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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
 Confidential, For Use of the Commission Only (as Permitted by Rule 14a-6(e)(2))
 Definitive Proxy Statement
 Definitive Additional Materials
 Soliciting Material Pursuant to § 240.14a-12

TONIX PHARMACEUTICALS HOLDING CORP.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required
 Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of transaction:
- (5) Total fee paid:
- Fee paid previously with preliminary materials:
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount previously paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:
-
-

TONIX PHARMACEUTICALS HOLDING CORP.
509 Madison Avenue, Suite 1608
New York, New York 10022
Telephone: (212) 980-9155

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

The Annual Meeting of the shareholders of Tonix Pharmaceuticals Holding Corp. (the "Company" or "Tonix") will be held on Friday, May 3, 2019, at 10:00 a.m. local time at the offices of Lowenstein Sandler LLP at 1251 Avenue of the Americas, New York, New York 10020 for the purposes of:

1. To elect the eight director nominees named in the Proxy Statement to hold office until the next annual meeting of shareholders;
2. To ratify the appointment of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019;
3. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan;
4. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan;
5. To approve an amendment to the Company's Articles of Incorporation, as amended, to increase the Company's authorized shares of common stock from 15,000,000 to 150,000,000;
6. To approve, on an advisory basis, the compensation of the Company's named executive officers;
7. To approve, on an advisory basis, a three-year frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation; and
8. To act on such other matters as may properly come before the meeting or any adjournment there.

Only shareholders of record at the close of business on March 7, 2019, will be entitled to attend and vote at the meeting. A list of all shareholders entitled to vote at the Annual Meeting, arranged in alphabetical order and showing the address of and number of shares held by each shareholder, will be available at the principal office of the Company during usual business hours, for examination by any shareholder for any purpose germane to the Annual Meeting for 10 days prior to the date thereof. The proxy materials will be furnished to shareholders on or about March 18, 2019.

Important Notice Regarding the Availability of Proxy Materials for the 2019 Annual Meeting of Shareholders to be held on May 3, 2019:

The Proxy Statement and Annual Report on Form 10-K for the year ended December 31, 2018 are available at: <http://viewproxy.com/tonixpharma/2018/>.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ Seth Lederman

Seth Lederman
Chief Executive Officer and Chairman of the Board of Directors
March 18, 2019

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. A return envelope (which is postage prepaid if mailed in the United States) is enclosed for your convenience. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

TABLE OF CONTENTS

<u>INFORMATION CONCERNING THE ANNUAL MEETING</u>	3
<u>QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING</u>	5
<u>PROPOSAL NO. 1: ELECTION OF DIRECTORS</u>	11
<u>Information about the Nominees</u>	11
<u>Board Independence</u>	13
<u>Board Leadership Structure</u>	13
<u>Board Role in Risk Oversight</u>	14
<u>Stockholder Communications with the Board</u>	14
<u>Meetings and Committees of the Board</u>	14
<u>Board Committees</u>	15
<u>Nomination of Directors</u>	16
<u>Code of Ethics</u>	17
<u>Section 16(a) Beneficial Ownership Reporting Compliance</u>	17
<u>PROPOSAL NO. 2: RATIFICATION OF APPOINTMENT OF OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	18
<u>Review of the Company's Audited Financial Statements for the Fiscal Year Ended December 31, 2018</u>	18
<u>Fees Paid to Auditors</u>	18
<u>Pre-Approval Policies and Procedures</u>	18
<u>REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS</u>	19
<u>PROPOSAL NO. 3: APPROVAL OF THE TONIX PHARMACEUTICALS HOLDING CORP. 2019 STOCK INCENTIVE PLAN</u>	20
<u>Overview</u>	20
<u>Best Practices</u>	21
<u>Burn Rate Table</u>	21
<u>Overhang Information</u>	22
<u>Summary of the 2019 Plan</u>	22
<u>Types of Awards</u>	25
<u>New Plan Benefits under the 2019 Plan</u>	26
<u>U.S. Federal Income Tax Considerations</u>	26
<u>Required Vote</u>	28
<u>PROPOSAL NO. 4: APPROVAL OF THE TONIX PHARMACEUTICALS HOLDING CORP. 2019 EMPLOYEE STOCK PURCHASE PLAN</u>	29
<u>PROPOSAL NO. 5: APPROVAL OF AMENDMENT TO ARTICLES OF INCORPORATION TO INCREASE OUR AUTHORIZED SHARES OF COMMON STOCK FROM 15,000,000 TO 150,000,000</u>	33
<u>PROPOSAL NO. 6: ADVISORY VOTE TO APPROVE NAMED EXECUTIVE OFFICER COMPENSATION</u>	35
<u>PROPOSAL NO. 7 ADVISORY VOTE ON THE FREQUENCY OF HOLDING AN ADVISORY VOTE ON EXECUTIVE COMPENSATION</u>	36
<u>INFORMATION ABOUT THE EXECUTIVE OFFICERS</u>	37
<u>Executive Officers</u>	37
<u>Involvement in Certain Legal Proceedings</u>	38
<u>EXECUTIVE COMPENSATION</u>	39
<u>Compensation Philosophy and Practices</u>	39
<u>Summary Compensation Table</u>	41
<u>Grants of Plan-Based Awards in Fiscal 2018</u>	41
<u>Outstanding Equity Awards at December 31, 2018</u>	42
<u>Option Exercises and Stock Vested</u>	43
<u>Equity Compensation Plan Information</u>	43
<u>Employment Contracts and Termination of Employment and Change-In-Control Arrangements</u>	43
<u>Directors Compensation Table</u>	46
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	47
<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS</u>	49
<u>PROPOSALS OF SHAREHOLDERS FOR THE 2020 ANNUAL MEETING</u>	50
<u>OTHER BUSINESS</u>	51
<u>APPENDIX A – 2019 Stock Incentive Plan</u>	A-1
<u>APPENDIX B – 2019 Employee Stock Purchase Plan</u>	B-1
<u>APPENDIX C – Certificate of Amendment to Increase Authorized Common Stock</u>	C-1

TONIX PHARMACEUTICALS HOLDING CORP.
509 Madison Avenue, Suite 1608
New York, New York 10022
Telephone: (212) 980-9155

PROXY STATEMENT
FOR THE 2019 ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON FRIDAY, MAY 3, 2019

INFORMATION CONCERNING THE ANNUAL MEETING

General

The enclosed proxy is solicited by the Board of Directors (the “Board”) of Tonix Pharmaceuticals Holding Corp. (the “Company”), for use at the Annual Meeting of the Company’s shareholders to be held at the offices of Lowenstein Sandler LLP at 1251 Avenue of the Americas, 17th Floor, New York, New York 10020 on May 3, 2019, at 10:00 a.m. local time and at any adjournments thereof. Whether or not you expect to attend the meeting in person, please vote your shares as promptly as possible to ensure that your vote is counted. The proxy materials will be furnished to shareholders on or about March 18, 2019.

Revocability of Proxy and Solicitation

Any shareholder executing a proxy that is solicited hereby has the power to revoke it prior to the voting of the proxy. Revocation may be made by attending the Annual Meeting and voting the shares of stock in person, or by delivering to the Secretary of the Company at the principal office of the Company prior to the Annual Meeting a written notice of revocation or a later-dated, properly executed proxy. Solicitation of proxies may be made by directors, officers and other employees of the Company by personal interview, telephone, facsimile transmittal or electronic communications. No additional compensation will be paid for any such services. This solicitation of proxies is being made by the Company which will bear all costs associated with the mailing of this proxy statement and the solicitation of proxies.

Record Date

Shareholders of record at the close of business on March 7, 2019 (the “**Record Date**”), will be entitled to receive notice of, attend and vote at the meeting.

Action to be Taken Under Proxy

Unless otherwise directed by the giver of the proxy, the persons named in the form of proxy, namely, Seth Lederman, our Chief Executive Officer, and Bradley Saenger, our Chief Financial Officer, or either one of them who acts, will vote:

- FOR the election of the eight director nominees named in the Proxy Statement to hold office until the next annual meeting of shareholders;
- FOR ratification of the appointment of EisnerAmper LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2019;
- FOR approval of the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan;
- FOR approval of the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan; and
- FOR approval of an amendment to the Company’s Articles of Incorporation, as amended, to increase the number of shares outstanding from 15,000,000 to 150,000,000;
- FOR, on an advisory basis, approval of the executive compensation of the Company’s named executive officers;

- FOR approval of a three-year frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation; and
- According to their discretion, on the transaction of such other matters as may properly come before the meeting or any adjournment there.

Should any nominee named herein for election as a director become unavailable for any reason, it is intended that the persons named in the proxy will vote for the election of such other person in his stead as may be designated by the Board. The Board is not aware of any reason that might cause any nominee to be unavailable.

Who is Entitled to Vote; Vote Required; Quorum

As of March 7, 2019, there were 104 shares of common stock issued and outstanding, which constitutes all of the outstanding capital stock of the Company. Shareholders are entitled to one vote for each share of common stock held by them.

One-third (1/3) of the outstanding shares, or 1,567,910 shares, present in person or represented by proxy, will constitute a quorum at the meeting. For purposes of the quorum and the discussion below regarding the vote necessary to take shareholder action, shareholders of record who are present at the Annual Meeting in person or by proxy and who abstain, including brokers holding customers' shares of record who cause abstentions to be recorded at the meeting, are considered shareholders who are present and entitled to vote and are counted towards the quorum.

Brokers holding shares of record for customers generally are not entitled to vote on "non-routine" matters, unless they receive voting instructions from their customers. As used herein, "uninstructed shares" means shares held by a broker who has not received such instructions from its customers on a proposal. A "broker non-vote" occurs when a nominee holding uninstructed shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that non-routine matter. In connection with the treatment of abstentions and broker non-votes, the proposals at this meeting to (i) elect directors, (ii) approve the 2019 Stock Incentive Plan, (iii) approve the 2019 Employee Stock Purchase Plan, (iv) approve, on an advisory basis, the compensation of the Company's named executive officers, and (v) approve, on an advisory basis, the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation, are considered "non-routine" matters, and brokers are not entitled to vote uninstructed shares with respect to these proposals. Only the proposals to (i) ratify the appointment of EisnerAmper LLP as the Company's independent registered public accounting firm and (ii) approve an amendment to the Company's Articles of Incorporation, as amended, to increase the Company's authorized shares of common stock from 15,000,000 to 150,000,000 are routine matters that brokers are entitled to vote shares without receiving instructions.

Determination of whether a matter specified in the Notice of Annual Meeting of Shareholders has been approved will be determined as follows:

- Those persons will be elected directors who receive a plurality of the votes cast at the Meeting in person or by proxy and entitled to vote on the election. Accordingly, abstentions or directions to withhold authority will have no effect on the outcome of the vote; and
- For each other matter specified in the Notice of Annual Meeting of Shareholders, the affirmative vote of a majority of the shares of common stock cast at the meeting in person or by proxy on such matter is required for approval. Abstentions and broker non-votes will be considered present but will not be counted as votes cast and, therefore, will have no effect on the outcome of the matter.

Directions to withhold authority to vote for directors, abstentions and broker non-votes will be counted for purposes of determining whether a quorum is present for the Annual Meeting.

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why am I receiving these materials?

We have sent you these proxy materials because the Board of **Tonix Pharmaceuticals Holding Corp.** (sometimes referred to as the “**Company**,” “**Tonix**,” “**we**” or “**us**”) is soliciting your proxy to vote at the 2018 Annual Meeting of Shareholders. According to our records, you were a shareholder of the Company as of the end of business on March 7, 2019.

You are invited to attend the Annual Meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card.

The Company intends to mail these proxy materials on or about March 18, 2019 to all shareholders of record on the Record Date entitled to vote at the Annual Meeting.

What is included in these materials?

These materials include:

- this proxy statement for the Annual Meeting; and
- the Company’s annual report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 18, 2019.

What is the proxy card?

The proxy card enables you to appoint Seth Lederman, our Chief Executive Officer, and Bradley Saenger, our Chief Financial Officer, as your representative at the Annual Meeting. By completing and returning a proxy card, you are authorizing these individuals to vote your shares at the Annual Meeting in accordance with your instructions on the proxy card. This way, your shares will be voted whether or not you attend the Annual Meeting.

When and where is the 2019 Annual Meeting being held?

The 2019 Annual Meeting will be held on Friday, May 3, 2019 commencing at 10:00 a.m., local time, at the offices of Lowenstein Sandler LLP at 1251 Avenue of the Americas, 17th Floor, New York, New York 10020.

Can I view these proxy materials over the Internet?

Yes. The Notice of Meeting, this Proxy Statement and accompanying proxy card and our Annual Report on Form 10-K for the year ended December 31, 2018 are available at <http://viewproxy.com/tonixpharma/2019/>.

Who can vote at the Annual Meeting?

Only shareholders of record at the close of business on March 7, 2019 will be entitled to vote at the Annual Meeting. On this Record Date, there were 4,703,728 shares of common stock outstanding and entitled to vote.

The 2019 Annual Meeting will begin promptly at 10:00 a.m., local time. Check-in will begin one-half hour prior to the meeting. Please allow ample time for the check-in procedures.

Shareholder of Record: Shares Registered in Your Name

If on March 7, 2019 your shares were registered directly in your name with Tonix’s transfer agent, VStock Transfer, LLC, then you are a shareholder of record. As a shareholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return the enclosed proxy.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on March 7, 2019, your shares were held in an account at a brokerage firm, bank, dealer, or other similar organization, rather than in your name, then you are the beneficial owner of shares held in “street name” and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the shareholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the 2019 Annual Meeting. However, since you are not the shareholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

The following matters are scheduled for a vote:

1. To elect the eight director nominees named in the Proxy Statement to hold office until the next annual meeting of shareholders;
2. To ratify the appointment of EisnerAmper LLP as the Company’s independent registered public accounting firm for the fiscal year ending December 31, 2019;
3. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan;
4. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan; and
5. To approve an amendment to the Company’s Articles of Incorporation, as amended, to increase the Company’s authorized shares of common stock from 15,000,000 to 150,000,000;
6. To approve, on an advisory basis, the compensation of the Company’s named executive officers;
7. To approve, on an advisory basis, the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation; and
8. To act on such other matters as may properly come before the meeting or any adjournment there.

The Board is not currently aware of any other business that will be brought before the 2019 Annual Meeting.

How do I vote?

You may vote “**For**” all the nominees to the Board, you may “**Withhold**” your vote for all nominees or you may vote “**For**” all nominees except for any nominee(s) you specify. For the other matters to be voted on, you may vote “**For**” or “**Against**” or abstain from voting. The procedures for voting are fairly simple:

Shareholder of Record: Shares Registered in Your Name

If you are a shareholder of record as of the Record Date, you may vote in person at the 2019 Annual Meeting or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person even if you have already voted by proxy.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive. You should be prepared to present photo identification for admittance. A list of shareholders eligible to vote at the Annual Meeting will be available for inspection at the 2019 Annual Meeting and for a period of ten days prior to the Annual Meeting during regular business hours at our principal executive offices, which are located at 509 Madison Avenue, Suite 1608, New York, New York 10022.

- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your completed and signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received voting instructions with these proxy materials from that organization rather than from us. Simply complete and mail your voting instructions as directed by your broker or bank to ensure that your vote is counted. Alternatively, you may be able to vote by telephone or over the Internet by following instructions provided by your broker or bank. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank, or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of the Record Date.

What is a quorum for purposes of conducting the 2019 Annual Meeting?

The presence, in person or by proxy, of the holders of one-third (1/3rd) of the issued and outstanding common stock, or 1,567,910 shares, entitled to vote at the meeting is necessary to constitute a quorum to transact business. If a quorum is not present or represented at the Annual Meeting, the shareholders entitled to vote thereat, present in person or by proxy, may adjourn the Annual Meeting from time to time without notice or other announcement until a quorum is present or represented.

What if I return a proxy card but do not make specific choices?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted “**FOR**” the election of each of the eight (8) nominees for director, “**FOR**” the ratification of EisnerAmper LLP as independent registered public accountants of the Company for its fiscal year ending December 31, 2019, “**FOR**” approval of the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan; “**FOR**” approval of the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan; “**FOR**” approval of an amendment to the Company’s Articles of Incorporation, as amended, to increase the number of shares authorized from 15,000,000 to 150,000,000, “**FOR**”, on an advisory basis, approval of the executive compensation of the Company’s named executive officers, to conduct an advisory vote on the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation every “**THREE YEARS**”, and “**FOR**” approval of any adjournment of the 2019 Annual Meeting, if necessary or appropriate, to transact such other business as may properly come before the meeting and all adjournments and postponements thereof; and if any other matter is properly presented at the meeting, your proxy holder (one of the individuals named on your proxy card) will vote your shares using his best judgment.

How does the Board recommend that I vote?

Our Board recommends that you vote your shares “**FOR**” the election of each of the eight (8) nominees for director, “**FOR**” the ratification of EisnerAmper LLP as independent registered public accountants of the Company for its fiscal year ending December 31, 2019, “**FOR**” approval of the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan; “**FOR**” approval of the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan; “**FOR**” approval of an amendment to the Company’s Articles of Incorporation, as amended, to increase the number of shares authorized and outstanding from 15,000,000 to 150,000,000; “**FOR**”, on an advisory basis, approval of the executive compensation of the Company’s named executive officers; and to conduct an advisory vote on the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation every “**THREE YEARS**”. Unless you provide other instructions on your proxy card, the persons named as proxy holders on the proxy card will vote in accordance with the recommendations of the Board as set forth in this Proxy Statement.

Who is paying for this proxy solicitation?

We will bear the cost of solicitation of proxies. Proxies may be solicited by mail or personally by our directors, officers or employees, none of whom will receive additional compensation for such solicitation. Those holding shares as of record for the benefit of others, or nominee holders, are being asked to distribute proxy soliciting materials to, and request voting instructions from, the beneficial owners of such shares. We will reimburse nominee holders for their reasonable out-of-pocket expenses.

What does it mean if I receive more than one set of proxy materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or in different accounts. Please complete, sign and return **each** proxy card to ensure that all of your shares are voted.

I share the same address with another Tonix Pharmaceuticals Holding Corp. shareholder. Why has our household only received one set of proxy materials?

The SEC's rules permit us to deliver a single set of proxy materials to one address shared by two or more of our shareholders. This practice, known as "householding," is intended to reduce the Company's printing and postage costs. We have delivered only one set of proxy materials to shareholders who hold their shares through a bank, broker or other holder of record and share a single address, unless we received contrary instructions from any shareholder at that address. However, any such street name holder residing at the same address who wishes to receive a separate copy of the proxy materials may make such a request by contacting the bank, broker or other holder of record, or Broadridge Financial Solutions, Inc. at (800) 542-1061 or in writing at Broadridge, Householding Department, 51 Mercedes Way, Edgewood, NY 11717. Street name holders residing at the same address who would like to request householding of Company materials may do so by contacting the bank, broker or other holder of record or Broadridge at the phone number or address listed above.

Can I change my vote after submitting my proxy?

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of three ways:

- You may submit another properly completed proxy card with a later date;
- You may send a timely written notice that you are revoking your proxy to the Company at 509 Madison Avenue, Suite 1608, New York, New York 10022, Attn: Chief Financial Officer; or
- You may attend the Annual Meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

What are "broker non-votes"?

Broker non-votes occur when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed "non-routine." Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange, "non-routine" matters include director elections (whether contested or uncontested) and matters involving a contest or a matter that may substantially affect the rights or privileges of shareholders.

In connection with the treatment of abstentions and broker non-votes, the proposals at this meeting to (i) elect directors, (ii) approve the 2019 Stock Incentive Plan, (iii) approval of the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan, (iv) approve, on an advisory basis, the compensation of the Company's named executive officers, and (v) approve, on an advisory basis, the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation are considered "non-routine" matters, and brokers are not entitled to vote uninstructed shares with respect to these proposals. The proposals (i) to ratify the appointment of EisnerAmper LLP as the Company's independent registered public accounting firm and (ii) approve an amendment to the Company's Articles of Incorporation, as amended, to increase the Company's authorized shares of common stock from 15,000,000 to 150,000,000 are routine matters that brokers are entitled to vote shares without receiving instructions.

Our election of directors (Proposal No. 1), approval of the 2019 Stock Incentive Plan (Proposal No. 3), approval of the 2019 Employee Stock Purchase Plan (Proposal No. 4), approval, on an advisory basis, of the compensation of the Company's named executive officers, (Proposal No. 6) and approval, on an advisory basis, of the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation (Proposal No. 7) are considered to be "non-routine" matters and as a result, brokers or nominees cannot vote your shares on these proposals in the absence of your direction.

How are votes counted?

Votes will be counted by the inspector of elections appointed for the meeting, who will separately count "For," "Withhold" and "Against" votes, abstentions and broker non-votes. Abstentions and broker non-votes will not be counted as votes with respect to any matter, but may have the effect of a vote against certain matters to come before the meeting, as described elsewhere in this Proxy.

How many votes are needed to approve each proposal?

For the election of directors, the eight (8) nominees receiving the most "For" votes at the meeting in person or by proxy will be elected. Approval of all other matters requires the affirmative vote of a majority of the votes cast on the applicable matter at the Annual Meeting in person or by proxy.

Is my vote kept confidential?

Proxy instructions, ballots and voting tabulations that identify individual shareholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within the Company or to third parties, except:

- as necessary to meet applicable legal requirements;
- to allow for the tabulation and certification of votes; and
- to facilitate a successful proxy solicitation.

Occasionally, shareholders provide written comments on their proxy cards, which may be forwarded to the Company's management and the Board.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be discussed in a Form 8-K filed after the Annual Meeting.

Who can help answer my questions?

If you need assistance with voting or have questions regarding the Annual Meeting, please contact:

Alliance Advisors, LLC
200 Broadacres Drive, 3rd Floor
Bloomfield, NJ 07003
888-991-1293

PROPOSAL NO. 1: ELECTION OF DIRECTORS

Information about the Nominees

At the Annual Meeting, the shareholders will elect eight directors to serve until the next annual meeting of Shareholders or until their respective successors are elected and qualified. In the event any nominee is unable or unwilling to serve as a director at the time of the Annual Meeting, the proxies may be voted for the balance of those nominees named and for any substitute nominee designated by the present Board or the proxy holders to fill such vacancy, or for the balance of the nominees named without nomination of a substitute, or the size of the Board may be reduced in accordance with the Bylaws of the Company. The Board has no reason to believe that any of the persons named below will be unable or unwilling to serve as a nominee or as a director if elected.

Assuming a quorum is present, the eight nominees receiving the highest number of affirmative votes of shares entitled to be voted for them will be elected as directors of the Company for the ensuing year. Unless marked otherwise, proxies received will be voted "FOR" the election of each of the eight nominees named below. In the event that additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them in such a manner as will ensure the election of as many of the nominees listed below as possible, and, in such event, the specific nominees to be voted for will be determined by the proxy holders. All of the director nominees currently serve as directors.

NAME	AGE	CURRENT POSITION
Seth Lederman	61	President, CEO and Chairman of the Board of Directors
Margaret Smith Bell	59	Director
Patrick Grace	63	Director
David Grange	71	Director
Donald W. Landry	64	Director
Adeoye Olukotun	74	Director
John Rhodes	62	Lead Director
James Treco	63	Director

The following information with respect to the principal occupation or employment of each nominee for director, the principal business of the corporation or other organization in which such occupation or employment is carried on, and such nominee's business experience during the past five years, as well as the specific experiences, qualifications, attributes and skills that have led the Board to determine that such Board members should serve on our Board, has been furnished to the Company by the respective director nominees:

Seth Lederman, MD became our President, Chief Executive Officer, Chairman of the Board and a Director in October 2011. Dr. Lederman founded Tonix Pharmaceuticals, Inc., a wholly-owned subsidiary of the Company ("Tonix Sub") in 2007 and has acted as its Chairman of the Board of Directors since its inception and as President since 2010. Dr. Lederman is an inventor on key patents and patent applications underlying our programs including: TNX-102 SL's eutectic composition; Tonmya's pharmacokinetic profile and related therapeutic properties, and Tonmya for posttraumatic stress disorder (PTSD). Dr. Lederman served as an Associate Professor at Columbia University, between 1996 and 2017. As an Assistant Professor at Columbia, Dr. Lederman discovered and characterized the CD40-ligand and invented therapeutic candidates to treat autoimmune diseases and transplant rejection. Dr. Lederman has been a Manager of L&L Technologies LLC, or L&L, since 1996. In addition, Dr. Lederman has been the Managing Member of Seth Lederman Co, LLC since 2007 and the Managing Member of Lederman & Co, LLC, or Lederman & Co, since 2002, both of which are biopharmaceutical consulting and investing companies. Dr. Lederman has also been the Managing Member of Targent Pharmaceuticals, LLC, or Targent, since 2000, and Managing Member of Plumblin LLC since 2002. Targent was a founder of Targent Pharmaceuticals Inc. on which Board of Directors Dr. Lederman served from inception in 2001 until the sale of its assets to Spectrum Pharmaceuticals Inc. in 2006. Between January 2007 and November 2008, Dr. Lederman was a Managing Partner of Konanda Pharma Partners, LLC, a Director of Konanda Pharma Fund I, LP, and a Managing Partner of Konanda General Partner, LLC, which were related private growth equity fund entities. As well, between 2007 and 2008, Dr. Lederman was Chairman of Validus Pharmaceuticals, Inc. and Fontus Pharmaceuticals, Inc., which were portfolio companies of the Konanda private growth equity funds. Since 2011, Dr. Lederman has served as CEO and Chairman of Leder Laboratories Inc., or Leder Labs, and Starling Pharmaceuticals Inc., or Starling, which are biopharmaceutical development companies. Dr. Lederman was the chairman of Leder Laboratories, Ltd., a wholly-owned subsidiary of Leder Laboratories Inc., between 2013 and 2018, when the entity was dissolved. In 2015, Dr. Lederman served as a member of the US – Japan Business Council. Between 2006 and 2011, Dr. Lederman was a director of Research Corporation, a New York-based non-profit organization. Dr. Lederman received his BA degree in Chemistry from Princeton University in 1979 and his MD from Columbia University in 1983. Dr. Lederman's significant experience with our patent portfolio and his experience as an entrepreneur, seed capital investor, fund manager, and director of start-up biopharmaceutical companies were instrumental in his selection as a member of the Board.

Margaret Smith Bell became a Director in September 2017. Ms. Bell has been retired for the last ten years. Previously, Ms. Bell was a Vice President at Standard Life Investments where she was a portfolio manager and health care equity analyst. Ms. Bell was also a Managing Director at Putnam Investments, and served as a senior health care analyst and a portfolio manager of the Putnam Health Sciences Trust. Ms. Bell was an analyst and vice president at State Street Research and a research analyst at Alex. Brown & Sons, Inc. Ms. Bell is a past member of the Board of Overseers at Beth Israel Deaconess Medical Center. Ms. Bell holds a B.A. from Wesleyan University and an M.B.A. from the Wharton School at the University of Pennsylvania. Ms. Bell's extensive healthcare and investment banking experience were instrumental in her selection as a member of the Board.

Patrick Grace became a Director in October 2011. Between June 2007 and October 2011, Mr. Grace served as a director of Tonix Sub. Since January 2017, Mr. Grace has been the President and CEO of Grace Institute Foundation. From 1996 to September 2016, he served as Chairman of the Grace Institute, New York, New York (workforce development for women). Mr. Grace was the co-founder of and served as the Managing Partner of Apollo Philanthropy Partners, L.L.C. from October 2008 until October 2012. He was President of MLP Capital, Inc., an investment holding company, from 1996 to 2016. Mr. Grace served in various senior management roles with W. R. Grace & Co. from 1977 to 1995, and was last President and CEO of Grace Logistics Services, Inc. From January 2000 to August 2002, Mr. Grace was also President and Chief Executive Officer of Kingdom Group, LLC ("Kingdom"), a provider of turnkey compressed natural gas fueling systems, and he was Executive Vice President of Kingdom from August 1999 to December 2000. Since 1996, he has been a director of Chemed Corporation. Mr. Grace was a liberal arts major at the University of Notre Dame and earned a MBA in finance from Columbia University. Mr. Grace's extensive executive experience, along with his membership on the board of directors of a public company, was instrumental in his selection as a member of our Board.

General David Grange (retired) became a director in February 2018. Gen. Grange has been Chief Executive Officer of Pharm-Olam International, Ltd. ("Pharm-Olam"), a contract research organization, since April 2017. Prior to joining Pharm-Olam, Gen. Grange was President and founder of Osprey Global Solutions, LLC ("OGS"), a Service Disabled Veterans Organization, from 2009 to 2017. Prior to founding OGS, Gen. Grange held various positions with Pharmaceutical Product Development, Inc. (PPDI), a contract research organization, from 2003 to 2009, including as a member of the Board of Directors and Chief Executive Officer. Prior to PPDI he served in the McCormick Tribune Foundation for 10 years most recently as Chief Executive Officer and President, where he also oversaw the support of Veteran Programs. Gen. Grange served 30 years in the U.S. Army as a Ranger, Green Beret, Aviator, Infantryman and a member of special operating units. At the Pentagon, he was Director of Army Current Operations, Readiness, and Mobilization. Gen. Grange commanded the Ranger Regiment and the First Infantry Division (the Big Red One). Gen. Grange holds a master's degree in Public Service from Western Kentucky University. Gen. Grange's extensive experience in the pharmaceutical industry and service with the U.S. military was instrumental in his selection as a member of our Board.

Donald W. Landry, MD, PhD became a Director in October 2011. Between June 2007 and October 2011, Dr. Landry served as a director of Tonix Sub. Dr. Landry has been a member of the faculty of Columbia University since 1985 and has served as the Samuel Bard Professor of Medicine, Chair of the Department of Medicine and Physician-in-Chief at New York Presbyterian Hospital/Columbia University Medical Center since 2008. Since November 2015, he has been a director of Sensient Technologies Corp. Dr. Landry was a co-founder and has been a member of L&L since 1996. Dr. Landry received his BS degree in Chemistry from Lafayette College in 1975, his PhD in Organic Chemistry from Harvard University in 1979 and his M.D. from Columbia University in 1983. Dr. Landry has been a New York State licensed physician since 1985. In 2008, Dr. Landry was awarded the Presidential Citizens Medal, the second-highest award that the President can confer upon a civilian. Dr. Landry's significant medical and scientific background was instrumental in his selection as a member of the Board.

Adeoye Olukotun, MD became a Director in September 2018. Dr. Olukotun has been the Chief Executive Officer of CR Strategies, LLC, a medical products consulting company, since 2000, and was the Chief Executive Officer of EpiGen Pharmaceuticals, Inc., a pharmaceutical company, from 2014 to January of 2018. Dr. Olukotun served as Vice Chairman of CardioVax, Inc., a pharmaceutical company, from 2012 to 2016, and as its Chief Executive Officer from 2006 to 2012. He is also co-founder of VIA Pharmaceuticals, Inc., a pharmaceutical company, and served as the company's Chief Medical Officer from 2004 to 2008. Dr. Olukotun's significant executive leadership experience was instrumental in his selection as a member of our Board.

John Rhodes became a Director in October 2011 and Lead Director in February 2014. Mr. Rhodes has served as Chair of the New York State Public Service Commission and Chief Executive Officer of the Department of Public Services since June 2017. Mr. Rhodes served as President and CEO of the New York State Energy Research and Development Authority between September 2013 and June 2017. Between October 2010 and October 2011, Mr. Rhodes served as a director of Tonix Sub. Between 2005 and 2013, Mr. Rhodes was a director of Dewey Electronics Company, a manufacturer of electronic and electromechanical systems for the military and commercial markets. Between January 2013 and September 2013, he served as director of the Center for Market Innovation at Natural Resources Defense Council. Between April 2007 and June 2010, Mr. Rhodes was a Senior Advisor to Good Energies, Inc., a renewable energy company. Mr. Rhodes is a former Vice President of Booz Allen Hamilton, Inc. Mr. Rhodes is a graduate of Princeton University and the Yale School of Management. Mr. Rhodes' extensive business and consulting experience, along with his membership on the board of directors of a public company was instrumental in his selection as a member of our Board.

James Treco became a director in February 2019. Mr. Treco has been a Managing Partner at First Chicago Advisors, Inc., a boutique financial advisory firm where he advises executives and boards of directors of a wide range of companies, from global, large-cap companies to emerging companies, from 2009 to 2012 and from 2014 to the present. From 2012 to 2013 Mr. Treco was an investment banker with Gleacher & Company, a company that previously operated an investment banking business, providing corporate and institutional clients with strategic and financial advisory services. Mr. Treco held various positions of increasing responsibility at Salomon Brothers/Citigroup from 1984 to 2008, where he used his extensive experience in the global capital markets to advise a wide range of clients. Mr. Treco holds a B.A. from Yale University and an M.B.A. from the Stanford University Graduate School of Business. Mr. Treco's extensive healthcare and investment banking experience were instrumental in his selection as a member of the Board.

Directors serve until the next annual meeting of shareholders or until their successors are elected and qualified. Officers serve at the discretion of the Board.

Board Independence

The Board has determined that (i) Seth Lederman, has a relationship which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and is not an "independent director" as defined in the Marketplace Rules of The NASDAQ Stock Market and (ii) Margaret Smith Bell, Patrick Grace, David Grange, Donald Landry, Adeoye Olukotun, John Rhodes and James Treco are each an independent director as defined in the Marketplace Rules of The NASDAQ Stock Market.

Board Leadership Structure

Our CEO also serves as the chairman of the Board. An independent director serves as the Board's lead director. This structure allows one person to speak for and lead both the Company and the Board, while also providing for effective independent board oversight through an independent lead director. Having Dr. Lederman, our CEO, serve as Chairman creates clear and unambiguous authority, which is essential to effective management. Our Board and management can respond more effectively to a clearer line of authority. By designating our CEO as its Chairman, our Board also sends an important signal to our employees and shareholders about who is accountable. Further, since Dr. Lederman is the founder of our Company and is an inventor on key patents and patent applications underlying our programs, we believe that Dr. Lederman is best-positioned to set our Board's agenda and provide leadership.

We have established the position of lead director, which is filled by Mr. Rhodes. The lead director has the following responsibilities, as detailed in the Lead Director charter, adopted by the Board (and also performs any other functions the Board may request):

- **Board leadership** — provides leadership to the Board in any situation where the chairman’s role may be, or may be perceived to be, in conflict, and also chairs meetings when the chairman is absent;
- **Leadership of independent director meetings** — leads independent director meetings, which take place without any management directors or Tonix employees present;
- **Additional meetings** — calls additional independent director meetings as needed;
- **Chairman-independent director liaison** — regularly meets with the chairman and serves as liaison between the chairman and the independent directors;
- **Stockholder communications** — makes himself available for direct communication with our stockholders;
- **Board agenda, schedule & information** — works with the chairman regarding meeting agendas, meeting schedules and information sent to directors for Board meetings, including the quality, quantity, appropriateness and timeliness of such information; and
- **Advisors and consultants** — recommends to the Board the retention of outside advisors and consultants who report directly to the Board on Board-wide issues.

Board Role in Risk Oversight

Risk is an integral part of the Board and Board committee deliberations throughout the year. While the Board has the ultimate oversight responsibility for the risk management process, various committees of the Board also have responsibility for risk management. In particular, the Audit Committee focuses on financial risk, including internal controls, and receives financial risk assessment reports from management. Risks related to the compensation programs are reviewed by the Compensation Committee. The Board is advised by these committees of significant risks and management’s response through periodic updates.

Stockholder Communications with the Board

The Company’s stockholders may communicate with the Board, including non-executive directors or officers, by sending written communications addressed to such person or persons in care of Tonix Pharmaceuticals Holding Corp., Attention: Secretary, 509 Madison Avenue, Suite 1608, New York, New York 10022. All communications will be compiled by the Secretary and submitted to the addressee. If the Board modifies this process, the revised process will be posted on the Company’s website.

Meetings and Committees of the Board

During the fiscal year ended December 31, 2018, the Board held five meetings, the Audit Committee held six meetings, the Compensation Committee held six meetings and the Nominating and Corporate Governance Committee held five meetings. The Board and Board committees also approved certain actions by unanimous written consent.

Each of the directors attended at least 75% of the aggregate of the total number of meetings of our Board (held during the period for which such directors served on the Board). Each of the directors attended at least 75% of the total number of meetings of all committees of our Board on which the director served (during the periods for which the director served on such committee or committees). Dr. Lederman was the only member of the Board who attended last year’s annual meeting of stockholders. The Company does not have a formal policy requiring members of the Board to attend our annual meetings.

Board Committees

The Board has standing Audit, Compensation, and Nominating and Corporate Governance Committees. Information concerning the membership and function of each committee is as follows:

Board Committee Membership

Name	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
Seth Lederman			
Margaret Smith Bell		**	
Patrick Grace	**		*
David Grange		*	*
Donald W. Landry			
Adeoye Olukotun		*	
John Rhodes	*		**
James Treco	*		*

* Member of Committee

** Chairman of Committee

Audit Committee

Our Audit Committee consists of Patrick Grace, John Rhodes and James Treco, with Mr. Grace elected as Chairman of the Committee. Our Board has determined that each of Messrs. Grace, Rhodes and Treco are “independent” as that term is defined under applicable SEC rules and under the current listing standards of the NASDAQ Stock Market. Mr. Grace is our audit committee financial expert.

Our Audit Committee’s responsibilities include: (i) reviewing the independence, qualifications, services, fees, and performance of the independent auditors, (ii) appointing, replacing and discharging the independent auditor, (iii) pre-approving the professional services provided by the independent auditor, (iv) reviewing the scope of the annual audit and reports and recommendations submitted by the independent auditor, and (v) reviewing our financial reporting and accounting policies, including any significant changes, with management and the independent auditor. The Audit Committee reviewed and discussed with management the Company’s audited financial statements for the year ended December 31, 2018. Our Board has adopted a written charter for the Audit Committee, a copy of which is posted under the “Investors” tab under “Governance” on our website, which is located at www.tonixpharma.com.

Compensation Committee

Our Compensation Committee consists of Margaret Smith Bell, Adeoye Olukotun, and David Grange, with Ms. Bell elected as Chairman of the Committee. Our Board has determined that all of the members are “independent” under the current listing standards of the NASDAQ Stock Market. Our Board has adopted a written charter setting forth the authority and responsibilities of the Compensation Committee.

Our Compensation Committee has responsibility for, among other things, evaluating and making decisions regarding the compensation of our executive officers, assuring that the executive officers are compensated effectively in a manner consistent with our stated compensation strategy, producing an annual report on executive compensation in accordance with the rules and regulations promulgated by the SEC and periodically evaluating and administering the terms and administration of our incentive plans and benefit programs. In addition, our Compensation Committee reviews and makes recommendations to the Board regarding incentive compensation plans that require shareholder approval, director compensation, the Company’s compensation discussion and analysis (“CD&A”) and the related executive compensation information for inclusion in the Company’s 10-K and proxy statement, and employment and severance agreements relating to the chief executive officer. Our Board has adopted a written charter for the Compensation Committee, a copy of which is posted under the “Investors” tab under “Governance” on our website, which is located at www.tonixpharma.com.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee consists of Patrick Grace, David Grange and John Rhodes, with Mr. Rhodes elected as Chairman of the Committee. The Board has determined that all of the members are “independent” under the current listing standards of the NASDAQ Stock Market.

Our Nominating and Corporate Governance Committee has responsibility for assisting the Board in, among other things, effecting the organization, membership and function of the Board and its committees. The Nominating and Corporate Governance Committee shall identify and evaluate the qualifications of all candidates for nomination for election as directors. In addition, the Nominating and Corporate Governance Committee is responsible for developing, recommending and evaluating corporate governance standards and a code of business conduct and ethics. Our Board has adopted a written charter for the Nominating and Corporate Governance Committee, copy of which is posted under the “Investors” tab under “Governance” on our website, which is located at www.tonixpharma.com.

Nomination of Directors

As provided in its charter and our Company’s corporate governance principles, the Nominating and Corporate Governance Committee is responsible for identifying individuals qualified to become directors. The Nominating and Corporate Governance Committee seeks to identify director candidates based on input provided by a number of sources, including (1) the Nominating and Corporate Governance Committee members, (2) our other directors, (3) our shareholders, (4) our Chief Executive Officer or Chairman, and (5) third parties such as professional search firms. In evaluating potential candidates for director, the Nominating and Corporate Governance Committee considers the entirety of each candidate’s credentials.

Qualifications for consideration as a director nominee may vary according to the particular areas of expertise being sought as a complement to the existing composition of the Board. However, at a minimum, candidates for director must possess:

- high personal and professional ethics and integrity;
- the ability to exercise sound judgment;
- the ability to make independent analytical inquiries;
- a willingness and ability to devote adequate time and resources to diligently perform Board and committee duties; and
- the appropriate and relevant business experience and acumen.

In addition to these minimum qualifications, the Nominating and Corporate Governance Committee also takes into account when considering whether to nominate a potential director candidate the following factors:

- whether the person possesses specific industry expertise and familiarity with general issues affecting our business;
- whether the person’s nomination and election would enable the Board to have a member that qualifies as an “audit committee financial expert” as such term is defined by the SEC in Item 401 of Regulation S-K;
- whether the person would qualify as an “independent” director under the listing standards of the Nasdaq Stock Market;

- the importance of continuity of the existing composition of the Board to provide long term stability and experienced oversight; and
- the importance of diversified Board membership, in terms of both the individuals involved and their various experiences and areas of expertise.

The Nominating and Corporate Governance Committee will consider director candidates recommended by shareholders provided such recommendations are submitted in accordance with the procedures set forth below. In order to provide for an orderly and informed review and selection process for director candidates, the Board has determined that shareholders who wish to recommend director candidates for consideration by the Nominating and Corporate Governance Committee must comply with the following:

- The recommendation must be made in writing to the Corporate Secretary at Tonix Pharmaceuticals Holding Corp.;
- The recommendation must include the candidate's name, home and business contact information, detailed biographical data and qualifications, information regarding any relationships between the candidate and the Company within the last three years and evidence of the recommending person's ownership of the Company's common stock;
- The recommendation shall also contain a statement from the recommending shareholder in support of the candidate; professional references, particularly within the context of those relevant to board membership, including issues of character, judgment, diversity, age, independence, expertise, corporate experience, length of service, other commitments and the like; and personal references; and
- A statement from the shareholder nominee indicating that such nominee wants to serve on the Board and could be considered "independent" under the Rules and Regulations of the Nasdaq Stock Market and the SEC, as in effect at that time.

All candidates submitted by shareholders will be evaluated by the Nominating and Corporate Governance Committee according to the criteria discussed above and in the same manner as all other director candidates.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors, executive officers and holders of more than 10% of our common stock to file with the SEC reports regarding their ownership and changes in ownership of our securities. Based solely upon a review of Forms 3, 4 and 5 furnished to the Company, the Company believes that all of its directors, officers and applicable shareholders timely filed these reports for fiscal year 2018.

The proxy holders intend to vote the shares represented by proxies for all of the Board's nominees, except to the extent authority to vote for the nominees is withheld.

The Board unanimously recommends a vote "FOR" each of its nominees

**PROPOSAL NO. 2: RATIFICATION OF APPOINTMENT OF OUR INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee has appointed the firm of EisnerAmper LLP as the independent registered public accounting firm of the Company for the year ending December 31, 2019, subject to ratification of the appointment by the Company's shareholders. A representative of EisnerAmper LLP is expected to attend the Annual Meeting to respond to appropriate questions and will have an opportunity to make a statement if he or she so desires.

Review of the Company's Audited Financial Statements for the Fiscal Year Ended December 31, 2018

The Audit Committee met and held discussions with management and the independent auditors. Management represented to the Audit Committee that the Company's consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States, and the Audit Committee reviewed and discussed the consolidated financial statements with management and the independent auditors. The Audit Committee also discussed with the independent auditors the matters required to be discussed by Statement on Auditing Standards No. 114 (Codification of Statements on Auditing Standards, AU 380), as amended.

In addition, the Audit Committee discussed with the independent auditors the auditors' independence from the Company and its management, and the independent auditors provided to the Audit Committee the written disclosures and letter required by the Independence Standards Board Standard No. 1 (Independence Discussions With Audit Committees).

The Audit Committee discussed with the Company's independent auditors the overall scope and plans for their respective audits. The Audit Committee met with the independent auditors, with and without management present, to discuss the results of their examinations and the overall quality of the Company's internal controls and financial reporting.

Based on the reviews and discussions referred to above, the Audit Committee approved the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, for filing with the SEC.

Fees Paid to Auditors

Audit Fees

The aggregate fees billed by our independent registered public accounting firm, for professional services rendered for the audit of our annual financial statements for the years ended December 31, 2018 and 2017, including review of our interim financial statements as well as registration statement filings with the SEC and comfort letters issued to underwriters were \$424,380 and \$386,790, respectively.

Audit-Related Fees

We did not incur fees to our independent registered public accounting firm for audit related fees during the fiscal years ended December 31, 2018 and 2017.

Tax and Other Fees

We incurred fees to our independent registered public accounting firm for tax services during the fiscal years ended December 31, 2018 and 2017, of \$7,500 and \$12,000, respectively, related to a net operating loss study.

Pre-Approval Policies and Procedures

Consistent with SEC policies and guidelines regarding audit independence, the Audit Committee is responsible for the pre-approval of all audit and permissible non-audit services provided by our principal accountants on a case-by-case basis. Our Audit Committee has established a policy regarding approval of all audit and permissible non-audit services provided by our principal accountants. Our Audit Committee pre-approves these services by category and service. Our Audit Committee has pre-approved all of the services provided by our principal accountants.

**The Board unanimously recommends a vote "FOR" the appointment of EisnerAmper LLP
as the Company's independent registered public accounting firm for the year ending December 31, 2019**

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee of the Board of Tonix Pharmaceuticals Holding Corp. has furnished the following report on its activities during the fiscal year ended December 31, 2018. The report is not deemed to be “soliciting material” or “filed” with the SEC or subject to the SEC’s proxy rules or to the liabilities of Section 18 of the Exchange Act, and the report shall not be deemed to be incorporated by reference into any prior or subsequent filing under the Securities Act of 1933, as amended (the “Securities Act”), or the Exchange Act, except to the extent that Tonix Pharmaceuticals Holding Corp. specifically incorporates it by reference into any such filing.

The Audit Committee oversees the financial reporting process on behalf of the Board. Management has the primary responsibility for the financial reporting process, principles and internal controls as well as preparation of our financial statements. For the fiscal year ended December 31, 2018, the members of the Audit Committee were Mr. Grace (Committee Chair), Mr. Mather and Mr. Rhodes, each of whom is an independent director as defined by the applicable NASDAQ and SEC rules.

In fulfilling its responsibilities, the Audit Committee appointed independent auditors EisnerAmper LLP for the fiscal year ended December 31, 2018. The Audit Committee reviewed and discussed with the independent auditors the overall scope and specific plans for their audit. The Audit Committee also reviewed and discussed with the independent auditors and with management the Company’s audited financial statements and the adequacy of its internal controls. The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2018 with the Company’s management and EisnerAmper. The Audit Committee has also discussed with EisnerAmper the matters required to be discussed by Auditing Standard No. 1301, “Communications with Audit Committees” issued by the Public Company Accounting Oversight Board (“PCAOB 1301”).

The Audit Committee monitored the independence and performance of the independent auditors. The Audit Committee discussed with the independent auditors the matters required to be discussed by PCAOB 1301. The Company’s independent auditors have provided the Audit Committee with the written disclosures and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent auditors’ communications with the Audit Committee concerning independence, and the Audit Committee has discussed with the independent auditor the independent auditor’s independence. Based upon the review and discussions referred to above, the Audit Committee recommended to the Board that the audited financial statements be included in the Annual Report on Form 10-K for the fiscal year ended December 31, 2018, for filing with the SEC.

Mr. Patrick Grace, Committee Chair
Mr. John Rhodes
Mr. James Treco

PROPOSAL NO. 3: APPROVAL OF THE TONIX PHARMACEUTICALS HOLDING CORP. 2019 STOCK INCENTIVE PLAN

Overview

On February 26, 2019, the Board adopted, upon the recommendation of the Compensation Committee, the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan (the "2019 Plan"), subject to and effective upon shareholder approval at the annual meeting. We are asking our shareholders to approve the 2019 Plan in order to permit the Company to use the 2019 Plan to achieve the Company's performance, recruiting, retention and incentive goals.

The 2019 Plan includes a variety of forms of awards, including stock options, stock appreciation rights, restricted stock, restricted stock units, cash awards and dividend equivalents to allow the Company to adapt its incentive compensation program to meet the needs of the Company in the changing business environment in which the Company operates.

We strongly believe that the approval of the 2019 Plan is essential to our continued success. As a clinical-stage biopharmaceutical company with limited cash focused on funding our development programs, we believe that equity, in particular stock option awards, is an important and significant component of our employees' compensation. The Board and management further believe that equity awards motivate high levels of performance, align the interests of our employees and shareholders by giving directors, employees and consultants the perspective of an owner with an equity stake in the Company, and provide an effective means of recognizing their contributions to the success of the Company.

As of March 7, 2019, 5,096 shares were available for grant under our only active, outstanding equity compensation plan, our 2018 Stock Incentive Plan (the "2018 Plan"). No shares are available for grant under the 2017 Stock Incentive Plan, the 2016 Stock Incentive Plan, the 2014 Stock Incentive Plan and the 2012 Amended and Restated Incentive Stock Option Plan (together with the 2018 Plan, the "Prior Plans"). If our stockholders do not approve this proposal, we may be unable to use equity compensation to the extent needed to make our compensation packages competitive and to motivate our employees and we could be required to increase cash compensation to attract, retain and motivate our employees, which may compromise funding of our development programs. The Board and management believe that equity awards are necessary to remain competitive in our industry and are essential to recruiting and retaining the highly qualified employees who help the Company meet its goals. The Board and management believe that the ability to grant equity awards will be important to the future success of the Company and is in the best interests of the Company's shareholders.

Our gross average share usage rate, sometimes referred to as burn rate, over the three years ended December 31, 2018 (calculated as equity-based awards granted under our equity compensation plan for the relevant year, divided by weighted average basic common shares outstanding for that year) is approximately 5.5%. We expect that the proposed share reserve under the 2019 Plan will be sufficient for awards for two or more years. Expectations regarding future share usage could be impacted by a number of factors such as: hiring and promotion activity at the executive level; the rate at which shares are returned to the 2019 Plan reserve upon awards' expiration, forfeiture or cash settlement; the future performance of our stock price; and other factors. While we believe that the assumptions we used are reasonable, future share usage may differ from current expectations.

The potential dilution resulting from issuing all of the proposed 1,400,000 shares under the 2019 Plan, when combined with shares subject to outstanding awards under the Prior Plans as of March 7, 2019, and assuming basic common shares outstanding as of the record date, would be 22.9% on a fully-diluted basis.

If approved, the 2019 Plan will serve as the successor to our Prior Plans. Assuming shareholders approve the 2019 Plan, the 2019 Plan will be effective as the date of the annual meeting and the Prior Plans will terminate on that date (except with respect to awards previously granted under the Prior Plans that remain outstanding) and no further awards will be granted under the Prior Plans. If the 2019 Plan is not approved, we will continue to make grants under the Prior Plans until all shares available thereunder have been issued or the Prior Plans expire.

We are seeking stockholder approval of the 2019 Plan in order to satisfy certain legal requirements, including requirements of The NASDAQ Stock Market. In addition, the Board regards stockholder approval of the 2019 Plan as desirable and consistent with good corporate governance practices.

Best Practices

We have designed the 2019 Plan to include a number of provisions that we believe promote best practices by reinforcing the alignment between equity compensation arrangements for directors, employees and consultants and shareholders' interests. These provisions include, but are not limited to, the following:

<u>2019 Plan Provision</u>	<u>Description of Best Practice</u>
<ul style="list-style-type: none"> ● <i>No Liberal Share Recycling</i> 	<ul style="list-style-type: none"> ● Shares will not be recycled for issuance as awards under the 2019 Plan in the following circumstances: shares delivered as a result of the net settlement of an outstanding SAR or stock option; shares used to pay the exercise price or withholding taxes related to an outstanding award; or shares repurchased on the open market with the proceeds of a stock option exercise price.
<ul style="list-style-type: none"> ● <i>No Repricing without Shareholder Approval</i> 	<ul style="list-style-type: none"> ● Except in case of certain corporate events, the Company cannot reduce the exercise price of stock options and SARs or buyout for cash underwater options and SARs without the approval of its shareholders.
<ul style="list-style-type: none"> ● <i>No "liberal" Change of Control Definition; No Automatic Single Trigger Acceleration</i> 	<ul style="list-style-type: none"> ● The definition of change of control in the 2019 Plan is not "liberal" and, for example, would not occur merely upon shareholder approval of a transaction. A change of control must actually occur in order for the Change of Control provisions in the 2019 Plan to be triggered. In addition, the 2019 Plan does not provide for automatic "single-trigger" acceleration on a change of control transaction.
<ul style="list-style-type: none"> ● <i>Minimum Vesting Requirement Applicable to All Equity Awards</i> 	<ul style="list-style-type: none"> ● All equity awards will generally vest no earlier than one year from the date of grant (except with respect to a maximum of 5% of the shares under the 2019 Plan).
<ul style="list-style-type: none"> ● <i>Restrictions on Dividends and Dividend Equivalents</i> 	<ul style="list-style-type: none"> ● The 2019 Plan prohibits participants from receiving dividends or dividend equivalents before the underlying award vests and does not permit dividends or dividend equivalents to be paid on stock options or SARs.
<ul style="list-style-type: none"> ● <i>Limits on Individual Director Awards per Year</i> 	<ul style="list-style-type: none"> ● \$350,000 in total value, either in cash, shares of stock or a combination of cash and stock, provided, however, that in extraordinary circumstances, that limit can be increased to \$500,000.
<ul style="list-style-type: none"> ● <i>Clawback Provision</i> 	<ul style="list-style-type: none"> ● Includes language subjecting awards to recovery pursuant to any law, government regulation, stock exchange listing requirement including the SEC clawback rules or Company policy.

Burn Rate Table

The following table sets forth information relating to stock options and full value awards granted in 2018, 2017 and 2016:

<u>Fiscal Year</u>	<u>Stock Options Granted</u>	<u>Full Value Awards Granted</u>	<u>Weighted-Average Common Shares Outstanding</u>
2018	101,968	0	1,094,867
2017	26,000	0	666,509
2016	6,980	1,125	252,102

Overhang Information

The following table sets forth certain information as of the Record Date and March 13, 2019, unless otherwise noted, with respect to the Company's existing equity compensation plans.

	As of March 7, 2019	As of March 13, 2019
Number of shares no longer available for issuance under the 2018 Plan if stockholders approve the 2019 Plan	5,096	5,096
Proposed number of shares under the 2019 Plan	1,400,000	1,400,000
Stock options outstanding	250,545	250,545
Weighted-average exercise price of outstanding stock options	\$ 79.26	\$ 79.26
Weighted-average remaining term of outstanding stock options	8.80 years	8.79 years
Total full value awards outstanding	0	0
Number of warrants outstanding	4,984,846	4,964,846
Preferred stock outstanding ¹	4,781	0
Basic common shares outstanding	4,703,728	6,089,728

¹ Consists of shares of the Company's Series A Preferred Stock, which ranks on parity to the Company's common stock with respect to dividend and liquidation rights and is convertible into common stock at any time at the option of the holder into an aggregate of 1,366,000 shares of common stock.

Summary of the 2019 Plan

The following is a description of the principal terms of the 2019 Plan. The summary is qualified in its entirety by the full text of the 2019 Plan, which is attached as Appendix A to this Proxy Statement.

General. The 2019 Plan would authorize the grant to eligible individuals of (1) stock options (incentive and nonstatutory), (2) restricted stock, (3) stock appreciation rights, or SARs, (4) restricted stock units, (5) other stock-based awards, and (6) cash-based awards.

Stock Subject to the 2019 Plan. Subject to adjustments for certain corporate events, the maximum number of shares of our common stock that may be issued under the 2019 Plan is 1,400,000 shares, which amount will be (a) reduced by awards granted under the Prior Plans after March 1, 2019, and (b) increased to the extent that awards granted under the 2019 Plan or the Prior Plans are forfeited, expire, are cancelled, or are settled for cash (except as otherwise provided in the 2019 Plan). In terms of calculating how many shares are reduced or increased based on activity under the Prior Plans after March 1, 2019, the calculation shall be based on one share for every one share that was subject to an option or SAR and 1.34 shares for every one share that was subject to an award other than an option or SAR.

Substitute awards (awards made or shares issued by the Company in assumption of, or in substitution or exchange for, awards previously granted, or the right or obligation to make future awards, in each case by a company acquired by the Company or any Company subsidiary or with which the Company or any subsidiary combines) will not reduce the shares authorized for grant under the 2019 Plan, nor will shares subject to a substitute award be added to the shares available for issuance or transfer under the 2019 Plan.

No Liberal Share Recycling. Notwithstanding anything to the contrary, any and all stock that is (i) withheld or tendered in payment of an option exercise price; (ii) withheld by the Company or tendered by the grantee to satisfy any tax withholding obligation with respect to any award; (iii) covered by a SAR that it is settled in stock, without regard to the number of shares of stock that are actually issued to the grantee upon exercise; or (iv) reacquired by the Company on the open market or otherwise using cash proceeds from the exercise of options, shall not be added to the maximum number of shares of stock that may be issued under the Plan.

Limits on Director Awards. The maximum number of shares of stock subject to awards granted during a single fiscal year to any non-employee director, taken together with any cash fees paid to such non-employee director during the fiscal year, shall not exceed \$350,000 in total value (calculating the value of any such awards based on the grant date fair value of such awards for financial reporting purposes); provided, that the Board may make exceptions to this limit for individual non-employee directors in extraordinary circumstances as the Board may determine in its sole discretion, so long as the aggregate limit does not exceed \$500,000 in total value during a fiscal year.

Eligibility. Employees of, and consultants to, our Company or its subsidiaries and members of our Board are eligible to receive equity awards under the Plan. Only our employees, and employees of our subsidiary corporations, if any, are eligible to receive Incentive Stock Options. Employees, directors (including non-employee directors) and consultants of or for our Company and its subsidiaries are eligible to receive Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units and any other form of award the Plan authorizes. As of March 1, 2019, 12 employees, approximately 90 consultants and seven non-employee directors of the Company and its subsidiaries were eligible to receive awards under the 2018 Plan. During the fiscal year ended December 31, 2018, 14 employees and nine current and former non-executive directors received awards under our 2018 Plan.

Purpose. The purpose of the Plan is to promote the interests of the Company and its stockholders by providing executive officers, employees, non-employee directors, and key advisors of the Company and its defined subsidiaries with appropriate incentives and rewards to encourage them to enter into and remain in their positions with the Company and to acquire a proprietary interest in the long-term success of the Company, as well as to reward the performance of these individuals in fulfilling their personal responsibilities for long-range and annual achievements.

Administration. Unless otherwise determined by the Board, the Compensation Committee administers the 2019 Plan. The Compensation Committee is composed solely of “non-employee directors” within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and “independent directors” within the meaning of NASDAQ listing standards. The Compensation Committee has the power, in its discretion, to grant awards under the 2019 Plan, to select the individuals to whom awards are granted, to determine the terms of the grants, to interpret the provisions of the 2019 Plan and to otherwise administer the 2019 Plan. Except as prohibited by applicable law or stock exchange rules, the Compensation Committee may delegate all or any of its responsibilities and powers under the 2019 Plan to one or more of its members, including, without limitation, the power to designate participants and determine the amount, timing and term of awards under the 2019 Plan.

The 2019 Plan provides that members of the Compensation Committee shall be indemnified and held harmless by the Company from any loss, cost, liability or expense resulting from claims, actions, suits, or proceedings arising from actions related to the 2019 Plan.

Term. If approved, the 2019 Plan is effective May 3, 2019 and awards may be granted through May 3, 2029. No awards may be granted under the 2019 Plan subsequent to that date. The Board may suspend or terminate the 2019 Plan without stockholder approval or ratification at any time or from time to time.

Amendments. Subject to the terms of the 2019 Plan, the Compensation Committee as administrator has the sole discretion to interpret the provisions of the 2019 Plan and outstanding awards. Our Board generally may amend or terminate the 2019 Plan at any time and for any reason, except that approval of our shareholders is required for any amendment which:

- Increases the number of shares of Common Stock subject to the 2019 Plan (other than in the context of certain adjustments provided for under the 2019 Plan);
- Decreases the price at which grants may be granted;
- Reprices or cancels and re-grants existing options or , if applicable, other awards;
- Changes the class of persons eligible to receive ISOs under the 2019 Plan; or
- Any other amendment to the 2019 Plan that would require approval of shareholders under applicable law, regulation or rule or stock exchange listing requirement.

Repricing Prohibition. Other than in connection with certain corporate events, the Compensation Committee shall not, without the approval of the Company's stockholders, (a) lower the option price per share of an option or SAR after it is granted, (b) cancel an Option or SAR when the exercise price per share exceeds the fair market value of one share in exchange for cash or another award (other than in connection with a change of control), or (c) take any other action with respect to an Option or SAR that would be treated as a repricing under the rules and regulations of the principal U.S. national securities exchange on which the Company's shares are then listed.

Minimum Vesting Requirement. Notwithstanding any other provision of the 2019 Plan to the contrary and subject to the immediately following proviso, equity-based awards granted under the 2019 Plan shall vest no earlier than the first anniversary of the date the award is granted (excluding, for this purpose, any (i) awards granted as substitutes for previously granted awards, (ii) shares of stock delivered in lieu of fully vested cash awards and (iii) awards to Directors that vest on the earlier of the one year anniversary of the date of grant or the next annual meeting of stockholders which is at least 50 weeks after the immediately preceding year's annual meeting); provided, that the Compensation Committee may grant equity-based awards without regard to the foregoing minimum vesting requirement with respect to a maximum of five percent (5%) of the available shares authorized for issuance under the 2019 Plan. For the avoidance of doubt, this minimum vesting requirement shall not be construed to limit the Compensation Committee's discretion to provide for accelerated exercisability or vesting of any award, including in cases of retirement, death, disability or a change of control.

Restrictions on Dividends and Dividend Equivalents. If dividends are declared during the period that all or part of an equity award is outstanding and unvested, such dividends (or dividend equivalents) shall either (i) not be paid or credited with respect to such unvested award or (ii) be accumulated but remain subject to vesting requirement(s) to the same extent as the applicable award and shall only be paid at the time or times such vesting requirement(s) are satisfied. No dividends or dividend equivalents may be paid with respect to options or SARs prior to their exercise or settlement, as applicable.

Adjustments upon Changes in Capitalization. In the event of any change in the Company's capital structure, including but not limited to a change in the number of shares of Stock outstanding, on account of (i) any stock dividend, spinoff, stock split, reverse stock split or any similar equity restructuring, or (ii) any combination or exchange of equity securities, merger, consolidation, recapitalization, reorganization, or divestiture or any other similar event affecting the Company's capital structure, to reflect such change in the Company's capital structure, the Committee shall make appropriate equitable adjustments to (a) the maximum number of shares of Stock that may be issued under the 2019 Plan, (b) the number of shares of stock issuable upon outstanding awards, (c) any individual award limitations or restrictions, as applicable, and (d) the exercise price and any performance conditions applicable to outstanding awards. In the event of any extraordinary dividend, divestiture or other distribution (other than ordinary cash dividends) of assets to stockholders, or any transaction or event described above, to the extent necessary to prevent the enlargement or diminution of the rights of participants, the Compensation Committee shall make appropriate equitable adjustments to the number or kind of shares subject to an outstanding award, the exercise price applicable to an outstanding award, and/or a performance goals. Any adjustments the 2019 Plan shall be consistent with Section 409A or Section 424 of the Code, to the extent applicable, and made in a manner that does not adversely affect the exemption provided pursuant to Rule 16b-3, to the extent applicable.

Change of Control. The Compensation Committee may, at the time an award is made or at any time prior to, coincident with or after the time of a Change of Control (as defined in the 2019 Plan):

- Provide for the adjustment of any performance goals as the Compensation Committee deems necessary or appropriate to reflect the Change of Control;
- provide for the cancellation of any awards then outstanding if the surviving entity or acquiring entity (or the surviving or acquiring entity's parent company) in the Change of Control replaces the awards with new rights of substantially equivalent value, as determined by the Compensation Committee. For an award to be validly assumed by a successor for this purpose, it must (x) provide such participant with rights and entitlements substantially equivalent to or better than the rights, terms and conditions applicable under such award, including, but not limited to, an identical or better exercise or vesting schedules; (y) have substantially equivalent value to such award (determined at the time of the Change of Control); and (z) be based on stock that is traded on an established U.S. securities market or an established securities market outside the United States upon which the participant could readily trade the stock without administrative burdens or complexities;

- provide that upon an involuntary termination of a participant's employment as a result of a Change of Control, any time periods shall accelerate, and any other conditions relating to the vesting, exercise, payment or distribution of an award shall be waived; or
- provide that awards shall be purchased for an amount of cash equal to the amount that could have been obtained for the shares covered by a restricted stock award if it had been vested and or by an option or SAR if it had been exercised at the time of the Change of Control, provided however that awards outstanding as of the date of the Change of Control may be cancelled and terminated without payment if the consideration payable with respect to one share of stock in connection with the Change of Control is less than the exercise price or grant price applicable to such award, as applicable.

Generally, under the 2019 Plan, a Change of Control occurs upon (i) the consummation of a reorganization, merger or consolidation involving the Company, pursuant to which our stockholders immediately prior to the transaction do not own more than 50% of the total combined voting power after the transaction, (ii) the consummation of the sale, transfer or other disposition of all or substantially all of our assets, (iii) certain changes in the majority of our Board from those in office on the effective date of the 2019 Plan, (iv) the acquisition of more than 50% of the total combined voting power in our outstanding securities by any person, or (v) the Company is dissolved or liquidated.

Types of Awards

Stock Options. Incentive Stock Options and Nonstatutory Stock Options are granted pursuant to award agreements adopted by our Compensation Committee. Our Compensation Committee determines the exercise price for a stock option, within the terms and conditions of the 2019 Plan; provided, that the exercise price of an option cannot be less than 100% of the fair market value of our Common Stock on the date of grant. Options granted under the 2019 Plan vest at the rate specified by our Compensation Committee.

The Compensation Committee determines the term of stock options granted under the 2019 Plan, up to a maximum of 10 years, except in the case of certain Incentive Stock Options, as described below. The Compensation Committee will also determine the length of period during which an optionholder may exercise their options if an optionholder's relationship with us, or any of our subsidiaries, ceases for any reason; for Incentive Stock Options, this period is limited by applicable law. In no event, however, may an option be exercised beyond the expiration of its term unless the term is extended in accordance with applicable law.

Acceptable consideration for the purchase of Common Stock issued upon the exercise of a stock option will be determined by the Compensation Committee.

Incentive or Nonstatutory Stock Options. Incentive Stock Options may be granted only to our employees, and the employees of our parent or subsidiary corporations, if any. Option Awards are granted pursuant to award agreements adopted by our Compensation Committee. To the extent required by applicable law, the aggregate fair market value, determined at the time of grant, of shares of our Common Stock with respect to Incentive Stock Options that are exercisable for the first time by an optionholder during any calendar year may not exceed \$100,000. To the extent required by applicable law, no Incentive Stock Option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (a) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (b) the term of the incentive stock option does not exceed five years from the date of grant.

Stock Appreciation Rights. A SAR is the right to receive stock, cash, or a combination of the foregoing equal in value to the difference between the grant price of the SAR and the market price of the Company's Common Stock on the exercise date. SARs may be granted independently or in tandem with an Option at the time of grant of the related Option. An SAR granted in tandem with an Option shall be exercisable only to the extent the underlying Option is exercisable. An SAR confers on the grantee a right to receive an amount with respect to each share of Common Stock subject thereto, upon exercise thereof, equal to the excess of (A) the fair market value of one share of Common Stock on the date of exercise over (B) the grant price of the SAR (which in the case of an SAR granted in tandem with an Option shall be equal to the exercise price of the underlying Option, and which in the case of any other SAR shall be such price as the Compensation Committee may determine but in no event shall be less than the fair market value of a share of common stock on the date of grant of such SAR).

Restricted Stock and Restricted Stock Units. Restricted Stock is common stock that the Company grants subject to transfer restrictions and a risk of forfeiture. A Restricted Stock Unit is a right to receive stock or cash equal to the value of a share of stock at the end of a specified period that the Company grants subject to transfer restrictions and vesting criteria. The grant of these awards under the 2019 Plan are subject to such terms, conditions and restrictions as the Compensation Committee determines consistent with the terms of the 2019 Plan.

At the time of grant, the Compensation Committee may place restrictions on Restricted Stock and restricted stock units that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals. Except to the extent restricted under the award agreement relating to the Restricted Stock, a grantee granted Restricted Stock shall have all of the rights of a stockholder including the right to vote Restricted Stock and the right to receive dividends.

Unless otherwise provided in an award agreement, upon the vesting of a Restricted Stock Unit, there shall be delivered to the grantee, within 30 days of the date on which such award (or any portion thereof) vests, the number of shares of common stock equal to the number of restricted stock units becoming so vested.

Other Stock-Based Awards. The 2019 Plan also allows the Compensation Committee to grant "Other Stock-Based Awards," which means a right or other interest that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, common stock. Subject to the limitations contained in the 2019 Plan, this includes, without limitation, (i) unrestricted stock awarded as a bonus or upon the attainment of Performance Goals or otherwise as permitted under the 2019 Plan and (ii) a right to acquire stock from the Company containing terms and conditions prescribed by the Compensation Committee. At the time of the grant of Other Stock-Based Awards, the Compensation Committee may place restrictions on the payout or vesting of Other Stock-Based Awards that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals. Other Stock-Based Awards may not be granted with the right to receive dividend equivalent payments.

Cash-Based Awards. The Compensation Committee may grant Cash-Based Awards under the 2019 Plan that specify the amount of cash to which the award pertains, the conditions under which the award will be vested and exercisable or payable, and such other conditions as the Compensation Committee may determine that are consistent with the terms of the 2019 Plan. At the time of the grant of Cash-Based Awards, the Compensation Committee may place restrictions on the payout or vesting of Cash-Based Awards that shall lapse, in whole or in part, only upon the attainment of Performance Goals, similar to those for Other Stock-Based Awards.

New Plan Benefits under the 2019 Plan

Because future awards under the 2019 Plan will be granted in the discretion of the Compensation Committee, the type, number, recipients, and other terms of such awards cannot be determined at this time.

U.S. Federal Income Tax Considerations

The following is a brief description of the material United States federal income tax consequences associated with awards under the 2019 Plan. It is based on existing United States laws and regulations, and there can be no assurance that those laws and regulations will not change in the future. Tax consequences in other countries may vary. This information is not intended as tax advice to anyone, including participants in the 2019 Plan.

Stock Options. Neither incentive stock option grants nor non-qualified stock option grants cause any tax consequences to the participant or Tonix at the time of grant. Upon the exercise of a non-qualified stock option, the excess of the market value of the shares acquired over their exercise price is ordinary income to the participant, and is deductible by Tonix, subject to any applicable limitations under Section 162(m) of the Code. The participant's tax basis for the shares is the market value thereof at the time of exercise. Any gain or loss realized upon a subsequent disposition of the stock will generally constitute capital gain, in connection with which Tonix will not be entitled to a tax deduction.

Upon the exercise of an incentive stock option, the participant will not realize taxable income, but the excess of the fair market value of the stock over the exercise price may give rise to alternative minimum tax. When the stock acquired upon exercise of an incentive stock option is subsequently sold, the participant will recognize income equal to the difference between the sales price and the exercise price of the option. If the sale occurs after the expiration of two years from the grant date and one year from the exercise date, the income will constitute long-term capital gain. If the sale occurs prior to that time, the participant will recognize ordinary income to the extent of the lesser of the gain realized upon the sale or the difference between the fair market value of the acquired stock at the time of exercise and the exercise price; any additional gain will constitute capital gain. Tonix will be entitled to a deduction in an amount equal to the ordinary income recognized by the participant, subject to any applicable limitations under Section 162(m) of the Code, but no deduction in connection with any capital gain recognized by the participant. If the participant exercises an incentive stock option more than three months after his or her termination of employment due to retirement or other separation other than death or disability, or more than twelve months after his or her termination of employment due to death or permanent disability, he or she is deemed to have exercised a non-qualified stock option.

Compensation realized by participants on the exercise of non-qualified stock options or the disposition of shares acquired upon exercise of any incentive stock options may be subject to the \$1,000,000 deductibility limit of Section 162(m) of the Code.

Stock Appreciation Rights. A participant granted a stock appreciation right under the 2019 Plan will not recognize income, and Tonix will not be allowed a tax deduction, at the time the award is granted. When the participant exercises the stock appreciation right, the amount of cash and the fair market value of any shares of stock or other consideration received will be ordinary income to the participant and Tonix will be allowed a corresponding federal income tax deduction at that time. Compensation realized by the participant on the exercise of the stock appreciation right may be subject to the \$1,000,000 deductibility limit of Section 162(m) of the Code.

Restricted Stock. Restricted stock is not taxable to a participant at the time of grant, but instead is included in ordinary income (at its then fair market value) when the restrictions lapse. A participant may elect, however, to recognize income at the time of grant, in which case the fair market value of the restricted shares at the time of grant is included in ordinary income and there is no further income recognition when the restrictions lapse. If a participant makes such an election and thereafter forfeits the restricted shares, he or she will be entitled to no tax deduction, capital loss or other tax benefit. Tonix is entitled to a tax deduction in an amount equal to the ordinary income recognized by the participant, subject to any applicable limitations under Section 162(m) of the Code.

A participant's tax basis for restricted shares will be equal to the amount of ordinary income recognized by the participant. The participant will recognize capital gain (or loss) on a sale of the restricted stock if the sale price exceeds (or is lower than) such basis. The holding period for restricted shares for purposes of characterizing gain or loss on the sale of any shares as long- or short-term commences at the time the participant recognizes ordinary income pursuant to an award. Tonix is not entitled to a tax deduction corresponding to any capital gain or loss of the participant.

Restricted Stock Units. A participant will not recognize income, and Tonix will not be allowed a tax deduction, at the time a restricted stock unit award is granted. Upon receipt of shares of stock (or the equivalent value in cash or any combination of cash and Tonix common stock) in settlement of a restricted stock unit award, a participant will recognize ordinary income equal to the fair market value of the stock and cash received as of that date (less any amount he or she paid for the stock and cash), and Tonix will be allowed a corresponding federal income tax deduction at that time, subject to any applicable limitations under Section 162(m) of the Code.

Performance Awards. A participant will not recognize income, and Tonix will not be allowed a tax deduction, at the time a performance award is granted (for example, when the performance goals are established). Upon receipt of stock or cash (or a combination thereof) in settlement of a performance award, the participant will recognize ordinary income equal to the fair market value of the stock and cash received, and Tonix will be allowed a corresponding federal income tax deduction at that time, subject to any applicable limitations under Section 162(m) of the Code.

Code Section 409A. If an award is subject to Code Section 409A (which relates to nonqualified deferred compensation plans), and if the requirements of Section 409A are not met, the taxable events as described above could apply earlier than described, and could result in the imposition of additional taxes and penalties. All awards that comply with the terms of the 2019 Plan, however, are intended to be exempt from the application of Code Section 409A or meet the requirements of Section 409A in order to avoid such early taxation and penalties.

Tax Withholding. Tonix has the right to deduct or withhold, or require a participant to remit to Tonix, an amount sufficient to satisfy federal, state and local taxes (including employment taxes) required by law to be withheld with respect to any exercise, lapse of restriction or other taxable event arising as a result of the 2019 Plan. The Compensation Committee may, at the time the award is granted or thereafter, require or permit that any such withholding requirement be satisfied, in whole or in part, by delivery of, or withholding from the award, shares having a fair market value on the date of withholding equal to the amount required to be withheld for tax purposes.

Required Vote

Approval of the 2019 Plan requires the receipt of the affirmative vote of the holders of a majority of the votes cast at the Annual Meeting.

**The Board unanimously recommends a vote “FOR” the approval
of the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan**

**PROPOSAL NO. 4: APPROVAL OF THE TONIX PHARMACEUTICALS HOLDING CORP.
2019 EMPLOYEE STOCK PURCHASE PLAN**

General

In February 25, 2019, the Compensation Committee recommended to the Board and the Board approved the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan (the "2019 ESPP"), subject to approval by our stockholders.

Under the 2019 ESPP, shares of the Company's common stock will be available for purchase by eligible employees who participate in the 2019 ESPP. Eligible employees will be entitled to purchase, by means of payroll deductions, limited amounts of the Company's common stock during periodic option periods under the 2019 ESPP. The 2019 ESPP will not be effective without stockholder approval.

The Company believes that the 2019 ESPP will help the Company retain and motivate eligible employees and help further align the interests of eligible employees with those of the Company's stockholders.

Summary Description of the 2019 Employee Stock Purchase Plan

The principal terms of the 2019 ESPP are summarized below. The discussion of the 2019 ESPP that follows is qualified in its entirety by the description of and full terms of the 2019 ESPP that are included as part of Annex B.

Purpose. The purpose of the 2019 ESPP is to provide eligible employees an incentive to advance the best interests of the Company by providing them with an opportunity to purchase shares of the Company's common stock at a favorable price through accumulated payroll deductions. The 2019 ESPP is intended to qualify as an "employee stock purchase plan" under Section 423 of the U.S. Internal Revenue Code of 1986, as amended (the "Code").

Administration. The Compensation Committee of the Board of Directors (the "Committee") will administer the 2019 ESPP. The Committee has authority to construe, interpret and apply the terms of the 2019 ESPP.

Operation. The 2019 ESPP is generally expected to operate in consecutive semi-annual periods referred to as "option periods." The first option period is expected to commence on July 1, 2019 and end on the last trading day in the semi-annual period ending December 31, 2019, with successive option periods expected to begin on the first day of January and July and to terminate on the last trading day of June and December, respectively. The 2019 ESPP gives the Committee the flexibility to change the duration of future option periods. However, option periods may not last longer than the maximum period permitted under Section 423 of the Code. Section 423 of the Code generally limits the length of such offerings to either 5 years or 27 months, depending on the terms of the offering.

On the first day of each option period (the "Grant Date"), each eligible employee for that option period will be granted an option to purchase shares of the Company's common stock. Each participant's option will permit the participant to purchase a number of shares determined by dividing the employee's accumulated payroll deductions for the option period by the applicable purchase price. A participant must designate in his or her enrollment package the percentage (if any) of compensation to be deducted during that option period for the purchase of stock under the 2019 ESPP. The participant's payroll deduction election will generally remain in effect for future option periods unless terminated by the participant. A participant may not increase or decrease his or her payroll deductions during the option period. A participant may instead elect to withdraw from any option period prior to the last day of the option period, in which case the participant's payroll deductions will be refunded and the participant's outstanding options will terminate.

Each participant's payroll deductions under the 2019 ESPP will be credited to a bookkeeping account in his or her name under the 2019 ESPP.

Each option granted under the 2019 ESPP will automatically be exercised on the last day of the respective option period (referred to as the "Exercise Date"). The number of shares acquired by a participant upon exercise of his or her option will be determined by dividing the participant's 2019 ESPP account balance as of the Exercise Date for the option period by the purchase price of the option. The purchase price for each option is generally expected to equal the lesser of (1) 85% of the fair market value of a share of the Company's common stock on the applicable Grant Date, or (2) 85% of the fair market value of a share of the Company's common stock on the applicable Exercise Date. However, the 2019 ESPP gives the Committee the flexibility to change the purchase price for future option periods that is consistent with Section 423 of the Code. A participant's 2019 ESPP account will be reduced upon exercise of his or her option by the amount used to pay the purchase price of the shares acquired by the participant. No interest will be paid to any participant or credited to any account under the 2019 ESPP.

Eligibility. Only certain employees will be eligible to participate in the 2019 ESPP. All employees of the Company and any subsidiaries of the Company which have been designated by the Committee as eligible to participate in an option period will generally be eligible to participate in such offering period. However, the following employees will not be eligible to participate in such option period:

- employees whose customary employment is for not more than 20 hours per week;
- employees whose customary employment is for not more than five months per calendar year; and
- employees who are citizens or residents of a foreign jurisdiction if the grant of an option is prohibited under the local laws of the jurisdiction.

As of March 1, 2019, twelve employees of the Company and its subsidiaries were eligible to participate in the Company's 2018 Employee Stock Purchase Plan.

Limits on Authorized Shares; Limits on Contributions. If the Company's stockholders approve the 2019 ESPP, a maximum of 150,000 shares of the Company's common stock may be purchased under the 2019 ESPP.

Participation in the 2019 ESPP is also subject to the following limits:

- A participant cannot contribute less than 1% or more than 15% of his or her compensation to the purchase of stock under the 2019 ESPP in any one payroll period;
- A participant cannot accrue rights to purchase more than \$25,000 of stock (valued at the Grant Date of the applicable offering period and without giving effect to any discount reflected in the purchase price for the stock) for each calendar year in which an option is outstanding; and
- A participant will not be granted an option under the 2019 ESPP if it would cause the participant to own stock and/or hold outstanding options to purchase stock possessing 5% or more of the total combined voting power or value of all classes of stock of the Company or of its parent or one of its subsidiaries or to the extent it would exceed certain other limits under the Code.

The \$25,000 and the 5% ownership limitations referred to above are required under the Code.

Termination of Employment. If a participant ceases to be an eligible employee for any reason, his or her payroll deductions will automatically cease.

Corporate Transactions. Generally in the event of a proposed sale of all or substantially all of the assets, property or stock of the Company, a reorganization, merger or consolidation of the Company with or into one or more corporations, or a dissolution or liquidation of the Company, unless a successor corporation or a parent or subsidiary thereof assumes or substitutes new options for all outstanding options, (i) the Board shall establish a new Exercise Date that is before the date of the corporate transaction and (ii) upon such effective date any unexercised options shall expire.

Adjustments. As is customary in stock incentive plans of this nature, the number of shares of stock available under the 2019 ESPP or subject to outstanding options, is subject to adjustment in the event of certain reorganizations, combinations, recapitalization of shares, stock splits, reverse stock split, subdivision or other similar change in respect of the Company's common stock.

Transfer Restrictions. A participant's rights with respect to options or the purchase of shares under the 2019 ESPP, as well as payroll deductions credited to his or her 2019 ESPP account, may not be assigned, transferred, pledged or otherwise disposed of in any way except by will or the laws of descent and distribution.

Amendments. The Board generally may amend, suspend, or terminate the 2019 ESPP at any time and in any manner, except that stockholder approval is required to increase the number of shares authorized for issuance under the 2019 ESPP and for certain other amendments. No amendment to the 2019 ESPP may materially adversely affect the option rights previously granted to a participant under the 2019 ESPP, except as required by law or regulation.

Term. Subject to stockholder approval, the 2019 ESPP will become effective on July 1, 2019 and will continue in effect until the earlier of such time as all of the shares of the Company's common stock subject to the 2019 ESPP have been sold under the 2019 ESPP or July 2, 2029, unless terminated earlier by the Board.

Federal Income Tax Consequences of the 2019 Employee Stock Purchase Plan

Following is a general summary of the current federal income tax principles applicable to the 2019 ESPP. The following summary is not intended to be exhaustive and, among other considerations, does not describe the deferred compensation provisions of Section 409A of the Code to the extent an award is subject to and does not satisfy those rules, nor does it describe state, local or international tax consequences.

The 2019 ESPP is intended to qualify as an "employee stock purchase plan" under Section 423 of the Code. Participant contributions to the 2019 ESPP through payroll deductions are made on an after-tax basis. That is, a participant's payroll deductions that are contributed to the 2019 ESPP are deducted from compensation that is taxable to the participant and for which the Company is generally entitled to a tax deduction.

Generally, no taxable income is recognized by a participant with respect to either the grant or exercise of his or her 2019 ESPP option. The Company will have no tax deduction with respect to either of those events. A participant will generally recognize income (or loss) only upon a sale or disposition of any shares that the participant acquires under the 2019 ESPP. The particular tax consequences of a sale or disposition of shares acquired under the 2019 ESPP depend on whether the participant has held the shares for a "Required Holding Period" before selling or disposing of the shares. The Required Holding Period ends on the later of (1) two years after the Grant Date of the offering period in which the participant acquired the shares, or (2) one year after the Exercise Date on which the participant acquired the shares.

If the participant holds the shares for the Required Holding Period and then sells the shares at a price in excess of the purchase price paid for the shares, the gain on the sale of the shares will be taxed as ordinary income to the participant to the extent of the lesser of (1) the amount by which the fair market value of the shares on the Grant Date of the offering period in which the participant acquired the shares exceeded the purchase price of the shares (calculated as though the shares had been purchased on the Grant Date), or (2) the gain on the sale of the shares. Any portion of the participant's gain on the sale of the shares not taxed as ordinary income will be taxed as long-term capital gain. If the participant holds the shares for the Required Holding Period and then sells the shares at a price less than the purchase price paid for the shares, the loss on the sale will be treated as a long-term capital loss to the participant. The Company will not be entitled to a tax deduction with respect to any shares held by the participant for the Required Holding Period, regardless of whether the shares are eventually sold at a gain or a loss.

The participant has a "Disqualifying Disposition" if the participant disposes of the shares before the participant has held the shares for the Required Holding Period. If the participant sells the shares in a Disqualifying Disposition, the participant will realize ordinary income in an amount equal to the difference between the purchase price paid for the shares and the fair market value of the shares on the Exercise Date on which the participant acquired the shares, and the Company generally will be entitled to a corresponding tax deduction. In addition, if the participant makes a Disqualifying Disposition of the shares at a price in excess of the fair market value of the shares on the Exercise Date, the participant will realize capital gain in an amount equal to the difference between the selling price of the shares and the fair market value of the shares on the Exercise Date. Alternatively, if the participant makes a Disqualifying Disposition of the shares at a price less than the fair market value of the shares on the Exercise Date, the participant will realize a capital loss in an amount equal to the difference between the fair market value of the shares on the Exercise Date and the selling price of the shares. The Company will not be entitled to a tax deduction with respect to any capital gain realized by a participant.

Specific Benefits under the 2019 Employee Stock Purchase Plan

The benefits that will be received by or allocated to eligible employees under the 2019 ESPP cannot be determined at this time because the amount of payroll deductions contributed to purchase shares of the Company's common stock under the 2019 ESPP (subject to the limitations discussed above) is entirely within the discretion of each participant.

Required Vote

Approval of the 2019 ESPP Plan requires the receipt of the affirmative vote of the holders of a majority of the shares of the Company's common stock present in person or by proxy and voting at the Annual Meeting.

**The Board unanimously recommends a vote "FOR" the approval
of the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Incentive Plan**

**PROPOSAL NO. 5: APPROVAL OF AMENDMENT TO ARTICLES OF
INCORPORATION TO INCREASE OUR AUTHORIZED SHARES OF COMMON
STOCK FROM 15,000,000 TO 150,000,000**

Our Board of Directors has approved, subject to shareholder approval, an amendment to our Articles of Incorporation to increase our authorized shares of common stock from 15,000,000 to 150,000,000. The increase in our authorized shares of common stock will become effective upon the filing of the amendment to our Articles of Amendment with the Nevada Secretary of State. If the amendment to increase our authorized shares of common stock is approved by shareholders at the Annual Meeting, we intend to file the amendment to our Articles of Incorporation as soon as practicable following the Annual Meeting.

The form of Articles of Amendment to be filed with the Nevada Secretary of State is set forth as **Appendix C** to this proxy statement (subject to any changes required by applicable law and provided that, since Proposal Nos. 5 will result in changes to the Articles of Incorporation, the Company may file one or more amendments with the Nevada Secretary of State to effect multiple approved proposals).

Outstanding Shares and Purpose of the Proposal

Our Articles of Incorporation currently authorizes us to issue a maximum of 15,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, \$0.001 par value per share. Our issued and outstanding securities, as of the Record Date, are as follows:

- 4,703,728 shares of common stock;
- 1,366,000 shares of common stock issuable upon the exercise of preferred stock outstanding;
- 4,984,846 shares of common stock issuable upon the exercise of warrants outstanding;
- 250,545 shares of common stock issuable upon the exercise of options outstanding;
- 5,097 shares of common stock reserved for future grants, awards and issuances under our current equity compensation plans;
- 28,242 shares of common stock reserved for future purchases under our employee stock purchase plan; and
- 11,338,458 shares of common stock outstanding on a fully diluted basis.

The approval of the amendment to the articles of incorporation to increase the authorized shares of Common Stock is important for the ongoing business of the Company. Without additional authorized shares of Common Stock, (i) the Company may not be able to raise additional financing which is needed to fund our ongoing clinical and research programs, (ii) the Company may not be able to attract and retain key employees, officers and directors, and (iii) the Company may not be able to make possible strategic acquisitions, although no such acquisitions are currently contemplated.

The increase in the number of authorized shares of Common Stock may be available for our Board to issue in future financings, to provide equity incentive to employees, officers and directors, to make stock-based acquisitions and for other general corporate purposes, and we intend to use the additional shares of Common Stock that will be available to undertake any such issuances. We have no specific plan, commitment, arrangement, understanding or agreement, either oral or written, regarding the issuance of Common Stock subsequent to this proposed increase in the number of authorized shares at this time, and we have not allocated any specific portion of the proposed increase in the authorized number of shares to any particular purpose. The Company is therefore requesting its stockholders approve this proposal to amend its Articles of Incorporation to increase the authorized shares of Common Stock.

Rights of Additional Authorized Shares

Any authorized shares of Common Stock, if and when issued, would be part of our existing class of Common Stock and would have the same rights and privileges as the shares of Common Stock currently outstanding. Our stockholders do not have pre-emptive rights with respect to the Common Stock, nor do they have cumulative voting rights. Accordingly, should the Board issue additional shares of Common Stock, existing stockholders would not have any preferential rights to purchase any of such shares, and their percentage ownership of our then outstanding Common Stock could be reduced.

Potential Adverse Effects of Increase in Authorized Common Stock

Future issuances of Common Stock or securities convertible into Common Stock could have a dilutive effect on our earnings per share, book value per share and the voting power and interest of current stockholders. We could also use the additional shares of common stock that will become available for issuance to oppose a hostile takeover attempt or to delay or prevent changes in control or management of the Company. For example, it may be possible for the Board of Directors to delay or impede a takeover or transfer of control of the Company by causing such additional authorized shares to be issued to holders who might side with the Board of Directors in opposing a takeover bid that the Board of Directors determines is not in the best interests of the Company or its stockholders. The proposed increase in authorized shares of common stock therefore may have the effect of discouraging unsolicited takeover attempts. By potentially discouraging initiation of any such unsolicited takeover attempts, the proposed increase in authorized shares of common stock may limit the opportunity for the Company's stockholders to dispose of their shares at the higher price generally available in takeover attempts or that may be available under a merger proposal. The proposed increase in authorized shares of common stock may have the effect of permitting the Company's current management, including the current Board of Directors, to retain its position, and place it in a better position to resist changes that stockholders may wish to make if they are dissatisfied with the conduct of the Company's business. The Board is not aware of any attempt, or contemplated attempt, to acquire control of the Company, nor is this proposal being presented with the intent that it be used to prevent or discourage any acquisition attempt. However, nothing would prevent the Board from taking any such actions that it deems to be consistent with its fiduciary duties.

Required Vote

Approval of an amendment to our Articles of Incorporation to increase our authorized shares of common stock from 15,000,000 to 150,000,000 requires the affirmative vote of the holders of a majority of the issued and outstanding shares of the Company's common stock.

The Board unanimously recommends a vote "FOR" the approval of an amendment to our Articles of Incorporation to increase our authorized shares of common stock from 15,000,000 to 150,000,000

PROPOSAL NO. 6: ADVISORY VOTE TO APPROVE NAMED EXECUTIVE OFFICER COMPENSATION

We are asking our stockholders to provide an advisory vote to approve the compensation of our named executive officers, including the CD&A, the compensation tables and narrative disclosures as described in this Proxy Statement. The Company currently holds such an advisory vote every three years, and this proposal, commonly known as a “say-on-pay” proposal, gives our stockholders the opportunity to express their views on the compensation of our named executive officers.

Please see the CD&A section of this Proxy Statement, the compensation tables and the narrative disclosures that accompany the compensation tables for greater detail about our executive compensation programs, including information about the fiscal year 2018 compensation of our named executive officers.

We believe that our overall compensation program and philosophy support and help drive the Company’s long-term value creation, business strategy and operating performance objectives. We are again asking our stockholders to indicate their support for our named executive officer compensation as described in this proxy statement by voting “FOR” the following resolution at the Annual Meeting:

“RESOLVED, that the compensation paid to the Company’s named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion is hereby APPROVED.”

While this say-on-pay vote is advisory and does not bind the Company to any particular action, the Board and the Compensation Committee value your opinion. Accordingly, the Board and the Compensation Committee will consider the outcome of this vote when making future compensation decisions for the Company’s named executive officers.

Approval of this resolution requires the affirmative vote of the holders of a majority of the votes cast in person or by proxy at the Annual Meeting.

**The Board unanimously recommends a vote “FOR” the approval
of the compensation of our named executive officers, as disclosed in this Proxy Statement.**

**PROPOSAL NO. 7 ADVISORY VOTE ON THE FREQUENCY OF HOLDING AN
ADVISORY VOTE ON EXECUTIVE COMPENSATION**

The Dodd-Frank Act requires the Company's shareholders to have the opportunity to cast a non-binding advisory vote regarding how frequently the Company should seek from its shareholders a non-binding advisory vote (similar to Proposal 6 above) on the compensation disclosed in the Company's proxy statement of its Named Executive Officers. The Company has included this proposal among the items to be considered at the Annual Meeting pursuant to the requirements of Section 14A of the Exchange Act. By voting on this frequency proposal, shareholders may indicate whether they would prefer that the advisory vote on the compensation of the Company's Named Executive Officers occur every one, two or three years. Shareholders may also abstain from voting on the proposal. Accordingly, the following resolution is submitted for an advisory shareholder vote at the Annual Meeting:

RESOLVED, that the highest number of votes cast by the shareholders of Tonix Pharmaceuticals Holding Corp. for the option set forth below shall be the preferred frequency of the Company's shareholders for holding an advisory vote on the compensation of the Company's executive officers who are named in the Summary Compensation Table of the Company's Proxy Statement:

- every year;
- every two years; or
- every three years.

The Board of Directors has determined that an advisory vote by the Company's shareholders on executive compensation that occurs every three years is the most appropriate alternative for the Company. In formulating its conclusion, the Board of Directors considered that, because the Company's compensation program for executive officers is not complex, a shareholder advisory vote every three years should be sufficient to permit our shareholders to express their views about our compensation program. Also, the Board of Directors believes that the success of the Company's executive compensation program should be judged over a period of time that is longer than one year.

You may cast your vote on your preferred voting frequency by choosing the option of one year, two years or three years when you vote in response to this proposal, and you may also abstain from voting on the proposal. Your vote on this proposal is not a vote to approve or disapprove of the Board's recommendation but rather is a vote to select one of the options described in the preceding sentence. The option of one year, two years or three years that receives the highest number of votes cast by shareholders will be the frequency of the advisory vote on executive compensation that has been recommended by the shareholders. However, because this vote is advisory and not binding on either the Board of Directors or the Company, the Board of Directors may subsequently decide that it is in the best interests of the Company and its shareholders to hold an advisory vote on executive compensation that differs in frequency from the option that received the highest number of votes from the Company's shareholders at the Annual Meeting.

**The Board unanimously recommends that you vote for a three-year frequency for holding an advisory vote
on executive compensation.**

INFORMATION ABOUT THE EXECUTIVE OFFICERS

Executive Officers

The executive officers are elected by our Board and hold office until their successors are elected and duly qualified. There are no family relationships between any of our directors or executive officers. The current executive officers of the Company are as follows:

NAME	AGE	OFFICES HELD
Seth Lederman	61	President, CEO and Chairman of the Board of Directors
Jessica Morris	41	Chief Operating Officer
Bradley Saenger	45	Chief Financial Officer and Treasurer
Gregory Sullivan	53	Chief Medical Officer and Secretary

Biographical information about Dr. Lederman is provided in “Proposal No. 1 - Election of Directors”.

Jessica Morris is our Chief Operations Officer and has worked for the Company since April 2013, first as a consultant (April 2013 – September 2013), then as SVP of Finance (September 2013 – October 2015), followed by Chief Administrative Officer (October 2015 – January 2016), Acting Chief Financial Officer (January 2016 – February 2016), and Executive Vice President, Operations (February 2016 – January 2018). Prior to joining the Company, Ms. Morris was a Vice President in investment management at Zhong Rong Group. Previously, Ms. Morris was a Senior Associate in the Sponsor Finance Group at American Capital, a Vice President of the mezzanine debt fund at Calvert Street Capital Partners, an Associate in the commercial finance department of Silicon Valley Bank, and a Financial Analyst in the investment banking group at Deutsche Bank. Ms. Morris earned a B.S. in Commerce and a B.A. in Music from the University of Virginia, where she was an Echols Scholar.

Bradley Saenger, CPA became our Chief Financial Officer in February 2016. Mr. Saenger has worked for Tonix since May 2014, as the Director of Accounting (May 2014 – December 2015) and VP of Accounting (January 2016 – February 2016). Between June 2013 and March 2014, Mr. Saenger worked for Shire Pharmaceuticals as a consultant in the financial analyst research and development group. Since November 2015, Mr. Saenger has been a director of Tonix Pharma Holdings Limited. Between February 2013 and May 2013, Mr. Saenger worked for Stewart Health Care System as a financial consultant. Between October 2011 and December 2012, Mr. Saenger was an Associate Director of Accounting at Vertex Pharmaceuticals, Inc. Between January 2005 and September 2011, Mr. Saenger worked for Alere Inc., as a Manager of Corporate Accounting and Consolidations (2007 – 2011) and Manager of Financial Reporting (2005 – 2006). Mr. Saenger also worked for PricewaterhouseCoopers LLP, Shifren Hirsowitz, public accountants and auditors in Johannesburg, South Africa, Investec Bank in Johannesburg, South Africa and Norman Sifris and Company, public accountants and auditors in Johannesburg, South Africa. Mr. Saenger received his Bachelor’s and Honors’ degrees in Accounting Science from the University of South Africa. Mr. Saenger is a Chartered Accountant in South Africa and a Certified Public Accountant in the Commonwealth of Massachusetts.

Gregory Sullivan, MD became our Chief Medical Officer on June 3, 2014 and our Secretary in March 2017. Prior to becoming our Chief Medical Officer, he served on our Scientific Advisory Board since October 2010, and had also provided *ad hoc* consulting services. Previously, Dr. Sullivan had been a member of the faculty of Columbia University since July 1999, where he served as an Assistant Professor of Psychiatry in the Department of Psychiatry at Columbia University Medical Center (CUMC) until June 2014. Between June 1997 and August 2014, Dr. Sullivan maintained a part-time psychiatry practice. He served as a Research Scientist at the New York State Psychiatric Institute (NYSPI) from December 2006 to June 2014. He also served as a member of the Institutional Review Board of the NYSPI from January 2009 to June 2014. As Principal Investigator and Co-Investigator on several human studies of PTSD, Dr. Sullivan has administered the recruitment, biological assessments, treatment, and safety of participants with PTSD in clinical trials of the disorder. He has published more than 50 articles and chapters on research topics ranging from stress and anxiety disorders to abnormal serotonin receptor expression in depression, PTSD and panic disorder. He is a recipient of grants from the National Institute of Mental Health (NIMH), the Anxiety Disorders Association of America, NARSAD, the Dana Foundation, and the American Foundation for Suicide Prevention. Dr. Sullivan received a BA in Biology from the University of California, Berkeley, and received his MD from the College of Physicians & Surgeons at Columbia University. He completed his residency training in psychiatry at CUMC, and then a two-year NIMH-sponsored research fellowship in anxiety and affective disorders before joining the faculty at Columbia.

Involvement in Certain Legal Proceedings

Except as disclosed below, our directors and executive officers have not been involved in any of the following events during the past ten years:

1. any bankruptcy petition filed by or against such person or any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time;
2. any conviction in a criminal proceeding or being subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
3. being subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining him from or otherwise limiting his involvement in any type of business, securities or banking activities or to be associated with any person practicing in banking or securities activities;
4. being found by a court of competent jurisdiction in a civil action, the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a Federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
5. being subject of, or a party to, any Federal or state judicial or administrative order, judgment decree, or finding, not subsequently reversed, suspended or vacated, relating to an alleged violation of any Federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
6. being subject of or party to any sanction or order, not subsequently reversed, suspended, or vacated, of any self-regulatory organization, any registered entity or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

In January 2013, the Chief Operating Officer filed for bankruptcy protection under Chapter 7 of Title 11 under the United States Code in the U. S. Bankruptcy Court in New York, New York. The petition was discharged in April 2013.

EXECUTIVE COMPENSATION

Compensation Philosophy and Practices

We believe that the performance of our executive officers significantly impacts our ability to achieve our corporate goals. We, therefore, place considerable importance on the design and administration of our executive officer compensation program. This program is intended to enhance stockholder value by attracting, motivating and retaining qualified individuals to perform at the highest levels and to contribute to our growth and success. Our executive officer compensation program is designed to provide compensation opportunities that are tied to individual and corporate performance.

Our compensation packages are also designed to be competitive in our industry. The Compensation Committee from time-to-time consults with compensation consultants, legal counsel and other advisors in designing our compensation program, including in evaluating the competitiveness of individual compensation packages and in relation to our corporate goals.

Our overall compensation philosophy has been to pay our executive officers an annual base salary and to provide opportunities, through cash and equity incentives, to provide higher compensation if certain key performance goals are satisfied. We believe that many of our key practices and programs demonstrate good governance. The main principles of our fiscal year 2018 compensation strategy included the following:

- *An emphasis on pay for performance.* A significant portion of our executive officers' total compensation is variable and at risk and tied directly to measurable performance, which aligns the interests of our executives with those of our stockholders;
- *Performance results are linked to Company and individual performance.* When looking at performance over the year, we equally weigh individual performance as well as that of the Company as a whole. Target annual compensation is positioned to allow for above-median compensation to be earned through an executive officer's and the Company's extraordinary performance;
- *Equity as a key component to align the interests of our executives with those of our stockholders.* Our Compensation Committee continues to believe that keeping executives interests aligned with those of our stockholders is critical to driving toward achievement of long-term goals of both our stockholders and the Company; and
- *Peer group positioning.* While the Compensation Committee considers the level of compensation paid by the companies in our peer group as a reference point that provides a framework for its compensation decisions, in order to maintain competitiveness and flexibility, the Compensation Committee does not target compensation at a particular level relative to the peer group; nor does the Compensation Committee employ a formal benchmarking strategy or rely upon specific peer-derived targets.

In 2018, we also continued practices that demonstrate good governance and careful stewardship of corporate assets, including:

- *Limited personal benefits.* Our executive officers are eligible for the same benefits as our non-executive salaried employees, and they do not receive any additional perquisites.
- *No retirement benefits.* We do not provide our executive officers with a traditional retirement plan, or with any supplemental deferred compensation or retirement benefits.
- *No tax gross-ups.* We do not provide our executive officers with any tax gross-ups.
- *No single-trigger cash change in control benefits.* We do not provide cash benefits to our executives upon a change in control, absent an actual termination of employment.

At our annual meeting in May 2016, we conducted our tri-annual advisory vote on executive compensation, commonly referred to as a “say-on-pay” vote. At that time, approximately 95% of the votes affirmatively cast on the advisory say-on-pay proposal were voted in favor of the compensation of our named executive officers. The Compensation Committee understood this level of approval to indicate strong stockholder support for our executive compensation policies and programs generally, and as a result, our Compensation Committee made no fundamental changes to our executive compensation programs. We are holding our next say-on-pay vote at the 2019 annual meeting. Our Compensation Committee and our Board will consider shareholder feedback through the say-on-pay vote and remains committed to engaging with shareholders and are open to feedback from shareholders.

Compensation Committee Report

The Compensation Committee of the Board of Tonix Pharmaceuticals Holding Corp. has furnished the following report on its activities during the fiscal year ended December 31, 2018. The report is not deemed to be “soliciting material” or “filed” with the SEC or subject to the SEC’s proxy rules or to the liabilities of Section 18 of the Exchange Act, and the report shall not be deemed to be incorporated by reference into any prior or subsequent filing under the Securities Act of 1933, as amended (the “Securities Act”), or the Exchange Act, except to the extent that Tonix Pharmaceuticals Holding Corp. specifically incorporates it by reference into any such filing.

The Compensation Committee has discussed and reviewed the foregoing Compensation Discussion and Analysis with management. Based upon this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement and incorporated by reference into the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC.

Ms. Margaret Smith Bell
Dr. Adeoye Olukotun
Gen. David Grange

Compensation Committee Interlocks and Insider Participation

None of the directors who served on the Compensation Committee in 2018 was during 2018 or previously an officer or employee of the Company or of any of its subsidiaries, and none of the directors who served on the Compensation Committee in 2018 is, or since the beginning of 2018 was, a participant in a related person transaction that requires disclosure under SEC rules. During 2018, none of the Company’s executive officers served on the board of directors, the compensation committee or any similar committee of another entity (not including entities exempt from tax under Section 501(c)(3) of the Code) that has one or more of its executive officers serving on our Board or Compensation Committee.

Summary Compensation Table

The following table provides certain summary information concerning compensation awarded to, earned by or paid to our Chief Executive Officer, and the two next most highly paid executive officers for fiscal years ended December 31, 2018 and 2017.

Name & Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and	All Other Compensation (\$)	Total (\$)
							Non-Qualified Deferred Compensation Earnings (\$)		
Seth Lederman	2018	472,500	160,000	—	844,945	—	—	—	1,477,445
Chief Executive Officer	2017	472,500	—	—	103,344	—	—	—	575,844
Gregory Sullivan	2018	335,000	70,000	—	316,855	—	—	—	721,855
Chief Medical Officer	2017	335,000	—	—	48,443	—	—	—	383,443
Bradley Saenger	2018	335,000	70,000	—	211,235	—	—	—	616,235
Chief Financial Officer	2017	335,000	—	—	30,680	—	—	—	365,680

(1) Represents the aggregate grant date fair value of options granted in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, "Stock Compensation." For the relevant assumptions used in determining these amounts, refer to Note 7 to our audited financial statements.

Grants of Plan-Based Awards in Fiscal 2018

The following table provides information with regard to each grant of plan-based award made to a named executive officer under any plan during the fiscal year ended December 31, 2018.

Name	Grant Date	All Other Option Awards:	Exercise or Base Price of Option Awards (\$/Share)	Grant Date Fair Value of
		Number of Securities Underlying Options (#)		Stock and Option Awards (\$) ⁽¹⁾
Seth Lederman	2/13/2018	15,661	\$ 34.00	\$ 27.36
	2/13/2018	15,661	\$ 42.50 ⁽²⁾	\$ 26.60
Bradley Saenger	2/13/2018	3,915	\$ 34.00	\$ 27.36
	2/13/2018	3,915	\$ 42.50 ⁽²⁾	\$ 26.60
Gregory Sullivan	2/13/2018	5,873	\$ 34.00	\$ 27.36
	2/13/2018	5,873	\$ 42.50 ⁽²⁾	\$ 26.60

(1) Represents the aggregate grant date fair value of options granted in accordance with FASB ASC Topic 718.

(2) Represents an exercise price at a 125% premium of the closing price of the Company's common stock on the grant date.

Outstanding Equity Awards at December 31, 2018

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2018.

Name	Number of Securities underlying Unexercised Options (#) Exercisable	Number of Securities underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$/Sh)	Option Expiration Date
Seth Lederman	350	—	\$ 3000.00	5/9/2022
	675	—	\$ 1020.00	2/12/2023
	710	—	\$ 1588.00	2/11/2024
	1,000	—	\$ 987.00	6/17/2024
	1,000	—	\$ 668.00	10/29/2024
	1,890	—	\$ 595.00	2/25/2025
	72	—	\$ 595.00	2/25/2025
	1,049	51 ⁽¹⁾	\$ 503.00	2/9/2026
	—	1,100 ⁽²⁾	\$ 503.00	2/9/2026
	933	667 ⁽⁴⁾	\$ 55.00	3/1/2027
	—	15,661 ⁽⁵⁾	\$ 34.00	2/13/2028
	—	15,661 ⁽⁵⁾	\$ 42.50	2/13/2028
Bradley Saenger	110	—	\$ 987.00	6/17/2024
	110	—	\$ 668.00	10/29/2024
	130	—	\$ 595.00	2/25/2025
	142	8 ⁽¹⁾	\$ 503.00	2/9/2026
	—	600 ⁽²⁾	\$ 242.00	5/27/2026
	172	28 ⁽³⁾	\$ 242.00	5/27/2026
	275	200 ⁽⁴⁾	\$ 55.00	3/1/2027
	—	3,915 ⁽⁵⁾	\$ 34.00	2/13/2028
	—	3,915 ⁽⁵⁾	\$ 42.50	2/13/2028
Gregory Sullivan	265	—	\$ 987.00	6/17/2024
	265	—	\$ 668.00	10/29/2024
	265	—	\$ 595.00	2/25/2025
	283	17 ⁽¹⁾	\$ 503.00	2/9/2026
	—	300 ⁽²⁾	\$ 503.00	2/9/2026
	438	312 ⁽⁴⁾	\$ 55.00	3/1/2027
	—	5,873 ⁽⁵⁾	\$ 34.00	2/13/2028
	—	5,873 ⁽⁵⁾	\$ 42.50	2/13/2028

(1) The shares subject to this stock option vested as to 1/3 of the shares on February 9, 2017, with the remaining shares vesting on an equal monthly basis over the following 24 months.

(2) The shares subject to this stock option vest 1/3rd upon the date(s) that certain stock price goals are achieved. The stock price goals are such date(s) when the Company's common stock has an average closing sales price equal to or exceeding each of \$600.00, \$700.00 and \$800.00 per share for 20 consecutive trading days, subject to a one year minimum service period prior to vesting.

(3) The shares subject to this stock option vested as to 1/3 of the shares on May 27, 2017, with the remaining shares vesting on an equal monthly basis over the following 24 months.

(4) The shares subject to this stock option vested as to 1/3 of the shares on March 1, 2018, with the remaining shares vesting on an equal monthly basis over the following 24 months.

(5) The shares subject to this stock option vested as to 1/3 of the shares on February 13, 2019, with the remaining shares vesting on an equal monthly basis over the following 24 months.

Option Exercises and Stock Vested

No options were exercised by any of the named executive officers and no named executive officers held restricted stock units during the fiscal year ended December 31, 2018.

Equity Compensation Plan Information

The following table provides certain information with respect to our equity compensation plans in effect as of December 31, 2018.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (A)	Weighted-average exercise price of outstanding options, warrants and rights (B)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column A)⁽²⁾ (C)
Equity compensation plans approved by security holders ⁽¹⁾	137,145	\$ 143.09	146,738
Equity compensation plans not approved by security holders	—	—	—
Total	137,145	\$ 143.09	146,738

(1) Consists of the 2012 Plan, the 2014 Plan, the 2016 Plan, the 2017 Plan, the 2018 Plan and the 2014 employee stock purchase plan (“ESPP”).

(2) Consists of shares available for future issuance under the 2018 Plan and our ESPP. As of December 31, 2018, 113,500 shares of common stock were available for issuance under the 2018 Plan and 30,000 shares of common stock were available for issuance under the ESPP.

Employment Contracts and Termination of Employment and Change-In-Control Arrangements

Employment Agreement with Seth Lederman

On February 11, 2014, the Company entered into an employment agreement (the “Lederman Agreement”) with Dr. Seth Lederman (“Lederman”) to continue to serve as our President, Chief Executive Officer and Chairman of the Board.

The base salary for Lederman under the Lederman Agreement was \$425,000 per annum, and is \$585,000 as of January 1, 2019. The Lederman Agreement has an initial term of one year and automatically renews for successive one year terms unless either party delivers written notice not to renew at least 60 days prior to the end of the current term.

Pursuant to the Lederman Agreement, if the Company terminates Lederman’s employment without Cause (as defined in the Lederman Agreement) or Lederman resigns for Good Reason (as defined in the Lederman Agreement), Lederman is entitled to the following payments and benefits: (1) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other benefits, if any, under any group retirement plan, nonqualified deferred compensation plan, equity award plan or agreement, health benefits plan or other group benefit plan to which Lederman may be entitled to under the terms of such plans or agreements; (2) a lump sum cash payment in an amount equal to 12 months of his base salary as in effect immediately prior to the date of termination; (3) continuation of health benefits for Lederman and his eligible dependents for a period of 12 months following the date of termination; and (4) the automatic acceleration of the vesting and exercisability of outstanding unvested stock awards as to the number of stock awards that would have vested over the 12-month period following termination had Lederman remained continuously employed by the Company during such period.

Pursuant to the Lederman Agreement, if Lederman's employment is terminated as a result of death or permanent disability, Lederman or his estate, as applicable, is entitled to the following payments and benefits: (1) his fully earned but unpaid base salary through the date of termination at the rate then in effect; (2) a lump sum cash payment in an amount equal to six months of his base salary as in effect immediately prior to the date of termination; and (3) the automatic acceleration of the vesting and exercisability of outstanding unvested stock awards.

If Lederman is terminated without Cause or resigns for Good Reason during the period commencing 90 days prior to a Change in Control (as defined below) or 12 months following a Change in Control, Lederman shall be entitled to receive, in lieu of the severance benefits described above, the following payments and benefits: (1) a lump sum cash payment in an amount equal to 36 months of his base salary as in effect immediately prior to the date of termination, except that, if and while Lederman is still entitled to the Sale Bonus (as defined below), it will only be 18 months; (2) continuation of health benefits for Lederman and his eligible dependents for a period of 24 months following the date of termination, except that, if and while Lederman is still entitled to the Sale Bonus it will only be 12 months; and (3) the automatic acceleration of the vesting and exercisability of outstanding unvested stock awards.

If during the term of the Lederman Agreement or within 120 days after Lederman is terminated without Cause or resigns for Good Reason, following a Change in Control, the Company consummates a Change in Control transaction in which the Enterprise Value (as defined below) equals or exceeds \$50 million, Lederman shall be entitled to receive a lump sum payment equal to 4.4% of the Enterprise Value (the "Sale Bonus"). The Sale Bonus provision of the Lederman Agreement will terminate upon the Company granting Lederman long-term incentive compensation mutually agreed to by the Board and Lederman.

For purposes of the Lederman Agreement, "Cause" generally means (1) commission of an act of fraud, embezzlement or dishonesty or some other illegal act that has a demonstrable material adverse impact on the Company or any successor or affiliate of the Company, (2) conviction of, or entry into a plea of "guilty" or "no contest" to, a felony, (3) unauthorized use or disclosure of the Company's confidential information or trade secrets or any successor or affiliate of the Company that has, or may reasonably be expected to have, a material adverse impact on any such entity; (4) gross negligence, failure to follow a material, lawful and reasonable request of the Board or material violation of any duty of loyalty to the Company or any successor or affiliate of the Company, or any other demonstrable material willful misconduct by Lederman, (5) ongoing and repeated failure or refusal to perform or neglect of his duties as required by his employment agreement, which failure, refusal or neglect continues for 30 days following Lederman's receipt of written notice from the Board stating with specificity the nature of such failure, refusal or neglect, provided that such failure to perform is not as a result of illness, injury or medical incapacity, or (6) material breach of any Company policy or any material provision of the Lederman Agreement.

For purposes of the Lederman Agreement, "Good Reason" generally means (1) a material diminution in Lederman's title, authority, duties or responsibilities, (2) a material diminution in Lederman's base compensation, unless such a reduction is imposed across-the-board to the Company's senior management, and such reduction is not greater than 15%, (3) a material change in the geographic location at which Lederman must perform his duties, (4) any other action or inaction that constitutes a material breach by the Company or any successor or affiliate of the Company's obligations to Lederman under the Lederman Agreement, or (5) the Company elects not to renew the Lederman Agreement for another term.

For purposes of the Lederman Agreement, "Change in Control" generally means:

- A transaction or series of transactions (other than public offerings) that results in any person or entity or related group of persons or entities (other than the Company, its subsidiaries, an employee benefit plan maintained by the Company or any of its subsidiaries or a person or entity that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of more than 40% of the total combined voting power of the Company's securities outstanding immediately after such acquisition;

- a merger, consolidation, reorganization, or business combination or (2) the sale, exchange or transfer of all or substantially all of the Company's assets in any single transaction or series of transactions or (3) the acquisition of assets or stock of another entity, in each case other than a transaction:
 - which results in the Company's voting securities outstanding immediately before the transaction continuing to represent, directly or indirectly, at least 60% of the combined voting power of the successor entity's outstanding voting securities immediately after the transaction, and
 - after which no person or group beneficially owns voting securities representing 40% or more of the combined voting power of the Company or its successor; provided, however, that no person or group is treated as beneficially owning 40% or more of combined voting power of the Company or its successor solely as a result of the voting power held in the Company prior to the consummation of the transaction.

For purposes of the Lederman Agreement, "Enterprise Value" generally means (1) in a Change in Control in which consideration is received by the Company, the total cash and non-cash consideration, including debt assumed, received by the Company, net of any fees and expenses in connection with the transaction and (2) in a Change in Control in which consideration is payable to the stockholders of the Company, the total cash and non-cash consideration, including debt assumed, payable to the Company's stockholders net of any fees and expenses in connection with the transaction. Enterprise Value also includes any cash or non-cash consideration payable to the Company or to the Company's stockholders on a contingent, earnout or deferred basis.

Employment Agreement with Gregory Sullivan

On June 3, 2014, the Company entered into an employment agreement (the "Sullivan Agreement") with Dr. Gregory Sullivan ("Sullivan") to serve as our Chief Medical Officer. The base salary for Sullivan under the Sullivan Agreement was \$225,000 per annum, and is \$400,000 as of January 1, 2019. The Sullivan Agreement had an initial term of one year and automatically renews for successive one year terms unless either party delivers written notice not to renew at least 60 days prior to the end of the current term.

Pursuant to the Sullivan Agreement, if the Company terminates Sullivan's employment without Cause (as defined below) or Executive resigns for Good Reason (as defined below), Sullivan is entitled to the following payments and benefits: (1) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other benefits, if any, under any group retirement plan, nonqualified deferred compensation plan, equity award plan or agreement, health benefits plan or other group benefit plan to which Sullivan may be entitled to under the terms of such plans or agreements; (2) a lump sum cash payment in an amount equal to 12 months of his base salary as in effect immediately prior to the date of termination; (3) continuation of health benefits for Sullivan and his eligible dependents for a period of 12 months following the date of termination; and (4) the automatic acceleration of the vesting and exercisability of outstanding unvested stock awards as to the number of stock awards that would have vested over the 12-month period following termination had Sullivan remained continuously employed by the Company during such period.

Pursuant to the Sullivan Agreement, if Sullivan's employment is terminated as a result of death or permanent disability, Sullivan or his estate, as applicable, is entitled to his fully earned but unpaid base salary through the end of the month in which termination occurs at the rate then in effect.

For purposes of the Sullivan Agreement, "Cause" generally means (1) commission of an act of fraud, embezzlement or dishonesty or some other illegal act that has a demonstrable material adverse impact on the Company or any successor or affiliate of the Company, (2) conviction of, or entry into a plea of "guilty" or "no contest" to, a felony, (3) unauthorized use or disclosure of the Company's confidential information or trade secrets or any successor or affiliate of the Company that has, or may reasonably be expected to have, a material adverse impact on any such entity, (4) gross negligence, failure to follow a material, lawful and reasonable request of the Company or material violation of any duty of loyalty to the Company or any successor or affiliate of the Company, or any other demonstrable material misconduct by Sullivan, (5) ongoing and repeated failure or refusal to perform or neglect of his duties as required by his employment agreement, which failure, refusal or neglect continues for 30 days following Sullivan's receipt of written notice from the Company stating with specificity the nature of such failure, refusal or neglect, or (6) material breach of any Company policy or any material provision of the Sullivan Agreement.

For purposes of the Sullivan Agreement, “Good Reason” generally means (1) a material diminution in Executive’s title, authority, duties or responsibilities, (2) a material diminution in the executive officer’s base compensation, unless such a reduction is imposed across-the-board to the Company’s senior management and such reduction is not greater than 15%, (3) a material change in the geographic location at which the executive officer must perform his duties, (4) any other action or inaction that constitutes a material breach by the Company or any successor or affiliate of the Company’s obligations to Sullivan under the Agreement, or (5) the Company elects not to renew the Agreement for another term.

Directors Compensation Table

The following table sets forth summary information concerning the total compensation paid to our non-employee directors in 2017 for services to our Company.

Name	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	Total (\$)
Margaret Smith Bell	\$ —	\$ 65,869	\$ 65,869
Patrick Grace	\$ —	\$ 65,869	\$ 65,869
David Grange	\$ —	\$ 83,979	\$ 83,979
Donald Landry	\$ —	\$ 65,869	\$ 65,869
Ernest Mario*	\$ —	\$ 12,416	\$ 12,416
Charles Mather IV**	\$ —	\$ 65,869	\$ 65,869
Adeoye Olukotun	\$ —	\$ 12,396	\$ 12,396
John Rhodes ⁽²⁾	\$ —	\$ 98,803	\$ 98,803
Samuel Saks***	\$ —	\$ 12,416	\$ 12,416
Total:	\$ —	\$ 483,486	\$ 483,486

(1) Represents the aggregate grant date fair value of stock options granted in accordance with FASB ASC Topic 718. For the relevant assumptions used in determining these amounts, refer to Note 7 to our audited financial statements. These amounts do not necessarily correspond to the actual value that may be recognized from the stock option grant.

(2) Mr. Rhodes received additional stock options for serving as lead director.

* Dr. Mario resigned from the Board on September 5, 2018.

** Mr. Mather resigned from the Board on February 16, 2019.

*** Dr. Saks resigned from the Board on August 21, 2018.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of our common stock as of the March 13, 2019:

- by each person who is known by us to beneficially own more than 5% of our common stock;
- by each of our officers and directors; and
- by all of our officers and directors as a group.

Unless otherwise indicated in the footnotes to the following table, each person named in the table has sole voting and investment power and that person's address is c/o Tonix Pharmaceuticals Holding Corp., 509 Madison Avenue, Suite 1608, New York New York 10022.

NAME OF OWNER	TITLE OF CLASS	NUMBER OF SHARES OWNED (1)	PERCENTAGE OF COMMON STOCK (2)
Seth Lederman	Common Stock	32,666 ⁽³⁾	*
Jessica Morris	Common Stock	4,602 ⁽⁴⁾	*
Bradley Saenger	Common Stock	4,977 ⁽⁵⁾	*
Gregory Sullivan	Common Stock	8,840 ⁽⁶⁾	*
Margaret Smith Bell	Common Stock	2,000 ⁽⁷⁾	*
Patrick Grace	Common Stock	2,701 ⁽⁸⁾	*
David Grange	Common Stock	700 ⁽⁹⁾	*
Donald Landry	Common Stock	3,332 ⁽¹⁰⁾	*
Adeoye Olukotun	Common Stock	—	*
John Rhodes	Common Stock	5,965 ⁽¹¹⁾	*
James Treco	Common Stock	—	*
Officers and Directors as a Group (11 persons)	Common Stock	65,458 ⁽¹²⁾	1.07%
Certain Beneficial Owners	Common Stock		
Iroquois Capital Management LLC	Common Stock	1,980,634 ⁽¹³⁾	24.95%

* Denotes less than 1%

- (1) Beneficial Ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options or warrants currently exercisable or convertible, or exercisable or convertible within 60 days of March 13, 2019 are deemed outstanding for computing the percentage of the person holding such option or warrant but are not deemed outstanding for computing the percentage of any other person.
- (2) Percentage based upon 6,089,728 shares of common stock issued and outstanding as of March 13, 2019.
- (3) Includes 20,133 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, 50 shares of common stock underlying warrants, 2,047 shares of common stock owned by Lederman & Co, 325 shares of common stock owned by L&L, 590 shares of common stock owned by Targent, 292 shares of common stock owned by Leder Laboratories, Inc. (Leder Labs), 292 shares of common stock owned by Starling, 2,270 shares owned through a 401(k) account, 4,590 shares owned through an IRA account and 310 shares owned by Dr. Lederman's spouse. Seth Lederman, as the Managing Member of Lederman & Co and Targent, the Manager of L&L and the Chairman of Leder Labs and Starling, has investment and voting control over the shares held by these entities.
- (4) Includes 4,415 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, and 23 shares of common stock underlying warrants.

- (5) Includes 4,083 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days.
- (6) Includes 6,205 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days.
- (7) Includes 2,000 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days.
- (8) Includes 2,425 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days.
- (9) Includes 700 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days.
- (10) Includes 2,410 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, 325 shares of common stock owned by L&L. Donald Landry, as a Member of L&L, has investment and voting control over the shares held by this entity.
- (11) Includes 3,493 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days and 125 shares of common stock underlying warrants.
- (12) Includes 45,864 shares of common stock underlying options which are currently exercisable or vested or become exercisable within 60 days, 2,047 shares of common stock owned by Lederman & Co, 325 shares of common stock owned by L&L, 590 shares of common stock owned by Targent, 292 shares of common stock owned by Leder Labs, 292 shares of common stock owned by Starling, 2,270 shares owned through a 401(k) account of Dr. Lederman, 4,590 shares owned through an IRA account of Dr. Lederman, 310 shares owned by Dr. Lederman's spouse and 198 shares of common stock underlying warrants owned directly by the executive officers and directors.
- (13) Based upon a Schedule 13G filed with the SEC on February 14, 2019 by Iroquois Capital Management L.L.C., Richard Abbe and Kimberly Page, Iroquois Master Fund Ltd. held 51,584 shares of Common Stock, 1,062 shares preferred stock convertible into 303,429 shares of Common Stock and warrants to purchase 356,975 shares of Common Stock; and Iroquois Capital Investment Group LLC held 79,050 shares of Common Stock, 1,913 shares of preferred stock convertible into 546,571 shares of Common Stock and warrants to purchase 643,025 shares of Common Stock. Mr. Abbe shares authority and responsibility for the investments made on behalf of Iroquois Master Fund with Ms. Kimberly Page, each of whom is a director of the Iroquois Master Fund Ltd. As such, Mr. Abbe and Ms. Page may each be deemed to be the beneficial owner of all shares of Common Stock held by, and underlying the preferred stock and warrants held by, Iroquois Master Fund. Iroquois Capital is the investment advisor for Iroquois Master Fund and Mr. Abbe is the President of Iroquois Capital. Mr. Abbe has the sole authority and responsibility for the investments made on behalf of Iroquois Capital Investment Group LLC. As such, Mr. Abbe may be deemed to be the beneficial owner of all shares of Common Stock held by, and underlying the preferred stock and warrants held by, Iroquois Master Fund and Iroquois Capital Investment Group LLC. Each of the Reporting Persons disclaims any beneficial ownership of any shares of Common Stock except to the extent of their pecuniary interest therein. As of March 13, 2019, all shares of preferred stock held by Iroquois Capital Management L.L.C., Iroquois Master Fund Ltd., Richard Abbe, Kimberly Page, Iroquois Capital Investment Group LLC had been converted into common stock. The mailing address for each beneficial owner is 125 Park Ave, 25th floor, NY, NY 10017.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of “related-party transactions.” For purposes of our policy only, a “related-party transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any “related party” are participants involving an amount that exceeds \$120,000.

Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A related party is any executive officer, director or a holder of more than five percent of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-party transaction, our Chief Compliance Officer must present information regarding the proposed related-party transaction to our Nominating and Corporate Governance Committee for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related parties, the benefits of the transaction to us and whether any alternative transactions are available. To identify related-party transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related-party transactions, our Nominating and Corporate Governance Committee will take into account the relevant available facts and circumstances including, but not limited to:

- whether the transaction was undertaken in the ordinary course of our business;
- whether the related party transaction was initiated by us or the related party;
- whether the transaction with the related party is proposed to be, or was, entered into on terms no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us from the related party transaction;
- the approximate dollar value of the amount involved in the related party transaction, particularly as it relates to the related party;
- the related party’s interest in the related party transaction, and
- any other information regarding the related party transaction or the related party that would be material to investors in light of the circumstances of the particular transaction.

The Nominating and Corporate Governance Committee shall then make a recommendation to the Board, who will determine whether or not to approve of the related party transaction, and if so, upon what terms and conditions. In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval.

During the last two fiscal years, there have been no related party transactions.

PROPOSALS OF SHAREHOLDERS FOR THE 2020 ANNUAL MEETING

If you want to submit a proposal for inclusion in our proxy statement for the 2020 Annual Meeting of shareholders, you may do so by following the procedures in Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). To be eligible for inclusion, shareholder proposals (other than nominees for directors) must be received at the Company’s principal executive office, at the following address: 509 Madison Avenue, Suite 1608, New York, New York 10022, Attention: Secretary, no earlier than February 4, 2020 and no later than March 6, 2020.

Under Rule 14a-4 promulgated under the Exchange Act, if a proponent of a proposal that is not intended to be included in the proxy statement fails to notify us of such proposal at least 45 days prior to the anniversary of the mailing date of the preceding year’s proxy statement, then we will be allowed to use our discretionary voting authority under proxies solicited by us when the proposal is raised at such Annual Meeting of shareholders, without any discussion of the matter in the proxy statement.

In addition, our Amended and Restated Bylaws contain an advance notice provision that requires that all business proposed by a shareholder that will be conducted or considered at a meeting must meet notice requirements. For business to be properly submitted by a shareholder for a vote at an Annual Meeting, the shareholder must (i) be a shareholder of record as of the record date for the meeting, (ii) be entitled to vote at the meeting, and (iii) have given timely notice in writing of the proposal to be submitted by the shareholder for a vote. The shareholder’s notice must be delivered to the Secretary at the Company’s principal executive office. To be timely, a shareholder’s notice must be received by the Secretary at least 60 calendar days before the date corresponding to the date for the annual meeting in the preceding year, and no more than 90 calendar days before that date; provided, however, if the date of the annual meeting is changed by more than 30 calendar days from the date corresponding to the date of the preceding year’s Annual Meeting, or if we did not hold an annual meeting in the preceding year, then the shareholder’s notice will be considered timely if it is received by the Secretary at least (a) 60 calendar days before the date for the annual meeting to be held or 10 calendar days following the date on which public announcement of the date for the annual meeting is first made by the Company, and (b) no more than 90 calendar days before the date for the Annual Meeting.

A shareholder’s notice to the Secretary must set forth as to each matter the shareholder proposes to bring before the annual meeting: (i) a description in reasonable detail of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and address, as they appear on the Company’s books, of the shareholder proposing such business and of the beneficial owner, if any, on whose behalf the proposal is made, (iii) such information regarding each director nominee or each matter of business to be proposed by such shareholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the U. S. Securities and Exchange Commission, or the SEC, had the nominee been nominated, or intended to be nominated, or the matter been proposed, or intended to be proposed by the Board; (iv) if applicable, the consent of each nominee to be named in the proxy statement and to serve as director of the Company if so elected; (v) the class and number of shares of the Company that are owned beneficially and of record by the shareholder proposing such business and by the beneficial owner, if any, on whose behalf the proposal is made, and (vi) any material interest of such shareholder proposing such business and the beneficial owner, if any, on whose behalf the proposal is made in such business.

OTHER BUSINESS

The Board knows of no business to be brought before the Annual Meeting other than as set forth above. If other matters properly come before the shareholders at the meeting, it is the intention of the persons named on the proxy to vote the shares represented thereby on such matters in accordance with their judgment.

By Order of the Board of Directors,

/s/ SETH LEDERMAN

Seth Lederman

Chief Executive Officer and Chairman of the Board of Directors

New York, New York

March 18, 2019

Appendix A

TONIX PHARMACEUTICALS HOLDING CORP. 2019 STOCK INCENTIVE PLAN (effective May 3, 2019, subject to shareholder approval)

1 General

1.1 **Purpose.** The purposes of the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan (as amended from time to time, the “Plan”) is to promote the interests of Tonix Pharmaceuticals Holding Corp. (the “Company”) and the stockholders of the Company by providing (i) executive officers and other employees of the Company and its Subsidiaries (as defined below), (ii) certain advisors who perform services for the Company and its Subsidiaries and (iii) non-employee members of the Board of Directors of the Company (the “Board”) with appropriate incentives and rewards to encourage them to enter into and continue in the employ and service of the Company and to acquire a proprietary interest in the long-term success of the Company, as well as to reward the performance of these individuals in fulfilling their personal responsibilities for long-range and annual achievements.

1.2 **Effective Date and Term.** The Plan will become effective upon the date it is approved by the stockholders of the Company (the “Effective Date”). Unless terminated earlier by the Committee, the Plan will expire on the tenth (10th) anniversary of the Effective Date.

1.3 **Definitions.** Capitalized terms in the Plan, unless defined elsewhere in the Plan, shall be defined as set forth below:

1934 Act. The term “1934 Act” shall mean the Securities Exchange Act of 1934, as amended, including the rules and regulations promulgated thereunder and any successor thereto.

Affiliated Company. The term “Affiliated Company” means any company, partnership, association, organization or other entity controlled by, controlling or under common control with the Company.

Award. The term “Award” means any award or benefit granted under the Plan, including, without limitation, Options, SARs, Restricted Stock, Restricted Stock Units, Other Stock-Based Awards and Cash-Based Awards.

Award Agreement. The term “Award Agreement” means a written or electronic Award grant agreement under the Plan.

Cash-Based Award. The term “Cash-Based Award” means a right or other interest granted to an Eligible Grantee under Section 4.2(vi) of the Plan that may be denominated or payable in cash, other than an Award pursuant to which the amount of cash is determined by reference to the value of a specific number of shares of Stock.

Change of Control. The term “Change of Control” shall be deemed to occur if and when:

- (i) any person, including a “person” as such term is used in Section 14(d)(2) of the 1934 Act (a “Person”), is or becomes a beneficial owner (as such term is defined in Rule 13d-3 under the 1934 Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company’s then outstanding securities;
- (ii) individuals who, as of the Effective Date, constitute the Board (the “Incumbent Board”) cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the Effective Date whose election, or nomination for election by the Company’s stockholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding for this purpose any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the 1934 Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board;

- (iii) all or substantially all of the assets of the Company are sold, transferred or distributed, or the Company is dissolved or liquidated; or
- (iv) a reorganization, merger, consolidation or other corporate transaction involving the Company (a “Transaction”) is consummated, in each case, with respect to which the stockholders of the Company immediately prior to such Transaction do not, immediately after the Transaction, own more than 50% of the combined voting power of the Company or other corporation resulting from such Transaction in substantially the same respective proportions as such stockholders’ ownership of the voting power of the Company immediately before such Transaction.

Notwithstanding the foregoing or any other provision of this Plan, the term Change of Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company. For the avoidance of doubt, solely with respect to any Award that constitutes “deferred compensation” subject to Section 409A of the Code and that is payable on account of a Change of Control (including any installments or stream of payments that are accelerated on account of a Change of Control), a Change of Control shall occur only if such event also constitutes a “change in the ownership”, “change in effective control”, and/or a “change in the ownership of a substantial portion of assets” of the Company as those terms are defined under Treasury Regulation §1.409A-3(i)(5), but only to the extent necessary to establish a time or form of payment that complies with Section 409A of the Code, without altering the definition of Change of Control for purposes of determining whether a Grantee’s rights to such Award become vested or otherwise unconditional upon the Change of Control.

Code. The term “Code” means the Internal Revenue Code of 1986, as amended. A reference to any provision of the Code shall include reference to any successor provision of the Code.

Committee. The term “Committee” means the committee of the Board described in Section 2 hereof and any sub-committee established by such Committee pursuant to Section 2.4.

Disability. The term “Disability” means “Disability” as defined in any Award Agreement to which the Grantee is a party.

Eligible Grantee. The term “Eligible Grantee” shall mean any Employee, Non-Employee Director or Key Advisor, as determined by the Committee in its sole discretion.

Employee. The term “Employee” means an active employee of the Company or a Subsidiary, but excluding any person who is classified by the Company or a Subsidiary as a “contractor” or “consultant,” no matter how characterized by the Internal Revenue Service, other governmental agency or a court, or any employee who is not actively employed, as determined by the Committee. Any change of characterization of an individual by the Internal Revenue Service or any court or government agency shall have no effect upon the classification of an individual as an Employee for purposes of this Plan, unless the Committee determines otherwise.

Fair Market Value. For purposes of determining the “Fair Market Value” of a share of Stock as of any date, the “Fair Market Value” as of that date shall be, unless otherwise determined by the Committee, the closing sale price during regular trading hours of the Stock on the date on the principal securities market in which shares of Stock is then traded; or, if there were no trades on that date, the closing sale price during regular trading hours of the Stock on the first trading day prior to that date. If the Stock is not publicly traded at the time a determination of Fair Market Value is required to be made hereunder, the determination of such amount shall be made by the Committee in such manner as it deems appropriate.

Grantee. The term “Grantee” means an Employee, Non-Employee Director or Key Advisor of the Company or a Subsidiary who has been granted an Award under the Plan.

ISO. The term “ISO” means any Option intended to be and designated as an incentive stock option within the meaning of Section 422 of the Code.

Key Advisor. The term “Key Advisor” means a consultant or other key advisor who performs services for the Company or a Subsidiary.

Non-Employee Director. The term “Non-Employee Director” means a member of the Board who is not an Employee.

NQSO. The term “NQSO” means any Option that is not designated as an ISO, or which is designated by the Committee as an ISO but which subsequently fails or ceases to qualify as an ISO.

Option. The term “Option” means a right, granted to an Eligible Grantee under Section 4.2(i), to purchase shares of Stock. An Option may be either an ISO or an NQSO.

Other Stock-Based Award. The term “Other Stock-Based Award” means a right or other interest granted to an Eligible Grantee under Section 4.2(v) of the Plan that may be denominated or payable in, valued in whole or in part by reference to, or otherwise based on, or related to, Stock, including but not limited to (i) unrestricted Stock awarded as a bonus or upon the attainment of Performance Goals or otherwise as permitted under the Plan, and (ii) a right granted to an Eligible Grantee to acquire Stock from the Company containing terms and conditions prescribed by the Committee.

Performance Goals. The term “Performance Goals” means performance goals based on the attainment on an absolute or relative basis by the Company or any Subsidiary of the Company or any Affiliated Company (or any division or business unit of any such entity), or any two or more of the foregoing, of performance goals established by the Committee in its sole discretion, based on one or more of the following criteria (if applicable, any performance criteria that are financial metrics, may be determined in accordance with United States Generally Accepted Accounting Principles (“GAAP”) or may be adjusted when established to include or exclude any items otherwise includable or excludable under GAAP): (i) the attainment of certain target levels of, or a specified percentage increase in, revenues, earnings, income before taxes and extraordinary items, net income, operating income, earnings before or after deduction for all or any portion of income tax, earnings before interest, taxes, depreciation and amortization or a combination of any or all of the foregoing; (ii) the attainment of certain target levels of, or a percentage increase in, after-tax or pre-tax profits including, without limitation, that attributable to continuing and/or other operations; (iii) the attainment of certain target levels of, or a specified increase in, operational cash flow; (iv) the achievement of a certain level of, reduction of, or other specified objectives with regard to limiting the level of increase in, all or a portion of, the Company’s bank debt or other long-term or short-term public or private debt or other similar financial obligations of the Company, which may be calculated net of such cash balances and/or other offsets and adjustments as may be established by the Committee; (v) earnings per share or the attainment of a specified percentage increase in earnings per share or earnings per share from continuing operations; (vi) the attainment of certain target levels of, or a specified increase in return on capital employed or return on invested capital; (vii) the attainment of certain target levels of, or a percentage increase in, after-tax or pre-tax return on stockholders’ equity; (viii) the attainment of certain target levels of, or a specified increase in, economic value added targets based on a cash flow return on investment formula; (ix) the attainment of certain target levels in, or specified increases in, the fair market value of the shares of the Company’s common stock; (x) the growth in the value of an investment in the Company’s common stock; (xi) the attainment of a certain level of, reduction of, or other specified objectives with regard to limiting the level in or increase in, all or a portion of controllable expenses or costs or other expenses or costs; (xii) gross or net sales, revenue and growth of sales revenue (either before or after cost of goods, selling and general administrative expenses, research and development expenses and any other expenses or interest); (xiii) total stockholder return; (xiv) return on assets or net assets; (xv) return on sales; (xvi) operating profit or net operating profit; (xvii) operating margin; (xviii) gross or net profit margin; (xix) cost reductions or savings; (xx) productivity; (xxi) operating efficiency; (xxii) working capital; (xxiii) market share; (xxiv) customer satisfaction; (xxv) workforce diversity; (xxvi) results of clinical trials; (xxvii) acceptance of a new drug application by a regulatory body; (xxviii) regulatory body approval for commercialization of a product; (xxix) launch of a new drug; (xxx) completion of out-licensing, in-licensing or disposition of product candidates or other acquisition or disposition projects; and (xxxi) any other objective or subjective business or individual measures of performance selected by the Committee. Any of the above Performance Goals may be compared to the performance of a selected group of comparison companies, or a published or special index that the Committee, in its sole discretion, deems appropriate, or as compared to various stock market indices. Subject to the limitations in Section 4.2, the Committee in its sole discretion may designate additional or alternative business criteria on which the Performance Goals may be based or adjust, or modify or amend the aforementioned business criteria. The relative weights of the criteria that comprise the Performance Goals shall be determined by the Committee in its sole discretion. In establishing the Performance Goals for a performance period, the Committee may establish different Performance Goals for individual Grantees or groups of Grantees. The Committee in its sole discretion shall have the authority to make equitable adjustments to the Performance Goals in recognition of unusual or non-recurring events affecting the Company or any Subsidiary of the Company or any Affiliated Company or the financial statements of the Company or any Subsidiary of the Company or any Affiliated Company, in response to changes in applicable laws or regulations, including changes in tax laws or generally accepted accounting principles or practices, or to account for items of gain, loss or expense determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business, as applicable. Performance Goals may include a threshold level of performance below which no Award will be earned, a level of performance at which the target amount of an Award will be earned and a level of performance at which the maximum amount of the Award will be earned.

Prior Plans. The term “Prior Plans” means the Company’s 2012 Amended and Restated Incentive Stock Option Plan, the Company’s 2014 Stock Incentive Plan, the Company’s 2016 Stock Incentive Plan, the Company’s 2017 Stock Incentive Plan and the Company’s 2018 Stock Incentive Plan.

Restricted Stock. The term “Restricted Stock” means an Award of shares of Stock to an Eligible Grantee under Section 4.2(iii) that may be subject to certain restrictions and to a risk of forfeiture. Stock issued upon the exercise of Options or SARs is not “Restricted Stock” for purposes of the plan, even if subject to post-issuance transfer restrictions or forfeiture conditions. When Restricted Stock vests, it ceases to be “Restricted Stock” for purposes of the Plan.

Restricted Stock Unit. The term “Restricted Stock Unit” means a right granted to an Eligible Grantee under Section 4.2(iv) to receive Stock or cash at the end of a specified deferral period, which right may be conditioned on the satisfaction of specified performance or other criteria.

Retirement. The term “Retirement” means any termination of employment or service as an Employee, Non-Employee Director or Key Advisor as a result of retirement in good standing under the rules of the Company or a Subsidiary, as applicable, then in effect.

Rule 16b-3. The term “Rule 16b-3” means Rule 16b-3, as from time to time in effect promulgated by the Securities and Exchange Commission under Section 16 of the 1934 Act, including any successor to such Rule.

Stock. The term “Stock” means shares of the common stock, par value \$0.001 per share, of the Company.

Stock Appreciation Right or SAR. The term “Stock Appreciation Right” or “SAR” means the right, granted to an Eligible Grantee under Section 4.2(ii), to be paid an amount measured by the appreciation in the Fair Market Value of Stock from the date of grant to the date of exercise of the right.

Subsidiary. The term “Subsidiary” means any present or future subsidiary corporation of the Company within the meaning of Section 424(f) of the Code, and any present or future business venture designated by the Committee in which the Company has a significant interest, including, without limitation, any subsidiary corporation in which the Company has at least a 50% ownership interest, as determined in the discretion of the Committee.

Substitute Award. The term “Substitute Award” means an Award granted or Stock issued by the Company in assumption of, or in substitution or exchange for, an award previously granted, or the right or obligation to make a future award, in all cases by a company acquired by the Company or any Subsidiary of the Company or with which the Company or a Subsidiary combines.

2 Administration

2 . 1 **Committee.** The authority to manage the operation of and administer the Plan shall be vested in a committee (the “Committee”) in accordance with this Section 2. The Committee shall be selected by the Board, and shall consist solely of two or more members of the Board who are non-employee directors within the meaning of Rule 16b-3. Unless otherwise determined by the Board, the Company’s Compensation Committee shall be designated as the “Committee” hereunder.

2.2 **Powers of the Committee.** The Committee’s administration of the Plan shall be subject to the following:

- (i) Subject to the provisions of the Plan, the Committee will have the authority and discretion to select from among the Eligible Grantees those persons who shall receive Awards, to determine the time or times of receipt, to determine the types of Awards and the number of shares covered by the Awards, and to establish the terms, conditions, performance criteria, restrictions, and other provisions of such Awards;
- (ii) The Committee will have the authority and discretion to interpret the Plan, to establish, amend, and rescind any rules and regulations relating to the Plan, to determine the terms and provisions of any Award Agreement made pursuant to the Plan, and to make all other determinations that may be necessary or advisable for the administration of the Plan;
- (iii) Any interpretation of the Plan by the Committee and any decision made by it under the Plan is final and binding on all persons; and
- (iv) In managing the operation of and administering the Plan, the Committee shall take action in a manner that conforms to the articles of incorporation and by-laws of the Company, and applicable state corporate law.

2 . 3 **Prohibition Against Repricing.** Other than pursuant to Section 3.4, the Committee shall not, without the approval of the Company’s stockholders, (a) lower the option price per share of an Option or SAR after it is granted, (b) cancel an Option or SAR when the exercise price per Share exceeds the Fair Market Value of one share in exchange for cash or another Award (other than in connection with a Change of Control), or (c) take any other action with respect to an Option or SAR that would be treated as a repricing under the rules and regulations of the principal U.S. national securities exchange on which the Company’s shares are then listed.

2.4 **Delegation of Authority.** To the extent not inconsistent with applicable law, the rules of the NASDAQ Stock Market or other provisions of the Plan, the Committee may, at any time, allocate all or any portion of its responsibilities and powers to any one or more of its members or, with respect to Awards made to Employees other than executive officers, the Chief Executive Officer, including without limitation, the power to designate Grantees hereunder and determine the amount, timing and terms of Awards hereunder. Any such allocation or delegation may be revoked by the Committee at any time.

2 . 5 **Indemnification.** Each person who is or shall have been a member of the Committee, or the Board, shall be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken in good faith or good faith failure to act under the Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company’s approval, or paid by him or her in satisfaction of any judgment in any such action, suit or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall be in addition to any other rights of indemnification or elimination of liability to which such persons may be entitled under the Company’s articles of incorporation or by-laws, as a matter of law, or otherwise, or any power that the Company may have to indemnify them or hold them harmless.

2.6 **Minimum Vesting Requirement for Awards.** Notwithstanding any other provision of the Plan to the contrary, equity-based Awards granted under the Plan shall vest no earlier than the first anniversary of the date the Award is granted (excluding, for this purpose, any (i) Substitute Awards, (ii) shares of Stock delivered in lieu of fully vested cash Awards and (iii) Awards to Directors that vest on the earlier of the one year anniversary of the date of grant or the next annual meeting of stockholders which is at least 50 weeks after the immediately preceding year's annual meeting); provided, that, the Committee may grant equity-based Awards without regard to the foregoing minimum vesting requirement with respect to a maximum of five percent (5%) of the available share reserve authorized for issuance under the Plan pursuant to Section 3.1 (subject to adjustment under Section 3.4); and, provided further, for the avoidance of doubt, that the foregoing restriction does not apply to the Committee's discretion to provide for accelerated exercisability or vesting of any Award, including in cases of retirement, death, disability or a Change of Control, in the terms of the Award or otherwise.

2.7 **Treatment of Dividends and Dividend Equivalents on Unvested Awards .** Notwithstanding any other provision of the Plan to the contrary, with respect to any Award that provides for or includes a right to dividends or dividend equivalents, if dividends are declared during the period that all or part of an equity Award is outstanding and unvested, such dividends (or dividend equivalents) shall either (i) not be paid or credited with respect to such unvested Award or (ii) be accumulated but remain subject to vesting requirement(s) to the same extent as the applicable Award and shall only be paid at the time or times such vesting requirement(s) are satisfied. In no event shall dividends or dividend equivalents be paid with respect to Options or Stock Appreciation Rights.

3 Available Shares of Stock Under the Plan

3.1 **Shares Available for Awards.** Subject to the adjustments described in Section 3 herein, the maximum number of shares of Stock reserved for the grant of Awards under the Plan shall be 1,400,000, less one (1) share for every one (1) share that was subject to an option or stock appreciation right granted after March 1, 2019 under any Prior Plan and 1.34 shares for every one (1) share that was subject to an award other than an option or stock appreciation right granted after March 1, 2019 under any Prior Plan. Any shares of Stock that are subject to Options or SARs shall be counted against this limit as one (1) share for every one (1) share granted, and any shares of Stock that are subject to Awards other than Options or SARs shall be counted against this limit as 1.34 shares for every one (1) share granted. After the Effective Date of the Plan (as provided in Section 1.2), no awards may be granted under any Prior Plan.

3.2 **Forfeited, Cancelled and Expired Awards.** Awards granted under the Plan, and awards outstanding after March 1, 2019 under any Prior Plan, that are forfeited, expire or are canceled or settled without issuance of Stock shall not count against the maximum number of shares that may be issued under the Plan as set forth in Section 3.1 and shall be available for future Awards under the Plan. Any Stock that again becomes available for Awards under the Plan pursuant to this Section 3.2 shall be added as (i) one (1) share for every one (1) share subject to Options or SARs granted under the Plan or options or stock appreciation rights granted under any Prior Plan, and (ii) as 1.34 shares for every one (1) share subject to Awards other than Options or Stock Appreciation Rights granted under the Plan or awards other than options or stock appreciation rights granted under any Prior Plan.

3.3 **Prohibition on Share Recycling.** Notwithstanding anything to the contrary, any and all Stock that is (i) withheld or tendered in payment of an Option (or in payment of an option under any Prior Plan) exercise price; (ii) withheld by the Company or tendered by the Grantee to satisfy any tax withholding obligation with respect to any Award (or any award under any Prior Plan); (iii) covered by a SAR (or a stock appreciation right under any Prior Plan) (in each case, to the extent that it is settled in Stock, without regard to the number of shares of Stock that are actually issued to the Grantee upon exercise); (iv) reacquired by the Company on the open market or otherwise using cash proceeds from the exercise of Options (or options under any Prior Plan), shall not be added to the maximum number of shares of Stock that may be issued under the Plan as set forth in Section 3.1.

3.4 **Adjustments.** In the event of any change in the Company's capital structure, including but not limited to a change in the number of shares of Stock outstanding, on account of (i) any stock dividend, spinoff, stock split, reverse stock split, extraordinary dividends or any similar equity restructuring, or (ii) any combination or exchange of equity securities, merger, consolidation, recapitalization, reorganization, or divestiture or any other similar event affecting the Company's capital structure, to reflect such change in the Company's capital structure, the Committee shall make appropriate equitable adjustments to (a) the maximum number of shares of Stock that may be issued under the Plan as set forth in Section 3.1, (b) the number of shares of Stock issuable upon outstanding Awards, (c) any individual Award limitations or restrictions, as applicable, and (d) the exercise price and any performance conditions applicable to outstanding Awards. In the event of any extraordinary dividend, divestiture or other distribution (other than ordinary cash dividends) of assets to stockholders, or any transaction or event described above, to the extent necessary to prevent the enlargement or diminution of the rights of Grantees, the Committee shall make appropriate equitable adjustments to the number or kind of shares subject to an outstanding Award, the exercise price applicable to an outstanding Award, and/or a Performance Goals. Any adjustments under this Section 3.4 shall be consistent with Section 409A or Section 424 of the Code, to the extent applicable, and made in a manner that does not adversely affect the exemption provided pursuant to Rule 16b-3, to the extent applicable. The Company shall give each Grantee notice of an adjustment to an Award hereunder and, upon notice, such adjustment shall be final, binding and conclusive for all purposes. Notwithstanding the foregoing, the Committee shall decline to adjust any Award made to a Grantee if such adjustment would violate applicable law.

3.5 **Fractional Shares.** The Company shall not be obligated to issue any fractional shares of Stock in settlement of Awards granted under the Plan. Except as otherwise provided in an Award Agreement or determined by the Committee, (i) the total number of shares issuable pursuant to the exercise, vesting or earning of an Award shall be rounded down to the nearest whole share, and (ii) no fractional shares shall be issued. The Committee may, in its discretion, determine that a fractional share shall be settled in cash.

3.6 **Substitute Awards; Plans of Acquired Companies .** Substitute Awards shall not count against the maximum number of shares that may be issued under the Plan as set forth in Section 3.1. In addition, shares of Stock issued in connection with awards that are assumed, converted or substituted as a result of the acquisition of another company by the Company or any Subsidiary of the Company (including by way of merger, combination or similar transaction) will not count against the number of shares of Stock that may be issued under the Plan. Available shares under a stockholder-approved plan of an acquired company (as appropriately adjusted to reflect the transaction) may be used for Awards under the Plan and do not reduce the maximum number of shares available for grant under the Plan, subject to applicable stock exchange requirements.

3.7 **Source of Shares.** Shares of Stock to be delivered under the Plan shall be made available from authorized and unissued Stock, or authorized and issued Stock reacquired and held as treasury shares or otherwise or a combination thereof.

4 Awards

4.1 **General.** The term of each Award shall be for such period as may be determined by the Committee, subject to the limitations set forth below. Subject to the terms of the Plan and any applicable Award Agreement, payments to be made by the Company or any Subsidiary of the Company upon the grant, maturation, or exercise of an Award may be made in such forms as the Committee shall determine at the date of grant or thereafter, including, without limitation, cash, Stock, or other property. In addition to the foregoing, the Committee may impose on any Award or the exercise thereof, at the date of grant, such additional terms and conditions not inconsistent with the provisions of the Plan, including, but not limited to forfeiture and clawback provisions, as the Committee shall determine; provided, however, that any such terms and conditions shall not be inconsistent with Section 409A of the Code.

4.2 **Types of Awards.** The Committee is authorized to grant the Awards described in this Section 4.2, under such terms and conditions as deemed by the Committee to be consistent with the purposes of the Plan. Such Awards may be granted with value and payment contingent upon Performance Goals. Each Award shall be evidenced by an Award Agreement containing such terms and conditions applicable to such Award as the Committee shall determine.

- (i) *Options.* The Committee is authorized to grant Options to Grantees on the following terms and conditions:
 - a. Type of Award. The Award Agreement evidencing an Option shall designate the Option as either an ISO or an NQSO, as determined in the discretion of the Committee. At the time of the grant of Options, the Committee may place restrictions on the exercisability or vesting of Options that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals.

- b. Exercise Price. The exercise price of each Option granted under this Section 4.2 shall be established by the Committee or shall be determined by a method established by the Committee at the time the Option is granted; provided, however, that the exercise price shall not be less than 100% of the Fair Market Value of a share of Stock on the date of grant of the Award. Notwithstanding the foregoing, the exercise price of any Substitute Awards may be issued at any such price as the Committee determines necessary in order to preserve for such newly Eligible Grantee the economic value of all or a portion of such acquired entity award.
 - c. Exercise. Upon satisfaction of the applicable conditions relating to vesting and exercisability, as determined by the Committee and set forth in the Award Agreement, and upon provision for the payment in full of the exercise price and applicable taxes due, the Grantee shall be entitled to exercise the Option and receive the number of shares of Stock issuable in connection with the Option exercise provided, however, that no Option may be exercised more than ten years after its grant date. Except as set forth in Section 4.3, no NQSO granted hereunder may be exercised after the earlier of (A) the expiration of the NQSO or (B) unless otherwise provided by the Committee in an Award Agreement, ninety days after the severance of an NQSO holder's employment or service with the Company or any Subsidiary. The shares issued in connection with the Option exercise may be subject to such conditions and restrictions as the Committee may determine, from time to time. An Option may be exercised by any method as may be permitted by the Committee from time to time, including but not limited to any "net exercise" or other "cashless" exercise method.
 - d. Restrictions Relating to ISOs. In addition to being subject to the terms and conditions of this Section 4.2(i), ISOs shall comply with all other requirements under Section 422 of the Code. Accordingly, ISOs may be granted only to Eligible Grantees who are employees (as described in Treasury Regulation Section 1.421-7(h)) of the Company or of any "Parent Corporation" (as defined in Code Section 424(e)) or of any "Subsidiary Corporation" (as defined in Code Section 424(f)) on the date of grant. The aggregate Fair Market Value (determined as of the time the ISO is granted) of the Stock with respect to which ISOs (under all option plans of the Company and of any Parent Corporation and of any Subsidiary Corporation) are exercisable for the first time by an Eligible Grantee during any calendar year shall not exceed \$100,000. ISOs shall not be transferable by the Eligible Grantee otherwise than by will or the laws of descent and distribution and shall be exercisable, during the Eligible Grantee's lifetime, only by such Eligible Grantee. The Committee shall not grant ISOs to any Employee who, at the time the ISO is granted, owns stock possessing (after the application of the attribution rules of Section 424(d) of the Code) more than ten percent (10%) of the total combined voting stock of the Company or of any Parent Corporation or of any Subsidiary Corporation, unless the exercise price of the ISO is fixed at not less than one hundred and ten percent (110%) of the Fair Market Value of a share of Common Stock on the date of grant and the exercise of such ISO is prohibited by its terms after the fifth (5th) anniversary of the ISO's date of grant. In addition, no ISO shall be issued to an Eligible Grantee in tandem with a NQSO issued to such Eligible Grantee in accordance with Treasury Regulation Section 14a.422A-1, Q/A-39. Subject to Section 3.4, a maximum of 1,000,000 shares may be granted in the form of ISOs.
- (ii) *SARs.* The Committee is authorized to grant SARs to Grantees on the following terms and conditions:
- a. In General. SARs may be granted independently or in tandem with an Option at the time of grant of the related Option. An SAR granted in tandem with an Option shall be exercisable only to the extent the underlying Option is exercisable. Payment of an SAR may be made in cash, Stock, or a combination of the foregoing, as specified in the Award Agreement or determined in the sole discretion of the Committee. At the time of the grant of SARs, the Committee may place restrictions on the exercisability or vesting of SARs that shall lapse, in whole or in part, upon the passage of time and/or the attainment of Performance Goals.

- b. Term and Exercisability of SARs. SARs shall be exercisable over the exercise period at such times and upon such conditions as the Committee may determine, as reflected in the Award Agreement; provided, however, that no SAR may be exercised more than ten years after its grant date. Except as set forth in Section 4.3, no SAR granted hereunder may be exercised after the earlier of (A) the expiration of the SAR or (B) unless otherwise provided by the Committee in an Award Agreement, ninety days after the severance of an SAR holder's employment or service with the Company or any Subsidiary.
 - c. Payment. An SAR shall confer on the Grantee a right to receive an amount with respect to each share of Stock subject thereto, upon exercise thereof, equal to the excess of (A) the Fair Market Value of one share of Stock on the date of exercise over (B) the grant price of the SAR (which in the case of an SAR granted in tandem with an Option shall be equal to the exercise price of the underlying Option, and which in the case of any other SAR shall be such price as the Committee may determine but in no event shall be less than the Fair Market Value of a share of Stock on the date of grant of such SAR). An SAR may be exercised by giving written notice of such exercise to the Committee or its designated agent.
- (iii) *Restricted Stock.* The Committee is authorized to grant Restricted Stock to Grantees on the following terms and conditions:
- a. Issuance and Restrictions. Restricted Stock shall be subject to such restrictions on transferability and other restrictions, if any, as the Committee may impose at the date of grant, which restrictions may lapse separately or in combination at such times, under such circumstances, in such installments, or otherwise, as the Committee may determine. The Committee may place restrictions on Restricted Stock that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals. Except to the extent restricted under the Award Agreement relating to the Restricted Stock, a Grantee granted Restricted Stock shall have all of the rights of a stockholder including, without limitation, the right to vote Restricted Stock and the right to receive dividends thereon.
 - b. Certificates for Stock. Restricted Stock granted under the Plan may be evidenced in such manner as the Committee shall determine. If certificates representing Restricted Stock are registered in the name of the Grantee, such certificates shall bear an appropriate legend referring to the terms, conditions, and restrictions applicable to such Restricted Stock, and the Company may retain physical possession of the certificate.
 - c. Dividends. The Committee may not provide for the current payment of dividends for Restricted Stock; for such Awards, dividends may accrue, but shall not be payable, unless and until the Award vests. Stock distributed in connection with a stock split or stock dividend shall be subject to the transfer restrictions, forfeiture risks and vesting conditions to the same extent as the Restricted Stock with respect to which such Stock or other property has been distributed.
- (iv) *Restricted Stock Units.* The Committee is authorized to grant Restricted Stock Units to Grantees, subject to the following terms and conditions:
- a. Conditions to Vesting. At the time of the grant of Restricted Stock Units, the Committee may place restrictions on Restricted Stock Units that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals.
 - b. Benefit Upon Vesting. Unless otherwise provided in an Award Agreement, upon the vesting of a Restricted Stock Unit, there shall be delivered to the Grantee, within 30 days of the date on which such Award (or any portion thereof) vests, the number of shares of Stock equal to the number of Restricted Stock Units becoming so vested.

- c. Dividend Equivalents. To the extent provided in an Award Agreement, and subject to Section 2.7 and the requirements of Section 409A of the Code, an Award of Restricted Stock Units may provide the Grantee with the right to receive dividend equivalent payments with respect to Stock subject to the Award, which payments may be settled in cash or Stock, as determined by the Committee. Any such settlements and any crediting of dividend equivalents may, at the time of grant of the Restricted Stock Unit, be made subject to the transfer restrictions, forfeiture risks, vesting and conditions of the Restricted Stock Units and subject to such other conditions, restrictions and contingencies as the Committee shall establish at the time of grant of the Restricted Stock Unit, including the reinvestment of such credited amounts in Stock equivalents, provided that all such conditions, restrictions and contingencies shall comply with the requirements of Section 409A of the Code.
- (v) *Other Stock-Based Awards*. The Committee is authorized to grant Awards to Grantees in the form of Other Stock-Based Awards, as deemed by the Committee to be consistent with the purposes of the Plan. At the time of the grant of Other Stock-Based Awards, the Committee may place restrictions on the payout or vesting of Other Stock-Based Awards that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals. The Committee shall determine the terms and conditions of such Awards at the date of grant. Other Stock-Based Awards may not be granted with the right to receive dividend equivalent payments.
- (vi) *Cash-Based Awards*. The Committee is authorized to grant Awards to Grantees in the form of Cash-Based Awards, as deemed by the Committee to be consistent with the purposes of the Plan. At the time of the grant of Cash-Based Awards, the Committee may place restrictions on the payout or vesting of Cash-Based Awards that shall lapse, in whole or in part, upon the passage of time and/or attainment of Performance Goals. The Committee shall determine the terms and conditions of such Awards at the date of grant.
- (vii) *Settlement of Options and SARs*. Shares of Stock delivered pursuant to the exercise of an Option or SAR shall be subject to such conditions, restrictions and contingencies as the Committee may establish in the applicable Award Agreement. Settlement of SARs may be made in shares of Stock (valued at their Fair Market Value at the time of exercise), in cash, or in a combination thereof, as determined in the discretion of the Committee and set forth in the Award Agreement. The Committee, in its discretion, may impose such conditions, restrictions and contingencies with respect to shares of Stock acquired pursuant to the exercise of an Option or an SAR as the Committee determines to be desirable.
- (viii) *Vesting; Additional Terms*. Subject to Section 2.6 and except as provided in Section 4.3, Awards granted hereunder shall vest as determined by the Committee and set forth in the Award Agreement. The term of any Award granted under the Plan will not exceed ten years from the date of grant.
- (ix) *Performance-Based Awards*.
- a. The Committee may determine that Restricted Stock, Restricted Stock Units, Other Stock-Based Awards or Cash-Based Awards shall vest or be delivered based on Performance Goals.
- b. The Committee in its sole discretion shall have the authority to make adjustments to the Performance Goals in recognition of events affecting the Company or any Subsidiary of the Company or any Affiliated Company or the financial statements of the Company or any Subsidiary of the Company or any Affiliated Company, for the following items: (1) asset write-downs; (2) litigation or claim judgments or settlements; (3) the effect of changes in tax laws, accounting principles, regulations, or other laws or regulations affecting reported results; (4) any reorganization and restructuring programs, including discontinued operations; (5) acquisitions or divestitures; (6) unusual, infrequently occurring, nonrecurring or extraordinary items identified in the Company's audited financial statements, including footnotes; (7) any reorganization or change in the corporate or capital structures of the Company; (8) foreign exchange gains and losses; (9) business interruption events; (10) annual incentive payments or other bonuses; (11) capital charges; or (12) any other adjustments determined by the Committee with respect to an Award.

- (x) *Automatic Extended Exercisability in Certain Cases.* Notwithstanding the foregoing provisions of this Section, if the date an Award would otherwise terminate is a date that the Grantee is prohibited from exercising the Award under the Company's insider trading policy or such other conditions under applicable securities laws as the Committee shall specify, the term of the Award shall be extended to the second business day after the Grantee is no longer so prohibited from exercising the Award, but in no event shall the Award be extended beyond the original stated term of the Award.

4.3 **Change of Control of the Company.**

- (i) The Committee may, at the time an Award is made or at any time prior to, coincident with or after the time of a Change of Control:
- a. provide for the adjustment of any Performance Goals as the Committee deems necessary or appropriate to reflect the Change of Control;
 - b. provide for the cancellation of any Awards then outstanding if the surviving entity or acquiring entity (or the surviving or acquiring entity's parent company) in the Change of Control replaces the Awards with new rights of substantially equivalent value, as determined by the Committee. For an Award to be validly assumed by a successor for purpose of this Section 4.3(b), it must (x) provide such Grantee with rights and entitlements substantially equivalent to or better than the rights, terms and conditions applicable under such Award, including, but not limited to, an identical or better exercise or vesting schedules; (y) have substantially equivalent value to such Award (determined at the time of the Change of Control); and (z) be based on stock that is traded on an established U.S. securities market or an established securities market outside the United States upon which the Grantees could readily trade the stock without administrative burdens or complexities. In the event of any ambiguity or discrepancy, the determination of the Committee shall be final and binding;
 - c. provide that upon an involuntary termination of a Grantee's employment as a result of a Change of Control, any time periods shall accelerate, and any other conditions relating to the vesting, exercise, payment or distribution of an Award shall be waived; or
 - d. provide that Awards shall be purchased for an amount of cash equal to the amount that could have been obtained for the shares covered by a Restricted Stock Award if it had been vested and or by an Option or SAR if it had been exercised at the time of the Change of Control, provided however that Awards outstanding as of the date of the Change of Control may be cancelled and terminated without payment if the consideration payable with respect to one share of Stock in connection with the Change of Control is less than the exercise price or grant price applicable to such Award, as applicable.

4 . 4 **Limitation on Award Grants to Non-Employee Directors .** The maximum number of shares of Stock subject to Awards granted during a single fiscal year to any non-employee director, taken together with any cash fees paid to such non-employee director during the fiscal year, in respect of such director's service as a member of the Board during such year (including service as a member or chair of any committees of the Board), shall not exceed \$350,000 in total value (calculating the value of any such Awards based on the grant date fair value of such Awards for financial reporting purposes); *provided*, that the Board may make exceptions to this limit for individual non-employee directors in extraordinary circumstances as the Board may determine in its sole discretion, so long as the aggregate limit does not exceed \$500,000 in total value during a fiscal year.

5 Operation

5.1 **Duration.** Grants may be made under the Plan through May 3, 2029. In the event of Plan termination while Awards remain outstanding, the Plan shall remain in effect as long as any Awards under it are outstanding, although no further grants may be made following Plan termination.

5.2 **Uncertificated Stock.** Nothing contained in the Plan shall prohibit the issuance of Stock on an uncertificated basis, to the extent allowed by the Company's Articles of Incorporation and Bylaws, by applicable law and by the applicable rules of any stock exchange.

5.3 **Tax Withholding.** All distributions under the Plan are subject to withholding of all applicable taxes, and the Committee may condition the delivery of any shares or other benefits under the Plan on satisfaction of the applicable withholding obligations. The Committee, in its discretion, and subject to such requirements as the Committee may impose prior to the occurrence of such withholding, may permit such withholding obligations to be satisfied through cash payment by the Grantee, through the surrender of shares of Stock which the Grantee already owns, through withholding from other compensation payable to the Grantee or through the surrender of unrestricted shares of Stock to which the Grantee is otherwise entitled under the Plan, but only to the extent of the minimum amount required to be withheld under applicable law (or, if permitted by the Company, such other withholding rate as will not cause adverse accounting consequences and is permitted under applicable IRS withholding rules).

5.4 **Use of Shares.** Subject to the limitations on the number of shares of Stock that may be delivered under the Plan, the Committee may use available shares of Stock as the form of payment for compensation, grants or rights earned or due under any other compensation plans or arrangements of the Company or a Subsidiary, including the plans and arrangements of the Company or a Subsidiary assumed in business combinations.

5.5 **Nontransferability.** Awards granted under the Plan, and during any period of restriction on transferability, shares of Common Stock issued in connection with the exercise of an Option or a SAR, or vesting of a Restricted Stock Award may not be sold, pledged, hypothecated, assigned, margined or otherwise transferred by a Grantee in any manner other than by will or the laws of descent and distribution, unless and until the shares underlying such Award have been issued, and all restrictions applicable to such shares have lapsed or have been waived by the Committee. No Award or interest or right therein shall be subject to the debts, contracts or engagements of a Grantee or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law, by judgment, lien, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy and divorce), and any attempted disposition thereof shall be null and void, of no effect, and not binding on the Company in any way. Notwithstanding the foregoing, the Committee may permit Options and/or shares issued in connection with an Option or a SAR exercise that are subject to restrictions on transferability, to be transferred one time and without payment or consideration to a member of a Grantee's immediate family or to a trust or similar vehicle for the benefit of a Grantee's immediate family members. During the lifetime of a Grantee, all rights with respect to Awards shall be exercisable only by such Grantee or, if applicable pursuant to the preceding sentence, a permitted transferee.

5.6 **Form and Time of Elections.** Unless otherwise specified herein, each election required or permitted to be made by any Grantee or other person entitled to benefits under the Plan, and any permitted modification, or revocation thereof, shall be in writing filed with the Committee at such times, in such form, and subject to such restrictions and limitations, not inconsistent with the terms of the Plan, as the Committee shall require.

5.7 **Agreement with Company.** An Award under the Plan shall be subject to such terms and conditions, not inconsistent with the Plan, as the Committee shall, in its sole discretion, prescribe. The terms and conditions of any Award to any Grantee shall be reflected in such form of written document as is determined by the Committee. A copy of such document shall be provided to the Grantee, and the Committee may, but need not, require that the Grantee shall sign a copy of such document. Such document is referred to in the Plan as an "Award Agreement" regardless of whether any Grantee signature is required.

5 . 8 **Gender and Number.** Where the context admits, words in any gender shall include any other gender, words in the singular shall include the plural and the plural shall include the singular.

5.9 **Limitation of Implied Rights.**

- (ii) The Plan shall at all times be unfunded and neither a Grantee nor any other person shall, by reason of participation in the Plan, acquire any right in or title to any assets, funds or property of the Company or any Subsidiary whatsoever, including, without limitation, any specific funds, assets, or other property which the Company or any Subsidiary, in its sole discretion, may set aside in anticipation of a liability under the Plan. Nothing contained in the Plan and no action taken pursuant hereto shall create or be construed to create a fiduciary relationship between the Company and any Grantee or any other person. A Grantee shall have only a contractual right to the Stock or amounts, if any, payable under the Plan, unsecured by any assets of the Company or any Subsidiary, and nothing contained in the Plan shall constitute a guarantee that the assets of the Company or any Subsidiary shall be sufficient to pay any benefits to any person.
- (iii) The Plan does not constitute a contract of employment or service, and selection as a Grantee will not give any participating Employee, Non-Employee Director or Key Advisor the right to be retained in the employ or service of the Company or any Subsidiary, nor any right or claim to any benefit under the Plan, unless such right or claim has specifically accrued under the terms of the Plan. Except as otherwise provided in the Plan or the Award Agreement, no Award under the Plan shall confer upon the holder thereof any rights as a stockholder of the Company prior to the date on which the individual fulfills all conditions for receipt of such rights.

5.10 **Section 409A.** It is intended that all Options and SARs granted under the Plan shall be exempt from the provisions of Section 409A of the Code and that all other Awards under the Plan, to the extent that they constitute “non-qualified deferred compensation” within the meaning of Section 409A of the Code, will comply with Section 409A of the Code (and any regulations and guidelines issued thereunder). The Plan and any Award Agreements issued hereunder may be amended in any respect deemed by the Board or the Committee to be necessary in order to preserve compliance with Section 409A of the Code. Notwithstanding anything in this Plan to the contrary, if required by Section 409A of the Code, if a Grantee is considered a “specified employee” for purposes of Section 409A of the Code and if payment of any Award under this Plan is required to be delayed for a period of six months after “separation from service” within the meaning of Section 409A of the Code, payment of such Award shall be delayed as required by Section 409A of the Code, and the accumulated amounts with respect to such Award shall be paid in a lump sum payment within ten days after the end of the six month period. If the Grantee dies during the postponement period prior to the payment of benefits, the amounts withheld on account of Section 409A of the Code shall be paid to the Grantee’s beneficiary within sixty (60) days after the date of the Grantee’s death. For purposes of Section 409A of the Code, each payment under the Plan shall be treated as a separate payment. In no event shall a Grantee, directly or indirectly, designate the calendar year of payment. To the extent that any provision of the Plan would cause a conflict with the requirements of section 409A of the Code, or would cause the administration of the Plan to fail to satisfy the requirements of Section 409A of the Code, such provision shall be deemed null and void to the extent permitted by applicable law. Notwithstanding anything in the Plan or any Award Agreement to the contrary, each Grantee shall be solely responsible for the tax consequences of Awards under the Plan, and in no event shall the Company have any responsibility or liability if an Award does not meet any applicable requirements of Section 409A of the Code. Although the Company intends to administer the Plan to prevent taxation under Section 409A of the Code, the Company does not represent or warrant that the Plan or any Award complies with any provision of federal, state, local or other tax law.

5.11 **Regulations and Other Approvals.**

- (i) The obligation of the Company to sell or deliver Stock with respect to any Award granted under the Plan shall be subject to all applicable laws, rules and regulations, including all applicable federal and state securities laws, and the obtaining of all such approvals by governmental agencies as may be deemed necessary or appropriate by the Committee.

- (ii) Each Award is subject to the requirement that, if at any time the Committee determines, in its absolute discretion, that the listing, registration or qualification of Stock issuable pursuant to the Plan is required by any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory body is necessary or desirable as a condition of, or in connection with, the grant of an Award or the issuance of Stock, no such Award shall be granted or payment made or Stock issued, in whole or in part, unless listing, registration, qualification, consent or approval has been effected or obtained free of any conditions not acceptable to the Committee.
- (iii) In the event that the disposition of Stock acquired pursuant to the Plan is not covered by a then current registration statement under the Securities Act and is not otherwise exempt from such registration, such Stock shall be restricted against transfer to the extent required by the Securities Act of 1933, as amended, or regulations thereunder, and applicable state securities laws, and the Committee may require a Grantee receiving Stock pursuant to the Plan, as a condition precedent to receipt of such Stock, to represent to the Company in writing that the Stock acquired by such Grantee is acquired for investment only and not with a view to distribution.
- (iv) With respect to persons subject to section 16 of the 1934 Act, it is the intent of the Company that the Plan and all transactions under the Plan comply with all applicable provisions of Rule 16b-3.
- (v) All Awards under the Plan will be subject to any compensation, clawback and recoupment policies that may be applicable to the employees of the Company, as in effect from time to time and as approved by the Board or Committee, whether or not approved before or after the Effective Date. Subject to the requirements of applicable law, any such compensation, clawback and recoupment policies shall apply to Awards made after the effective date of the policy.

5.12 **Non-Employee Director Award Deferrals.** The Committee may permit a Non-Employee Director to defer receipt of the payment of cash or the delivery of shares that would otherwise be due to such Non-Employee Director in connection with any Restricted Stock, Restricted Stock Units, Other Stock-Based Awards or Cash-Based Awards. If any such deferral election is permitted, the Committee shall establish rules and procedures for such deferrals and may provide for interest or other earnings to be paid on such deferrals, which rules and procedures shall be consistent with applicable requirements of Section 409A of the Code. Unless otherwise specified in a Non-Employee Director's valid election, any deferred amount will be deferred until the earliest to occur of the Non-Employee Director's death, separation from service, or Change of Control; provided that any such deferral election is made by the Non-Employee Director on or prior to December 31 of the calendar year preceding the calendar year in which any such amounts are earned, or, if such Non-Employee Director is newly eligible for purposes of Section 409A of the Code, then within 30 days following the date he or she is first eligible, and then only with respect to amounts earned after the date of the election.

6 **Amendment and Termination**

The Plan may be terminated or amended by the Board at any time, except that the following actions may not be taken without stockholder approval:

- (i) any increase in the number of shares that may be issued under the Plan (except by certain adjustments provided for under the Plan);
- (ii) any change in the class of persons eligible to receive ISOs under the Plan;
- (iii) any change in the requirements of Sections 4.2(i)(b) and 4.2(ii)(c) hereof regarding the exercise price of Options and the grant price of SARs;
- (iv) any repricing or cancellation and regrant of any Option or, if applicable, other Award at a lower exercise, base or purchase price, as set forth in Section 2.3; or
- (v) any other amendment to the Plan that would require approval of the Company's stockholders under applicable law, regulation or rule or stock exchange listing requirement.

Notwithstanding any of the foregoing, adjustments pursuant to Section 3 shall not be subject to the foregoing limitations of this Section 6.

7 Governing Law

The Plan and all Award Agreements entered into under the Plan shall be construed in accordance with and governed by the laws of the State of New York, except that any principles or provisions of New York law that would apply the law of another jurisdiction (other than applicable provisions of U.S. Federal law) shall be disregarded. Notwithstanding the foregoing, matters with respect to indemnification, delegation of authority under the Plan, and the legality of shares of Stock issued under the Plan, shall be governed by the Nevada Revised Statutes.

8 Severability

If any of the provision of this Plan is finally held to be invalid, illegal or unenforceable (whether in whole or in part), such provision shall be deemed modified to the extent, but only to the extent, of such invalidity, illegality or unenforceability and the remaining provisions shall not be affected thereby; provided that, if any such provision is finally held to be invalid, illegal or unenforceable because it exceeds the maximum scope determined to be acceptable to permit such provision to be enforceable, such provision shall be deemed modified to the minimum extent necessary in order to make such provision enforceable.

9 Clawback and Noncompete

Notwithstanding any other provisions of this Plan, any Award which is subject to recovery under any law, government regulation, stock exchange listing requirement, or Company policy, will be subject to such deductions and clawback as may be required to be made pursuant to such law, government regulation or stock exchange listing requirement, or any policy adopted by the Company whether pursuant to any such law, government regulation or stock exchange listing requirement or otherwise. In addition and notwithstanding any other provisions of this Plan, any Award shall be subject to such noncompete provisions under the terms of the Agreement or any other agreement or policy adopted by the Company, including, without limitation, any such terms providing for immediate termination and forfeiture of an Award if and when a Participant becomes an employee, agent or principal of a competitor without the express written consent of the Company.

* * * * *

Appendix B

TONIX PHARMACEUTICALS HOLDING CORP. 2019 EMPLOYEE STOCK PURCHASE PLAN (effective May 3, 2019, subject to shareholder approval)

1. **Purpose.** The purpose of the Plan is to furnish to Eligible Employees an incentive to advance the best interests of the Company by providing a method whereby they may voluntarily purchase stock of the Company at a favorable price and upon favorable terms. The Plan is intended to qualify as an “employee stock purchase plan” under Section 423 of the Code.

2. **Definitions.**

(a) **“Board”** means the Board of Directors of Tonix Pharmaceuticals Holding Corp.

(b) **“Code”** means the U.S. Internal Revenue Code of 1986, as amended.

(c) **“Committee”** means the Tonix Pharmaceuticals Holding Corp. Compensation Committee; provided, however, with respect to certain procedural interpretations of the Plan and the day-to-day administration of the Plan, the Committee may delegate to a subcommittee or a member of the Committee.

(d) **“Company”** means Tonix Pharmaceuticals Holding Corp.

(e) **“Date of Exercise”** means the last day of each Option Period.

(f) **“Date of Grant”** means, except as otherwise determined by the Committee, the first day of each January and July.

(g) **“Designated Subsidiary”** means any Subsidiary which has been designated by the Committee from time to time in its sole discretion as eligible to participate in the Plan.

(h) **“Eligible Base Compensation”** means that portion of an Eligible Employee’s Eligible Compensation that is comprised of wages and salaries and that excludes bonuses, commissions, and other amounts received during the Option Period.

(i) **“Eligible Compensation”** means the gross (before taxes are withheld) total of all wages, salaries and overtime earnings received during the Option Period, except that such term shall include elective contributions made on an Employee’s behalf by the Company or a Designated Subsidiary that are not includable in income under Section 125 or Section 402(e)(3) of the Code. Notwithstanding the foregoing, “Eligible Compensation” shall not include (i) reimbursements and other expense allowances, (ii) cash and noncash fringe benefits, (iii) moving expenses and moving bonuses, (iv) employer contributions to or payments from any deferred compensation program, whether such program is qualified under Section 401(a) of the Code or nonqualified, (v) employee contributions to, or deferrals under, any nonqualified deferred compensation program, (vi) welfare benefits, (vii) amounts realized from participation in any stock option, restricted stock, restricted stock unit, stock purchase or similar equity plan, (viii) amounts realized at the time property described in Section 83 of the Code is freely transferable or no longer subject to a substantial risk of forfeiture, (ix) severance or separation pay, (x) accumulated vacation paid upon termination of employment, (xi) bonuses, and (xii) any other amounts that receive special tax benefits under the Code but are not specifically included in the preceding sentence.

(j) **“Eligible Employee”** means an Employee that pursuant to paragraph 4 is eligible to participate in Plan.

(k) **“Employee”** means any individual who is an employee of the Employer for tax purposes and for purposes of participation in the Plan whose customary employment with the Employer is at least 20 hours per week and more than five months in a calendar year. The term “Employee” shall not include any independent contractors providing services to the Employer, regardless of length of such service.

- (l) **“Employer”** means the Company or any of its Designated Subsidiaries.
- (m) **“Enrollment Period”** means with respect to a given Option Period, that period beginning on the fifteenth (15th) day of May and November and ending on the fifteenth (15th) day of June and December, respectively, during which Eligible Employees may elect to purchase shares of Stock at the end of that Option Period in accordance with the terms of this Plan. The duration and timing of Enrollment Periods may be changed or modified by the Committee.
- (n) **“Fair Market Value”** means, as of any date, the mean of the high and low sales prices of the Stock reported on the composite tape of the NASDAQ Stock Market (or if no longer listed on the NASDAQ Stock Market, such other national securities exchange on which the Stock is then listed), on that date or, if no prices are reported on that date, on the last preceding date on which such prices of the Stock are so reported. If the Stock is traded over the counter at the time a determination of its Fair Market Value is required to be made hereunder, its Fair Market Value shall be deemed to be equal to the average between the reported high and low or closing bid and asked prices of Stock on the most recent date on which Stock was publicly traded. In the event Stock is not publicly traded at the time a determination of its value is required to be made hereunder, the determination of its Fair Market Value shall be made by the Committee in such manner as it deems appropriate.
- (o) **“Maximum Period”** means, with respect to a Participant, the 90 day period beginning on the first day of the Participant’s leave of absence; provided, however, that if the Participant’s right to reemployment by the Company or a Designated Subsidiary is guaranteed either by statute or contract, then such 90 day period shall be extended until the last day upon which such reemployment rights are so guaranteed.
- (p) **“Offering”** means an offer under this Plan of an option that may be exercised during an Option Period as further described in paragraph 6.
- (q) **“Option Period”** means the six-month period that begins on the Date of Grant and ends on the Date of Exercise. The duration and timing of Option Periods may be changed or modified by the Committee but the Option Period cannot exceed 27 months between the Date of Grant and the Date of Exercise.
- (r) **“Option Price”** means 85% of the Fair Market Value of the Stock on the Date of Exercise or on the Date of Grant, whichever amount is lesser; provided, however, that the Committee may alter this definition in any manner consistent with Section 423 of the Code.
- (s) **“Participant”** means any Employee who meets the eligibility and participation requirements in paragraphs 4 and 6 below.
- (t) **“Plan”** means this Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan, as amended from time to time.
- (u) **“Stock”** means shares of the authorized \$0.001 par value common stock of the Company.
- (v) **“Subsidiary”** means any present or future corporation which (i) is or becomes a "subsidiary corporation" of the Company as that term is defined in Section 424 of the Code and (ii) is designated as a participant in the Plan by the Committee.

3. **Administration of the Plan.**

- (a) **Administration by the Committee.** The Plan shall be administered by the Committee, which committee was established by the Board. With respect to certain procedural interpretations of the Plan and the day-to-day administration of the Plan, the Committee may delegate to a subcommittee or a member of the Committee. Subject to the provisions of the Plan, the Committee shall interpret the Plan and all options granted under the Plan, shall make such rules as it deems necessary for the proper administration of the Plan, shall make all other determinations necessary or advisable for the administration of the Plan, and shall correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any option granted under the Plan in the manner and to the extent that the Committee deems desirable to carry the Plan or any option into effect. Any action taken or determination made by the Committee pursuant to this and the other paragraphs of the Plan shall be conclusive on all parties. All expenses incurred in connection with the administration of the Plan shall be paid by the Company.

- (b) **Authority of Officers.** Any officer of the Company shall have the authority to act on behalf of the Company with respect to any matter, right, obligation, determination or election that is the responsibility of or that is allocated to the Company herein, provided that the officer has apparent authority with respect to such matter, right, obligation, determination or election.
- (c) **Indemnification.** In addition to such other rights of indemnification as they may have as members of the Board or officers or employees of the Company, members of the Board and any officers or employees of the Company to whom authority to act for the Board or the Company is delegated shall be indemnified by the Company against all reasonable expenses, including attorneys' fees, actually and necessarily incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan, or any right granted hereunder, and against all amounts paid by them in settlement thereof provided such settlement is approved by independent legal counsel selected by the Company or paid by them in satisfaction of a judgment in any such action, suit or proceeding, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such person is liable for gross negligence, bad faith or intentional misconduct in duties; provided, however, that within sixty (60) days after the institution of such action, suit or proceeding, such person shall offer to the Company, in writing, the opportunity at its own expense to handle and defend the same.

4. **Eligibility.**

(a) **General Statement.** Any individual who, as of a specific Date of Grant, is an Employee and has been continuously employed (including any authorized leave of absence) by the Company or any Designated Subsidiary for at least 90 consecutive days and who made an enrollment election as an Employee for that Date of Grant during the Enrollment Period or whose enrollment election was carried over according to subparagraph 6(f) shall be eligible to participate in the Plan for the Option Period beginning on such Date of Grant, subject to the requirements of paragraph 6 and the limitation imposed by Section 423(b) of the Code, provided, however, that any Employee on July 1, 2019 shall be eligible to participation for the Option Period beginning July 1, 2019 regardless of length of employment. Employees who are located outside the U.S. may be excluded from the Plan if their participation is prohibited under the laws of the applicable jurisdiction or if complying with the laws of the applicable jurisdiction would cause the Plan to violate Section 423 of the Code.

(b) **Employees Not Eligible.** Any provisions of the Plan to the contrary notwithstanding, an Employee is not eligible to participate if on the Date of Grant for any Offering Period such Employee, immediately after the grant of an option hereunder, would own stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of its parent or subsidiary corporations (within the meaning of Sections 423(b)(3) and 424(d) of the Code).

5. **Stock Subject to the Plan.** Subject to the provisions of paragraph 12 (relating to adjustment upon changes in Stock), the Company shall reserve initially for issuance under the Plan an aggregate of 150,000 shares of the Company's common stock (the "Common Stock"), which shares may be authorized but unissued shares of Stock, treasury shares or shares acquired on the open market. For purposes of applying the limitation set forth in the preceding sentence, any share of Stock sold pursuant to the Plan prior to an adjustment of the number of shares of Stock subject to the Plan under paragraph 12 shall be deemed to have been adjusted at the same time and in a similar manner as the adjustment to such number of shares of Stock subject to the Plan pursuant to paragraph 12. The Committee may from time to time reserve additional shares of authorized and unissued Stock for issuance pursuant to the Plan; provided, however, that at no time shall the number of shares of Stock reserved be greater than permitted by applicable law. Should any option granted under the Plan expire or terminate prior to its exercise in full, the shares theretofore subject to such option may again be subject to an option granted under the Plan. Any shares which are not subject to outstanding options upon the termination of the Plan shall cease to be subject to the Plan.

6. **Grant of Options.**

(a) **General Statement.** Following the effective date of the Plan and continuing while the Plan remains in force, the Company shall offer options under the Plan to all Eligible Employees to purchase shares of Stock. Subject to subparagraph 6(d), the number of shares subject to an option for a Participant shall be equal to the quotient of (i) the aggregate payroll deductions withheld on behalf of such Participant during the Option Period in accordance with subparagraph 6(b), divided by (ii) the Option Price of the Stock applicable to the Option Period, including fractions.

(b) **Election to Participate; Payroll Deduction Authorization.**

(i) Except as provided in subparagraph 6(f), an Eligible Employee may participate in the Plan only by means of payroll deduction. Except as provided in subparagraph 6(f), each Eligible Employee who elects to participate in the Plan shall deliver to the Company no later than the last day of the Enrollment Period a written payroll deduction authorization (which may be delivered electronically in accordance with procedures established by the Committee) in a form prepared by the Company whereby he or she gives notice of his or her election to participate in the Plan as of the next following Date of Grant, and whereby he or she designates an integral percentage, which cannot be less than one percent (1%) of his or her Eligible Compensation to be deducted from his or her compensation on each payment date and paid into the Plan for his or her account.

(ii) The Committee's administrative procedures may provide that an Employee's contributions to the Plan made pursuant to this subparagraph 6(b) will be subject to a "withholding hierarchy" for purposes of determining the amount that may be contributed to the Plan on behalf of a Participant. The Committee may determine the order of all withholdings and deductions taken from an Eligible Employee's compensation (*e.g.*, for federal, state and local taxes, social security, wage garnishments, welfare plan contributions, 401(k) deferrals, amounts elected under the Plan, and similar withholdings), and an Eligible Employee's payroll deductions made pursuant to this subparagraph 6(b) will be subject to such withholding hierarchy. As a result, such contributions to the Plan may be effectively limited to Eligible Compensation available after the application of such withholding hierarchy.

(iii) The percentage of Eligible Compensation that an Eligible Employee designates to contribute under this subparagraph 6(b) may not exceed either of the following: (i) 15% of the amount of Eligible Compensation from which the deduction is made; or (ii) an amount which will result in noncompliance with the \$25,000 limitation stated in subparagraph 6(d).

(iv) Subject to the limitations set forth in Section 423 of the Code, the Committee may change the administrative procedures applicable to the processes of electing Eligible Compensation deductions or deposits, as are set forth in subparagraphs 6(b)(i) and 6(b)(ii), and such revised procedures shall apply under the Plan as if fully set forth in the Plan.

(c) **Changes in Payroll Authorization.** The payroll deduction authorization referred to in subparagraph 6(b) may not be changed during the Option Period.

(d) **\$25,000 Annual Limitation.** No Employee shall be granted an option under the Plan to the extent the grant of an option under the Plan would permit his or her rights to purchase Stock under the Plan and under all other employee stock purchase plans of the Company and its parent and subsidiary corporations (as such terms are defined in Section 424(e) and (f) of the Code) to accrue at a rate which exceeds \$25,000 (or such other limit as may be in effect under Section 423 of the Code (or any successor provision) from time to time) of Stock, measured at the Fair Market Value of the Stock determined on the first day of the Option Period, for each calendar year in which any such option granted to such Employee is outstanding at any time (within the meaning of Section 423(b)(8) of the Code). Any amounts received from an Employee which cannot be used to purchase Stock under the Plan due to the \$25,000 annual limitation set forth in this subparagraph 6(d) shall be returned as soon as practicable, without interest.

(e) **Leaves of Absence.** During a paid leave of absence approved by the Company and meeting the requirements of Treasury Regulation § 1.421-1(h)(2), a Participant's elected payroll deductions shall continue. A Participant may not contribute to the Plan during an unpaid leave of absence. If a Participant takes an unpaid leave of absence that is approved by the Company and meets the requirements of Treasury Regulation § 1.421-1(h)(2), then such Participant's payroll deductions for an Option Period that were made prior to such leave may remain in the Plan and be used to purchase Stock under the Plan on the Date of Exercise relating to such Option Period. If a Participant takes a leave of absence that is not described in the first or third sentence of this subparagraph 6(e), then he or she shall be considered to have terminated his or her employment and withdrawn from the Plan pursuant to the provisions of paragraph 8 hereof. Further, notwithstanding the preceding provisions of this subparagraph 6(e), if a Participant takes a leave of absence that is described in the first or third sentence of this subparagraph 6(e) and such leave of absence exceeds the Maximum Period, then he or she shall be considered to have withdrawn from the Plan pursuant to the provisions of paragraph 8 hereof and terminated his or her employment for purposes of the Plan on the day immediately following the last day of the Maximum Period.

(f) **Continuing Election.** Except for a Participant who contributed a specific amount of Eligible Base Compensation, a Participant who has elected to participate in the Plan pursuant to subparagraph 6(b), as applicable, as of a Date of Grant, who takes no action to change or revoke his or her election on or before the date that is 15 days before any such respective Date of Grant shall be deemed to have made the same election, including the same attendant payroll deduction authorization or deposit election agreement, as applicable, for such next following and/or subsequent Date(s) of Grant as was in effect for the Date of Grant for which he or she made (or was deemed to have made, as applicable) such election to participate, subject to 6(b)(i) of the Plan

7. **Exercise of Options.**

(a) **General Statement.** Subject to the limitations contained herein, each Eligible Employee who is a Participant in the Plan automatically and without any act on his or her part shall be deemed to have exercised his or her option on each Date of Exercise to the extent that the cash balance then in his or her account under the Plan is sufficient to purchase at the Option Price whole and fractional shares of Stock.

(b) **Delivery of Shares.** As soon as practicable after each Date of Exercise, the Company shall deliver to a custodian selected by the Committee instructions for electronic delivery of the total number of shares of Stock respecting exercised options in the aggregate (for both whole and fractional shares) of all of the Eligible Employees who participated in the Option Period ending on such Date of Exercise. Such custodian shall keep accurate records of the beneficial interests of each Eligible Employee in the shares of Stock purchased by such Eligible Employee under the Plan and shall provide each Eligible Employee with such periodic statements as may be directed by the Committee reflecting all activity in the Eligible Employee's account. In the event the Company is required to obtain from any commission or agency authority to deliver any such shares of Stock, the Company shall seek to obtain such authority. Inability of the Company to obtain from any such commission or agency authority which counsel for the Company deems necessary for the lawful issuance of any such shares of Stock shall relieve the Company from liability to any Participant in the Plan except to return to him or her the amount of the balance in his or her account.

(c) **Fractional Shares.** Notwithstanding anything else to the foregoing, fractional shares of Stock will not be issued under the Plan. Any accumulated payroll deductions which would have been used to purchase fractional shares, unless refunded pursuant to Sections 8(a) or 9 below, will be held for the purchase of Stock in the next following Offering Period, without interest.

8. **Withdrawal from the Plan.**

(a) **General Statement.** Any Participant may withdraw in whole from the Plan at any time prior to the first day of the payroll period that includes the Date of Exercise relating to a particular Option Period. Partial withdrawals shall not be permitted. A Participant who wishes to withdraw from the Plan must timely provide notice of withdrawal by following the electronic or other procedures prescribed by the Committee or its delegate. The Company, promptly following the date when notice of withdrawal is timely provided, shall refund to the Participant the amount of the cash balance in his or her account under the Plan; and thereupon, automatically and without any further act on his or her part, his or her payroll deduction authorization and his or her interest in unexercised options under the Plan shall terminate.

(b) **Eligibility Following Withdrawal.** A Participant who withdraws from the Plan shall be eligible to participate again in the Plan upon expiration of the Option Period during which he or she withdrew (provided that he or she is otherwise eligible to participate in the Plan at such time).

9. **Termination of Employment.** If the employment of a Participant terminates for any reason, his or her participation in the Plan automatically and without any act on his or her part shall terminate as of the date of the termination of his or her employment. The Company shall promptly refund to him or her any cash balance in his or her account under the Plan, and thereupon his or her interest in unexercised options under the Plan shall terminate. The Committee may also establish rules regarding when leaves of absence or changes of employment status will be considered to be a termination of employment, including rules regarding transfer of employment among Designated Subsidiaries or between Designated Subsidiaries and the Company, and the Committee may establish termination-of-employment procedures that are independent of similar rules established under other benefit plans of the Company and its Subsidiaries; provided that such procedures for the Code Section 423(b) Component are not in conflict with the requirements of Section 423 of the Code.

10. **Restriction Upon Assignment of Option.** An option granted under the Plan shall not be transferable, other than by will or the laws of descent and distribution. Each option shall be exercisable, during his or her lifetime, only by the Employee to whom granted. The Company shall not recognize and shall be under no duty to recognize any assignment or purported assignment by an Employee of his or her option or of any rights under his or her option.

11. **No Rights of Stockholder Until Stock Issued.** With respect to shares of Stock subject to an option, a Participant shall not be deemed to be a stockholder, and he or she shall not have any of the rights or privileges of a stockholder. A Participant shall have the rights and privileges of a stockholder upon, but not until, electronic delivery of shares has been made on his or her behalf following exercise of his or her option. With respect to a Participant's Stock held by the custodian pursuant to subparagraph 7(b), the custodian shall, as soon as practicable, pay the Participant any cash dividends attributable thereto and shall, in accordance with procedures adopted by the custodian and the Committee, facilitate the Participant's voting rights attributable thereto.

12. **Changes in Stock; Adjustments.** Whenever any change is made in the Stock, by reason of a stock dividend or by reason of subdivision, stock split, reverse stock split, recapitalization, reorganization, combination, reclassification of shares, or other similar change, appropriate action will be taken by the Board to adjust accordingly the number of shares subject to the Plan and the number and Option Price of shares subject to options outstanding under the Plan.

In the event of a proposed sale of all or substantially all of the assets, property or stock of the Company, a reorganization, merger or consolidation of the Company with or into one or more corporations, or a dissolution or liquidation of the Company, unless a successor corporation or a parent or subsidiary thereof assumes or substitutes new options (within the meaning of Section 424(a) of the Code) for all options then outstanding, (i) the Date of Exercise for all options then outstanding shall be accelerated to a date fixed by the Board prior to the effective date of such sale, reorganization, merger or consolidation or such dissolution or liquidation and (ii) upon such effective date any unexercised options shall expire.

13. **Use of Funds; No Interest Paid.** All funds received or held by the Company under the Plan shall be included in the general funds of the Company free of any trust or other restriction and may be used for any corporate purpose. No interest shall be paid to any Participant or credited to his or her account under the Plan.

14. **Term of the Plan.** The Plan shall be effective for the Option Period beginning July 1, 2019 subject to the prior adoption by the Board, provided the Plan is approved by the stockholders of the Company within 12 months after the date of its adoption by the Board. Notwithstanding any provision in the Plan, no option granted under the Plan shall be exercisable prior to such stockholder approval, and, if the stockholders of the Company do not approve the Plan within 12 months after its adoption by the Board, then the Plan shall automatically terminate. If not sooner terminated under the provisions of paragraph 15, the Plan shall terminate (and no further options shall be granted, and no further shares of Stock shall be sold) after the sooner of (i) such time as all of the shares of Stock subject to the Plan, as provided in paragraph 5, have been sold pursuant to options granted under the Plan or (ii) July 2, 2029.

15. **Amendment or Termination of the Plan.** The Board in its discretion may terminate the Plan at any time with respect to any shares for which options have not theretofore been granted. The Board shall have the right to alter or amend the Plan or any part thereof from time to time; provided, that no change in any option theretofore granted may be made which would materially impair the rights of the Participant without the consent of such Participant; and provided, further, that the Board may not make any alteration or amendment which would materially increase the benefits accruing to Participants under the Plan, increase the aggregate number of shares which may be issued pursuant to the provisions of the Plan (other than as a result of the anti-dilution provisions of the Plan), change the class of individuals eligible to receive options under the Plan, extend the term of the Plan, cause options issued under the Plan to fail to meet the requirements of employee stock purchase options as defined in Section 423 of the Code, or otherwise modify the requirements as to eligibility for participation in the Plan without the approval of the stockholders of the Company.

16. **Securities Laws.** The Company shall not be obligated to issue any Stock pursuant to any option granted under the Plan at any time when the shares covered by such option have not been registered under the Securities Act of 1933, as amended, and such other state and federal laws, rules, or regulations as the Company or the Committee deems applicable and, in the opinion of legal counsel for the Company, there is no exemption from the registration requirements of such laws, rules or regulations available for the issuance and sale of such shares. Further, all Stock acquired pursuant to the Plan shall be subject to insider trading policies of the Company, as the same may be amended from time to time.

17. **No Restriction on Corporate Action.** Nothing contained in the Plan shall be construed to prevent the Company or any Subsidiary from taking any corporate action which is deemed by the Company or such Subsidiary to be appropriate or in its best interest, whether or not such action would have an adverse effect on the Plan or any award made under the Plan. No Employee, beneficiary or other person shall have any claim against the Company or any Subsidiary as a result of any such action.

18. **Governing Law.** The Plan shall be construed in accordance with and governed by the laws of the State of New York, except that any principles or provisions of New York law that would apply the law of another jurisdiction (other than applicable provisions of U.S. Federal law) shall be disregarded. Notwithstanding the foregoing, matters with respect to indemnification, delegation of authority under the Plan, and the legality of shares of Stock issued under the Plan, shall be governed by the Nevada Revised Statutes.

* * * * *

Appendix C

CERTIFICATE OF AMENDMENT

TO ARTICLES OF INCORPORATION FOR NEVADA PROFIT CORPORATIONS
(Pursuant to NRS 78.385 and 78.390 - After Issuance of Stock)

1. Name of corporation:

Tonix Pharmaceuticals Holding Corp.

2. The articles have been amended as follows (provide article numbers, if available):

The corporation's articles of incorporation, as heretofore amended to date, are hereby further amended by amending Article IV thereof, as set forth on Attachment "A" attached hereto.

[continued on Attachment "A" attached hereto and filed herewith]

3. The vote by which the stockholders holding shares in the corporation entitling them to exercise at least a majority of the voting power, or such greater proportion of the voting power as may be required in the case of a vote by classes or series, or as may be required by the provisions of the articles of incorporation* have voted in favor of the amendment is: ____%

4. Effective date and time of filing: (optional)

Date: _____ Time:

(must not be later than 90 days after the certificate is filed)

5. Signature: (required)

Signature of Officer

TONIX PHARMACEUTICALS HOLDING CORP.

ATTACHMENT "A"

TO

CERTIFICATE OF AMENDMENT TO ARTICLES OF INCORPORATION

The Certificate of Amendment to Articles of Incorporation of Tonix Pharmaceuticals Holding Corp. (the "Corporation") consists of the certifications set forth on the preceding page and the continuation of Section 2 thereof, which is set forth on this Attachment "A" as follows:

2. The articles have been amended as follows (cont'd): The last sentence of Article IV of the articles of incorporation is hereby amended and restated to read in its entirety as follows:

The total number of shares of stock of each class which the Corporation shall have authority to issue and the par value of each share of each class of stock are as follows:

<u>Class</u>	<u>Par Value</u>	<u>Authorized Shares</u>
Common	\$0.001	150,000,000
Preferred	\$0.001	5,000,000
Total:		155,000,000

* * * *

C-2

PROXY

**TONIX PHARMACEUTICALS HOLDING CORP.
PROXY FOR ANNUAL MEETING TO BE HELD ON MAY 3, 2019
THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS**

The undersigned, revoking all prior proxies, hereby appoints SETH LEDERMAN and BRADLEY SAENGER (the "Proxies") and each of them, with full power of substitution in each, as proxies for the undersigned, to represent the undersigned and to vote all the shares of Common Stock of the Company which the undersigned would be entitled to vote, as fully as the undersigned could vote and act if personally present, at the Annual Meeting of Stockholders (the "Meeting") to be held on May 3, 2019, at 10:00 a.m., local time, at the offices of Lowenstein Sandler LLP at 1251 Avenue of the Americas, New York, New York 10020 or at any adjournments or postponements thereof.

Should the undersigned be present and elect to vote at the Meeting or at any adjournments or postponements thereof, and after notification to the Secretary of the Company at the Meeting of the stockholder's decision to terminate this proxy, then the power of such attorneys or Proxies shall be deemed terminated and of no further force and effect. This proxy may also be revoked by filing a written notice of revocation with the Secretary of the Company or by duly executing a proxy bearing a later date.

In their discretion, the Proxies are authorized to vote upon any other matter that may properly come before the meeting or any adjournments thereof.

THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE SPECIFICATIONS MADE, BUT IF NO CHOICES ARE INDICATED, THIS PROXY WILL BE VOTED FOR THE ELECTION OF ALL NOMINEES AND FOR THE PROPOSALS LISTED ON THE REVERSE SIDE.

CONTINUED AND TO BE MARKED, DATED AND SIGNED ON THE OTHER SIDE

▲ PLEASE DETACH ALONG PERFORATED LINE AND MAIL IN THE ENVELOPE PROVIDED. ▲

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held May 3, 2019.

**This Proxy Statement and our 2018 Annual Report on Form 10-K are available at:
<http://viewproxy.com/tonixpharma/2019>**

Please mark your votes like this

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR ALL NOMINEES" IN PROPOSAL 1, "FOR" IN PROPOSALS 2-6 AND FOR "3 YEARS" FOR PROPSAL 7

1. Election of Directors

Nominees:

- 01 Seth Lederman 06 Adeoye Olukotun
- 02 Margaret Smith 07 James Treco Bell
- 03 David Grange 08 John Rhodes
- 04 Patrick Grace
- 05 Donald W. Landry

**WITHHOLD
FOR AUTHORITY FOR
ALL ALL
EXCEPT**

- 2. To ratify the appointment of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019
 FOR **AGAINST** **ABSTAIN**
- 3. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Stock Incentive Plan
 FOR **AGAINST** **ABSTAIN**
- 4. To approve the Tonix Pharmaceuticals Holding Corp. 2019 Employee Stock Purchase Plan
 FOR **AGAINST** **ABSTAIN**
- 5. To approve an amendment to the Company's Articles of Incorporation, as amended, to increase the Company's authorized shares of common stock from 15,000,000 to 150,000,000
 FOR **AGAINST** **ABSTAIN**
- 6. To approve, on an advisory basis, the compensation of the Company's named executive officers
 FOR **AGAINST** **ABSTAIN**
- 7. To approve, on an advisory basis, the frequency with which the Company should conduct future shareholder advisory votes on named executive officer compensation
 1 YEAR **2 YEARS** **3 YEARS** **ABSTAIN**

INSTRUCTIONS: To withhold authority to vote for any individual, mark, "For All Except" and write the nominee's name(s) on the line below.

**DO NOT PRINT IN THIS AREA
(Shareholder Name & Address Data)**

I plan to attend the meeting

Date: _____

Signature _____

Signature (if held jointly) _____

Address Change/Comments: (If you noted any Address Changes and/or Comments above, please mark box.)

NOTE: This proxy should be marked, dated and signed by each stockholder exactly as such stockholder's name appears hereon, and returned promptly in the enclosed envelope. When shares are held jointly, each holder should sign. When signing as an executor, administrator, attorney, trustee or guardian please give full title as such. If the signatory is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If the signatory is a partnership, please sign in the partnership name by authorized person.

CONTROL NUMBER

→

▲ PLEASE DETACH ALONG PERFORATED LINE AND MAIL IN THE ENVELOPE PROVIDED. ▲

CONTROL NUMBER

→

PROXY VOTING INSTRUCTIONS

Please have your 11-digit control number ready when voting by Internet or Telephone



INTERNET

**Vote Your Shares on the Internet:
Go to www.aalvote.com/TNXP**

Have your proxy card available



TELEPHONE

**Vote Your Shares by Phone:
Call 1 (866) 804-9616**

Use any touch-tone telephone to



MAIL

Vote Your Shares by Mail:

Mark, sign, and date your proxy

when you access the above website. Follow the prompts to vote your shares.

vote your Shares. Have your proxy card available when you call. Follow the voting instructions to vote your shares.

card, then detach it, and return it in the postage-paid envelope provided.
