Owned Before this Offering (2)	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned After this Offering (3)	Percentage of Common Stock Beneficially Owned After this Offering (2)
Targent Pharmaceuticals, LLC (4)	1,179,424	165,000	3.90%	384,450	959,974	2.31%
Lederman & Co, LLC (5)	3,692,558	2,090,000	12.77%	2,209,700	3,572,858	5.91%
Sandor Capital Master Fund, L.P. (6)	832,000	400,000	3.55%	932,000	300,000	*
JSL Kids Partners (7)	233,000	100,000	*	233,000	100,000	*
L & L Technologies, LLC (8)	649,138	486,666	2.60%	496,666	639,138	1.07%
John Selzer (9)	100,000	200,000	*	300,000	0	0%
Lysander LLC (10)	1,324,049	383,334	3.92%	449,834	1,257,549	2.11%
Ernest Mario (11)	1,280,412	383,334	3.82%	449,834	1,213,912	2.04%
Donald W. Landry (12)	393,020	25,000	1.22%	58,250	359,770	*
Charles E. Mather III (13)	13,300	10,000	*	23,300	0	0%
Adam B. Connors	33,250	25,000	*	58,250	0	0%
Eli Lederman (14)	2,427,810	300,000	6.27%	366,500	2,361,310	3.96%
The London Trust (15)	99,500	50,000	*	149,500	0	0%
John Rhodes (16)	1,101,936	550,000	3.78%	616,500	1,035,436	1.73%
Ryan Ferman	33,250	25,000	*	58,250	0	0%
Charles E. Mather IV (17)	150,569	110,000	0.60%	123,300	137,269	0.23%
Frank C. Condella, Jr.	142,337	25,000	*	58,250	109,087	*
David Moss	1,886,818	230,000	6.13%	345,000	1,771,818	4.25%
The Hashad Family Trust (18)	199,500	150,000	1.02%	349,500	0	0%
Continental Trust Corporation Limited (19)	266,000	200,000	1.35%	466,000	0	0%
Dorothy M. Ix	25,000	50,000	*	75,000	0	0%
John N. Alessandro	36,000	36,000	*	72,000	0	0%
Jack and Marcy Garson	200,000	200,000	1.16%	400,000	0	0%
CL Anderson and Associates Profit Sharing Plan (20)	25,000	25,000	*	50,000	0	0%
James C. Miller	12,500	12,500	*	25,000	0	0%
Bengt Elvir Ling	100,000	100,000	*	200,000	0	0%
Michael Mulieri	12,500	12,500	*	25,000	0	0%
Brett Nesland	99,750	75,000	*	174,750	0	0%
Iredell and Virginia Iglehart, III, TBE	44,636	25,000	*	50,000	19,636	*
Korrigan AG (21)	133,000	100,000	*	233,000	0	0%
Gregory Harrison	50,000	50,000	*	100,000	0	0%
Carl Stevens	50,000	50,000	*	100,000	0	0%
Robert B. Stanger	12,500	12,500	*	25,000	0	0%
Jeffrey & Jennifer Stagnoli	12,500	12,500	*	25,000	0	0%
Vincent Rose, Jr.	25,000	25,000	*	50,000	0	0%
Richard A. Wienecke, II	12,500	12,500	*	25,000	0	0%
Terry and Denis Altenburg	25,000	25,000	*	50,000	0	0%
Gilbert E. Ludwig IRA	25,000	25,000	*	50,000	0	0%
Geoffrey Poremba, IRA	58,000	58,000	*	116,000	0	0%

Selling Stockholder	Shares of Common Stock Owned Before this Offering	Shares of Common Stock Underlying Warrants Owned Before this Offering (1)	Percentage of Common Stock Beneficially Owned Before this Offering (2)	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned After this Offering (3)	Percentage of Common Stock Beneficially Owned After this Offering (2)
Theo Olison, IRA	12,500	12,500	*	25,000	0	0%
Timothy & Patricia Gillis	12,500	12,500	*	25,000	0	0%
Denis Robert Daun	18,000	18,000	*	36,000	0	0%
Alessandro Lamom	25,000	25,000	*	50,000	0	0%
Woody S. Byars, IRA	25,000	25,000	*	50,000	0	0%
John Sloan Jr., IRA	50,000	50,000	*	100,000	0	0%
John Blum Jr.	50,000	50,000	*	100,000	0	0%
Mary Louise Marcin	25,000	25,000	*	50,000	0	0%
John Grohe	25,000	25,000	*	50,000	0	0%
Jeffrey E. Burt	12,700	12,700	*	25,400	0	0%
Wardenburg 2009 Family Trust (22)	25,000	25,000	*	50,000	0	0%
Frank and Hope Patton	13,000	13,000	*	26,000	0	0%
WP O'Reilly & Associates Ltd. (23)	100,000	100,000	*	200,000	0	0%
SLMI Holdings LLC (24)	50,000	50,000	*	100,000	0	0%
Pamela Corson, IRA	12,500	12,500	*	25,000	0	0%
Brian Wolf	25,000	25,000	*	50,000	0	0%
Jan Backvall	65,000	65,000	*	130,000	0	0%
Fred Militello	18,750	18,750	*	37,500	0	0%
Kevin Lydon	25,000	25,000	*	50,000	0	0%
Cadence Investments IV, LLLP (25)	70,000	70,000	*	140,000	0	0%
Francis and Jeffrey Chan	25,000	25,000	*	50,000	0	0%
Alan David Cohen	25,000	25,000	*	50,000	0	0%
Kerston Coombs	37,500	37,500	*	75,000	0	0%
Constantine Hagepanos	25,000	25,000	*	50,000	0	0%
Peter Kaplan	50,000	50,000	*	100,000	0	0%
Gerald and Seena Sperling JTWROS	200,000	200,000	1.16%	400,000	0	0%
Bunkap Industries, Inc. (26)	25,000	25,000	*	50,000	0	0%
Steven Etra	170,000	170,000	*	340,000	0	0%
Cadence Investments III LLLP (27)	60,000	60,000	*	120,000	0	0%
Michael Berenhaus	50,000	50,000	*	100,000	0	0%
Donald S. Darendinger Revocable Trust UA 07/03/2007 (28)	25,000	25,000	*	50,000	0	0%
John Black	25,000	25,000	*	50,000	0	0%
Bruce Robinson	25,000	25,000	*	50,000	0	0%
Joe A. Holle	50,000	50,000	*	100,000	0	0%
Christopher Moore	50,000	50,000	*	100,000	0	0%
Raymond G. Tinney 1995 Inter Vivos Trust U/A (29)	50,000	50,000	*	100,000	0	0%
Jason Curtis	19,000	19,000	*	38,000	0	0%
Stanley & Larisa Minkin	25,000	25,000	*	50,000	0	0%
David Hansen	25,000	25,000	*	50,000	0	0%
Michael Brodherson	25,000	25,000	*	50,000	0	0%
Umesh B Malyavantham, IRA	50,000	50,000	*	100,000	0	0%
William S. Atkins Living Trust dtd. 8/14/1998 (30)	12,500	12,500	*	25,000	0	0%
James Rees	37,500	37,500	*	75,000	0	0%

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F. Richard Stark	50,000	50,000	*	100,000	0	0%
Paul & Teri Sallwasser Joint Tenants	25,000	25,000	*	50,000	0	0%
Dr. Carl Eric Mayer Revocable Trust (31)	25,000	25,000	*	50,000	0	0%
John E. Nash	12,500	12,500	*	25,000	0	0%
B Mark Paull	25,000	25,000	*	50,000	0	0%
Dominic Martos	12,500	12,500	*	25,000	0	0%
Bayard Henry	100,000	100,000	*	200,000	0	0%
Robert J. Rosenberg	25,000	25,000	*	50,000	0	0%
Virginia Anne Cahal	250,000	250,000	1.45%	500,000	0	0%
Melvyn Gober	25,000	25,000	*	50,000	0	0%
William C. Kottke	15,000	15,000	*	30,000	0	0%
Jim & Mike Narutowicz, JTWROS	25,000	25,000	*	50,000	0	0%
George Rosch	12,500	12,500	*	25,000	0	0%
Donald Myrtue	25,000	25,000	*	50,000	0	0%
Mark Wiley	20,000	20,000	*	40,000	0	0%
Ashley Weatherford, IRA	25,000	25,000	*	50,000	0	0%
Kyl Scott, IRA	47,000	47,000	*	94,000	0	0%
William & Rosalyn Gershell, JTWROS (32)	25,000	25,000	*	50,000	0	0%
Cheryl Martos	12,500	12,500	*	25,000	0	0%
Charles McElheney, IRA	25,000	25,000	*	50,000	0	0%
James E. Anderson	100,000	100,000	*	200,000	0	0%
Niamh O.Reilly	75,000	75,000	*	150,000	0	0%
John D. Marks	50,000	50,000	*	100,000	0	0%
Timothy Douglas Quartly-Watson	25,000	25,000	*	50,000	0	0%
Gerald & Janice Johnson, JTWROS	50,000	50,000	*	100,000	0	0%
Robert A. Kiesz	12,500	12,500	*	25,000	0	0%
George A. Long, III	25,000	25,000	*	50,000	0	0%
David Hawks	25,000	25,000	*	50,000	0	0%
Martha Blackwood Zeh	50,000	50,000	*	100,000	0	0%
Gurpreet S. Ahluwalia	30,000	30,000	*	60,000	0	0%
Susan Doukas	25,000	25,000	*	50,000	0	0%
James Streett	25,000	25,000	*	50,000	0	0%
Jacques Lee Smith	50,000	50,000	*	100,000	0	0%
John R. Rogers	30,000	30,000	*	60,000	0	0%
Joseph Mulieri	25,000	25,000	*	50,000	0	0%
Elizabeth Burrow Living Trust (33)	25,000	25,000	*	50,000	0	0%
Susan Loewenstein	12,500	12,500	*	25,000	0	0%
Becky A. Davis	12,500	12,500	*	25,000	0	0%
John Sloan Jr., IRA	50,000	50,000	*	100,000	0	0%
Kerry Staton	100,000	100,000	*	200,000	0	0%
Philip Stark	25,000	25,000	*	50,000	0	0%
Thomas J. Minton and Mary Jo R. Minton	25,000	25,000	*	50,000	0	0%
F. Lary Holcomb	50,000	50,000	*	100,000	0	0%

Selling Stockholder	Shares of Common Stock Owned Before this Offering	Shares of Common Stock Underlying Warrants Owned Before this Offering (1)	Percentage of Common Stock Beneficially Owned Before this Offering (2)	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned After this Offering (3)	Percentage of Common Stock Beneficially Owned After this Offering (2)
JJ2002 Inc. (34)	25,000	25,000	*	50,000	0	0%
Jason Morjain	12,500	12,500	*	25,000	0	0%
Robert & Elsie Mathews	12,500	12,500	*	25,000	0	0%
Leland and Lauren Gershell (35)	25,000	25,000	*	50,000	0	0%
Cadence Investments III LLLP (27)	10,000	10,000	*	20,000	0	0%
Cadence Investments IV LLLP (25)	15,000	15,000	*	30,000	0	0%
Gerard W. Walterhoefer & Nancy Lynn Walterhoefer	12,515	12,515	*	25,030	0	0%
Bruce Robinson	200,000	200,000	1.16%	400,000	0	0%
Nigel Francis Burrow Living Trust (36)	24,500	24,500	*	49,000	0	0%
JJB GA SF LLC (37)	75,000	75,000	*	150,000	0	0%
Patrick & Zoe Lynch, JTWROS	50,000	50,000	*	100,000	0	0%
Mario Cabrera	12,500	12,500	*	25,000	0	0%
PES Property Corp 401k Profit Sharing Plan (38)	50,000	50,000	*	100,000	0	0%
Eric Schweiger	10,000	10,000	*	20,000	0	0%
Cecelia Maben, IRA	12,500	12,500	*	25,000	0	0%
Geoffrey Poremba, IRA	13,300	13,300	*	26,600	0	0%
Michael White	25,000	25,000	*	50,000	0	0%
Edward Karr	8,250	0	*	8,250	0	0%
Joseph Rudick	0	25,000	*	25,000	0	0%
WFG Investments, Inc. (39)	0	15,000	*	15,000	0	0%
Seagate Advisors Inc. (40)	0	15,750	*	15,750	0	0%
Dawson James Securities, Inc. (41)	60,000	102,654	*	102,654	60,000	*
Thomas Hands	0	11,500	*	11,500	0	0%
Donald Shek	0	11,500	*	11,500	0	0%
Tom Curtis	0	30,665	*	30,665	0	0%
Bret Shapiro	0	9,464	*	9,464	0	0%
Joseph Balagot	0	3,144	*	3,144	0	0%
Jonathan Blum	220,000	175,207	*	175,207	220,000	*
Brandon Ross	120,000	122,643	*	122,643	120,000	*
Bruce Daugherty (42)	166,667	333,334	1.15%	333,334	166,667	*
Leder Laboratories, Inc. (43)	83,333	166,666	*	166,666	83,333	*
Starling Pharmaceuticals, Inc. (44)	83,333	166,666	*	166,666	83,333	*
Marcia Fox	62,500	125,000	*	125,000	62,500	*
Samuel Saks (45)	166,667	333,334	1.15%	333,334	166,667	*
Theodore A. McGraw, Jr.	343,178	250,000	1.37%	250,000	343,178	*
Charles Lowery	250,000	500,000	1.72%	500,000	250,000	*
David Lummis	250,000	500,000	1.72%	500,000	250,000	*
Matthew Harad	62,500	125,000	*	125,000	62,500	*
Ju Innovation Partners I, L.P. (46)	125,000	250,000	*	250,000	125,000	*
Peabody Capital Partners, LP (47)	500,000	1,000,000	3.40%	1,000,000	500,000	*
Gates P. Torrey	125,000	250,000	*	250,000	125,000	*
Jupiter Financial Services, LLC (48)	1,540,000	3,080,000	4.99%(54)	3,080,000	1,540,000	2.52%
The Fontinalis Trust (49)	125,000	250,000	*	250,000	125,000	*
The 1901 Trust (50)	125,000	250,000	*	250,000	125,000	*
Bluestein Capital Opportunities Fund, L.P. (51)	125,000	250,000	*	250,000	125,000	*
Richard M. Furlaud, Jr.	125,000	250,000	*	250,000	125,000	*

Selling Stockholder	Shares of Common Stock Owned Before this Offering	Shares of Common Stock Underlying Warrants Owned Before this Offering (1)	Percentage of Common Stock Beneficially Owned Before this Offering (2)	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned After this Offering (3)	Percentage of Common Stock Beneficially Owned After this Offering (2)
Technology Partners Fund VIII, LP (52)	2,500,000	5,000,000	9.99%(54)	5,000,000	2,500,000	4.04%
The 2012 Quinine Fund (53)	335,000	670,000	2.29%	670,000	335,000	*
TOTALS:	32,877,009	25,173,626	84.92%	32,352,141	25,698,494	37.59%

* Represents less than 1%.

- (1) Represents shares of our common stock issuable under warrants issued in connection with the 2011 Financing, March 2012 Financing and December 2012 Financing. All warrants are immediately exercisable.
- (2) Applicable percentage ownership before the offering is based on 43,182,599 shares of common stock outstanding as of March [], 2013. Applicable percentage ownership after the offering is based on 59,452,058 shares of common stock, which includes the 7,365,292 shares of common stock issuable upon exercise of all of the 16,269,459 warrants to purchase common stock registered pursuant to this prospectus.
- (3) Assumes that (i) all of the shares of common stock to be registered on the registration statement of which this prospectus is a part, including all shares of common stock underlying warrants held by the selling stockholders, are sold in the offering and (ii) that no other shares of common stock are acquired or sold by the selling stockholder prior to the completion of the offering. However, subject to the restrictions of transfer agreed to by the selling stockholders (see "Plan of Distribution" in this prospectus), the selling stockholders may sell all, some or none of the shares offered pursuant to this prospectus and may sell other shares of our common stock that they may own pursuant to another registration statement under the Securities Act or sell some or all of their shares pursuant to an exemption from the registration provisions of the Securities Act, including under Rule 144.
- (4) Seth Lederman, our chairman and chief executive officer, is the managing member of Targent Pharmaceuticals, LLC and has voting and investment power over the securities owned by it.
- (5) Seth Lederman, our chairman and chief executive officer, is the managing member of Lederman & Co, LLC and has voting and investment power over the securities owned by it.
- (6) John Lemak is the manager of Sandor Capital Master Fund, L.P. and has voting and investment power over the securities owned by it. Mr. Lemak is affiliated with WFG Investments, Inc., a registered broker-dealer.
- (7) John Lemak is the manager of JSL Kids Partners and has voting and investment power over the securities owned by it. Mr. Lemak is affiliated with WFG Investments, Inc., a registered broker-dealer.
- (8) Seth Lederman, our chairman and chief executive officer, is the manager of L&L Technologies, LLC and has voting and investment power over the securities owned by it.
- (9) John Selzer is the brother of Benjamin Selzer, our former Chief Operating Officer.
- (10) Stuart Davidson, a member of our board of directors, is a member of Lysander LLC and has voting and investment power over the securities owned by it.
- (11) Ernest Mario is a member of our board of directors.
- (12) Donald W. Landry is a member of our board of directors.
- (13) Charles E. Mather III is the father of Charles E. Mather IV, a member of our board of directors. Charles E. Mather IV disclaims beneficial ownership of the securities held by Charles E. Mather III.
- (14) Eli Lederman is the brother of Seth Lederman, our chairman and chief executive officer. Seth Lederman disclaims beneficial ownership of the securities held by Eli Lederman.
- (15) Tara Callen is the trustee of The London Trust and has voting and investment power over the securities owned by it.
- (16) John Rhodes is a member of our board of directors.
- (17) Charles E. Mather IV is a member of our board of directors.
- (18) Adel Hashad and Farida Hashad are the trustees of the Hashad Family Trust and have voting and investment power over the securities owned by it.
- (19) Colin G. Hames is the Director of Continental Trust Corporation Limited and has voting and investment power over the securities owned by it.

- (20) Charles L. Anderson is the trustee of the CL Anderson and Associates Profit Sharing Plan and has voting and investment power over the securities owned by it.
- (21) David Craven and Geoffrey Long are the Directors of Korrigan AG and have voting and investment power over the securities owned by it.
- (22) Peter Wardenburg is the trustee of Wardenburg Family Trust and has voting and investment power over the securities owned by it.
- (23) Niamh O'Reilly is the Managing Director of WP O'Reilly Associates Ltd. and has voting and investment power over the securities owned by it.
- (24) Arthur Slack is the managing partner of SLMH Holdings LLC and has voting and investment power over the securities owned by it.
- (25) John Rogers is the general partner of Cadence Investments IV, LLLP and has voting and investment power over the securities owned by it.
- (26) Peter Kaplan is the president of Bunker Industries, Inc. and has voting and investment power over the securities owned by it.
- (27) John Rogers is the general partner of Cadence Investments III, LLLP and has voting and investment power over the securities owned by it.
- (28) Donald S. Darendinger is the trustee of the Donald S. Darendinger Revocable Trust and has voting and investment power over the securities owned by it.
- (29) Raymond Tinney is the trustee of the Raymond G. Tinney 1995 Inter Vivos Trust and has voting and investment power over the securities owned by it.
- (30) William S. Atkins and Sally S. Atkins are the trustees of the William S. Atkins Living Trust and have voting and investment power over the securities owned by it.
- (31) Carl Erik Mayer is the trustee of the Dr. Carl Erik Mayer Revocable Trust and has voting and investment power over the securities owned by it.
- (32) William and Rosalyn Gershell are the parents of Leland Gershell, our chief financial officer. Leland Gershell disclaims beneficial ownership of the securities held by William and Rosalyn Gershell.
- (33) Elizabeth Burrow is the trustee of the Elizabeth Burrow Living Trust and has voting and investment power over the securities owned by it.
- (34) Jason Morjian is the president of JJ2002 Inc. and has voting and investment power over the securities owned by it.
- (35) Leland Gershell is our chief financial officer.
- (36) Nigel Burrow is the trustee of the Nigel Burrow Living Trust and has voting and investment power over the securities owned by it.
- (37) John Smithgall is the Co-Manager of JJB GA SF LLC and has voting and investment power over the securities owned by it.
- (38) Peter Subesan is the president of PES Property Corp 401(k) Profit Sharing Plan and has voting and investment power over the securities owned by it.
- (39) Wilson H. Williams is the President and Chief Executive Officer of WFG Investments, Inc. and has voting and investment power over the securities owned by it.
- (40) Mabel Moreno is the President and Owner of Seagate Advisors Inc. and has voting and investment power over the securities owned by it.
- (41) Thomas Hands is the President of Dawson James Securities, Inc. and has voting and investment power over the securities owned by it.
- (42) Bruce Daugherty is an executive officer of the Company.
- (43) Seth Lederman, our chairman and chief executive officer, is the chairman of Leder Laboratories, Inc. and has voting and investment power over the securities owned by it.
- (44) Seth Lederman, our chairman and chief executive officer, is the chairman of Starling Pharmaceuticals, Inc. and has voting and investment power over the securities owned by it.
- (45) Samuel Saks is a member of our board of directors.
- (46) William Ju is the member of William David Ju, L.L.C., the general partner of Ju Innovation Partners I, L.P. and has voting and investment power over the securities owned by it.
- (47) James A. Torrey is the general partner of Peabody Capital Partners, LP and has voting and investment power over the securities owned by it.
- (48) David T. Altshuler is the member of Jupiter Financial Services, LLC and has voting and investment power over the securities owned by it.

- (49) William C. Ford, Jr. is the trustee of The Fontinalis Trust and has voting and investment power over the securities owned by it.
- (50) Elena A. Ford is the trustee of The 1901 Trust and has voting and investment power over the securities owned by it.
- (51) Robert H. Bluestein and Jeffrey N. Bluestein are the president and senior managing director, respectively, of R. J. Bluestein & Company, the general partner of Bluestein Capital Opportunities Fund, L.P. and have voting and investment power over the securities owned by it.
- (52) Sheila Mutter and Roger Quy are the managing members of TP Management VIII, LLC, the general partner of Technology Partners Fund VIII, LP and have voting and investment power over the securities owned by it.
- (53) Hill C. Snellings is the trustee of The 2012 Quinine Fund and has voting and investment power over the securities owned by it.
- (54) Represents maximum beneficial ownership percentage pursuant to exercise limitations contained within the warrants.

2011 Private Placement

Between October and November, 2011 we consummated the 2011 Financing pursuant to which we sold \$2,075,000 principal amount of Debentures for aggregate cash proceeds of \$1,575,000 and the exchange of \$500,000 in previously issued Notes of Tonix Sub that were converted into Debentures in the principal face amount of \$500,000.

Upon conversion or repayment of the Debenture, the holders were entitled to receive, at the holder's option, either (i) the Conversion Warrant or (ii) the Incentive Shares. The private placement that closed in January 2012 met the requirements of a Subsequent Financing, therefore, the holders of the Debentures elected to receive 275,000 Conversion Warrants and 594,000 Incentive Shares. In connection with the 2011 Financing, we issued the 2011 Agent Warrants.

The Incentive Shares and shares underlying the Conversion Warrants and 2011 Agent Warrants are registered pursuant to this prospectus.

2012 Private Placement

Between January and March, 2012, we consummated the 2012 Financing pursuant to which we issued an aggregate of 264,7106 Units.

Each Unit had a purchase price of \$25,000 per Unit and consisted of twenty five thousand (25,000) shares of our Common Stock, 25,000 Class A Warrants and 25,000 Class B Warrants. The Class A Warrants have an exercise price of \$1.25 per share of Common Stock and will be exercisable for a period of five years from the date of issuance. In connection with the 2012 Financing, we issued the 2012 Agent Warrants.

The shares included in the Units and shares underlying the Class A Warrants and 2012 Agent Warrants are registered pursuant to this prospectus.

December 2012 Private Placement

In December 2012, we consummated the December 2012 Financing, pursuant to which we issued an aggregate of 8,904,167 Units to the Purchasers for aggregate cash proceeds of \$2,615,000, at a price per Unit of \$0.40, and the exchange of \$710,000 in Debentures of the Company that were converted into Units at a price of \$0.30 per Unit.

Each Unit consisted of one share of Common Stock, a Class A Warrant to purchase one share of Common Stock and a Class B Warrant to purchase one share of Common Stock. The Class A Warrants have an exercise price of \$0.60 per share of Common Stock and will be exercisable for a period of five years from the date of issuance. The Class A Warrants may be exercised on a cashless basis under certain circumstances. The Class B Warrants have an exercise price of \$0.40 per share of Common Stock and will be exercisable for a period of one year from the date of issuance.

In connection with the December 2012 Financing, we granted each Purchaser registration rights. We are obligated to use our best efforts to cause a registration statement registering for resale the Common Stock included in the Units and the Common Stock underlying the Class A Warrants to be filed no later than 60 days from the date of the last closing of the December 2012 Financing and must be declared effective no later than 120 days from the date of the last closing of the December 2012 Financing. Moreover, we will maintain the effectiveness of the registration statement from its effective date unless all securities registered under the registration statement have been sold or are otherwise able to be sold pursuant to Rule 144 of the Securities Act of 1933, as amended (the "Securities Act"). If we fail to comply with the registration statement filing or effective date requirements, we are required to pay the investors a fee equal to 1.0% of the Purchaser's investment, for each 30-day period of delay, subject to a maximum payment of 10% to each Purchaser.

The shares included in the Units and shares underlying the Class A Warrants are registered pursuant to this prospectus.

EXHIBIT B

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

The following exhibits are included as part of this Form S-1. References to “the Company” in this Exhibit List mean Tonix Pharmaceuticals Holding Corp., a Nevada corporation.

- 2.01 Share Exchange Agreement, dated as of October 7, 2011 by and among Tamandare Explorations Inc., David J. Moss, Tonix Pharmaceuticals, Inc. and the shareholders of Tonix Pharmaceuticals, Inc. filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 3.01 Articles of Incorporation, filed as an exhibit to the Registration Statement on Form S-1, filed with the Securities and Exchange Commission (the “Commission”) on April 9, 2008 and incorporated herein by reference.
- 3.02 Articles of Merger between Tamandare Explorations Inc. and Tonix Pharmaceuticals Holding Corp., effective October 11, 2011, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 17, 2011 and incorporated herein by reference.
- 3.03 Amended and Restated Bylaws, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on February 23, 2012 and incorporated herein by reference.
- 5.01 Opinion of Sichenzia Ross Friedman Ference LLP, [filed as an exhibit to the Registration Statement on Form S-1, filed with the Commission on March 25, 2013 and incorporated herein by reference.](#)
- 10.01 Feasibility and Option Agreement, dated as of June 20, 2007, by and between Krele Pharmaceuticals, Inc. (now, Tonix Pharmaceuticals, Inc.) and Lipocine, Inc., filed as an exhibit to the amended Current Report on Form 8-K/A, filed with the Commission on April 3, 2012 and incorporated herein by reference. †
- 10.02 Consulting Agreement, dated as of June 4, 2010, by and between Krele Pharmaceuticals, Inc. (now, Tonix Pharmaceuticals, Inc.) and Lederman & Co., LLC, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.03 Technology Transfer and Assignment Agreement, dated as of June 4, 2010, by and between Krele Pharmaceuticals, Inc. (now, Tonix Pharmaceuticals, Inc.) and Lederman & Co., LLC, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.04 Lease Agreement, dated as of September 28, 2010, by and between 509 Madison Avenue Associates, L.P. and Tonix Pharmaceuticals, Inc., filed as an exhibit to the amended Current Report on Form 8-K/A, filed with the Commission on February 3, 2012 and incorporated herein by reference.
- 10.05 Amendment to Feasibility and Option Agreement, dated as of October 4, 2010, by and between Tonix Pharmaceuticals, Inc. and Lipocine, Inc., filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference. †
- 10.06 Engagement Agreement, dated as of October 6, 2010, by and between Tonix Pharmaceuticals, Inc. and Frost and Sullivan, filed as an exhibit to the amended Current Report on Form 8-K/A, filed with the Commission on April 3, 2012 and incorporated herein by reference.
- 10.07 Amendment to Consulting Agreement, dated as of December 9, 2010, by and between Tonix Pharmaceuticals, Inc. and Lederman & Co., LLC, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.

- 10.08 Employment Agreement, dated as of April 1, 2011, by and between Tonix Pharmaceuticals, Inc. and Rhonda Rosen, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.09 Employment Agreement, dated as of April 1, 2011, by and between Tonix Pharmaceuticals, Inc. and Benjamin A. Selzer, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.10 Employment Agreement, dated as of April 1, 2011, by and between Tonix Pharmaceuticals, Inc. and Susan Oliver (now, Susan Kerridge), filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.11 API Supply and Development Agreement, dated as of April 7, 2011, by and between Tonix Pharmaceuticals, Inc. and JFC Technologies, Inc., filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.12 Consulting Agreement, dated as of June 2, 2011, by and between Tonix Pharmaceuticals, Inc. and Pharmanet Canada, Inc., filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.13 Amendment to Employment Agreement, dated as of July 27, 2011, by and between Tonix Pharmaceuticals, Inc. and Rhonda Rosen, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.14 Amendment to Employment Agreement, dated as of July 27, 2011, by and between Tonix Pharmaceuticals, Inc. and Benjamin A. Selzer, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.15 Amendment to Employment Agreement, dated as of July 27, 2011, by and between Tonix Pharmaceuticals, Inc. and Susan Oliver (now, Susan Kerridge), filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.16 Financial Public Relations Agreement, dated as of August 1, 2011, by and between Tonix Pharmaceuticals, Inc. and Porter, LeVay & Rose, Inc., filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.17 Form of 8% Secured Convertible Debenture, issued October 7, 2011, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.18 Form of Subscription Agreement, dated October 7, 2011, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.19 Form of Pledge and Security Agreement, dated as of October 7, 2011, by and among Tamandare Explorations Inc., Tonix Pharmaceuticals, Inc., Krele LLC and the investors, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
- 10.20 Form of Subsidiary Guaranty, dated as of October 7, 2011, by and among Tonix Pharmaceuticals, Inc., Krele LLC and Sandor Capital Master Fund L.P., on behalf of the investors, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.

- 10.21 Form of Subscription Agreement, dated January 20, 2012, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on January 23, 2012 and incorporated herein by reference.
- 10.22 Form of Class A Warrant, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on January 23, 2012 and incorporated herein by reference.
- 10.23 Form of Class B Warrant, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on January 23, 2012 and incorporated herein by reference.
- 10.24 Form of Registration Rights Agreement, dated January 20, 2012, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on January 23, 2012 and incorporated herein by reference.
- 10.25 Amendment to Consulting Agreement, dated as of March 30, 2012 but effective as of July 27, 2011, by and between Tonix Pharmaceuticals, Inc. and Lederman & Co., LLC, filed as an exhibit to the Annual Report on Form 10-K filed with the Commission on March 30, 2012 and incorporated herein by reference.
- 10.26 Employment Agreement, between Tonix Pharmaceuticals Holding Corp. and Leland Gershell, dated April 1, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on April 5, 2012 and incorporated herein by reference.
- 10.27 Employment Agreement, between Tonix Pharmaceuticals Holding Corp. and Benjamin Selzer, dated April 2, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on April 5, 2012 and incorporated herein by reference.
- 10.28 Amendment to Employment Agreement, between Tonix Pharmaceuticals Holding Corp. and Benjamin Selzer, dated October 5, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on October 10, 2012 and incorporated herein by reference.
- 10.29 Form of Subscription Agreement, dated November 13, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on November 14, 2012 and incorporated herein by reference.
- 10.30 Form of Convertible Debenture, dated November 13, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on November 14, 2012 and incorporated herein by reference.
- 10.31 Form of Subscription Agreement, dated December 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 5, 2012 and incorporated herein by reference.
- 10.32 Form of Class A Warrant, dated December 4, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 5, 2012 and incorporated herein by reference.
- 10.33 Form of Class B Warrant, dated December 4, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 5, 2012 and incorporated herein by reference.
- 10.34 Form of Registration Rights Agreement, dated December 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 5, 2012 and incorporated herein by reference.
- 10.35 Form of Class A Warrant, dated December 21, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 27, 2012 and incorporated herein by reference.
- 10.36 Form of Class B Warrant, dated December 21, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 27, 2012 and incorporated herein by reference.

10.37	Form of Amendment No. 1 to the Purchase Agreement, Registration Rights Agreement and Escrow Agreement, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 27, 2012 and incorporated herein by reference.
21.01	List of Subsidiaries, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
23.01	Consent of EisnerAmper LLP
24.01	Power of Attorney (included on signature page to the registration statement).
99.01	Frost & Sullivan Fibromyalgia Market Study, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
99.02	Lipocine Cyclobenzaprine Study Results, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 14, 2011 and incorporated herein by reference.
101 INS	XBRL Instance Document*
101 SCH	XBRL Taxonomy Extension Schema Document*
101 CAL	XBRL Taxonomy Calculation Linkbase Document*
101 LAB	XBRL Taxonomy Labels Linkbase Document*
101 PRE	XBRL Taxonomy Presentation Linkbase Document*
101 DEF	XBRL Taxonomy Extension Definition Linkbase Document*

† Confidential treatment granted for certain confidential portions of this exhibit pursuant to Rule 24b-2 under the Exchange Act. In accordance with Rule 24b-2, these confidential portions have been omitted from this exhibit and filed separately with the Commission.

* [Users of this data are advised pursuant to Rule 406T of Regulation S-T that this interactive data file is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.](#)