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

FORM 10-K/A (Amendment No. 1)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2016

Commission File Number 001-36019

TONIX PHARMACEUTICALS HOLDING CORP.

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization)

26-1434750 (IRS Employer Identification No.)

509 Madison Avenue, Suite 306

New York, New York (Address of principal executive office)

10022 (Zip Code)

(212) 980-9155 (Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Common Stock, \$0.001 par value

Name of each exchange on which registered

The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined by Rule 405 of the Securities Act. Yes 🗆 No 🗵

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes 🗆 No 🗵

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 🗵 No 🗆

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box Non-accelerated filer \Box (Do not check if a smaller reporting company)

Accelerated filer \Box Smaller reporting company ⊠

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🗵

The aggregate market value of the voting common equity held by non-affiliates as of June 30, 2016, based on the closing sales price of the common stock as quoted on The NASDAQ Global Market was \$42,675,460. For purposes of this computation, all officers, directors, and 5 percent beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed an admission that such directors, officers, or 5 percent beneficial owners are, in fact, affiliates of the registrant.

As of August 30, 2017, there were 7,508,661 shares of registrant's common stock outstanding.

EXPLANATORY NOTE

Tonix Pharmaceuticals Holding Corp. (the "Company") is filing this Amendment No. 1 on Form 10-K/A (this " **Amendment**") to its Annual Report on Form 10-K ("**Form 10-K**") for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission (the "**Commission**") on April 13, 2017, to include Part III hereof, which was omitted from the Form 10-K due to the Company's intention at the time to have Part III be incorporated by reference to the definitive proxy statement, which was filed on May 2, 2017. In addition, Item 15 of Part IV of the Form 10-K has been amended and restated solely to include as exhibits new certifications by our principal executive officer and principal financial officer.

As required by the applicable rules, currently dated Section 302 certifications from the Company's Chief Executive Officer and Chief Financial Officer are included as exhibits to this Amendment. Because no financial statements have been included in this Amendment and this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4 and 5 of the certifications have been omitted.

Except as described above, no other revisions or amendments have been made to any other portion of the Form 10-K. This Amendment does not reflect events that may have occurred after April 13, 2017, the date of the original filing of the Form 10-K, or modify or update any disclosures that may have been affected by subsequent events.

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	Executive Compensation Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters Certain Relationships and Related Transactions, and Director Independence Principal Accounting Fees and Services Exhibits, Financial Statement Schedules

PART III

ITEM 10 - DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The Board of Directors elects our executive officers annually. A majority vote of the directors who are in office is required to fill vacancies. Each director shall be elected for the term of one year and until his successor is elected and qualified or until his earlier resignation or removal. Our directors and executive officers are as follows:

NAME	AGE	CURRENT POSITION	
Seth Lederman	60	President, CEO and Chairman of the Board of Directors	
Stuart Davidson	60	Director	
Patrick Grace	61	Director	
Donald W. Landry	63	Director	
Ernest Mario	79	Director	
Charles E. Mather IV	57	Director	
John Rhodes	61	Lead Director	
Samuel Saks	62	Director	
Bradley Saenger	44	Chief Financial Officer and Treasurer	
Gregory Sullivan	52	Chief Medical Officer and Secretary	

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 June of 2007 and has acted as its Chairman of the Board of Directors since its inception and as President since June 2010. Dr. Lederman is an inventor on key patents and patent applications underlying our programs including: TNX-102 SL's eutectic composition; TNX-102 SL's pharmacokinetic profile and related therapeutic properties, and TNX-102 SL for posttraumatic stress disorder (PTSD). Dr. Lederman has been the Chairman of Krele since its inception in August 2010. Dr. Lederman has also been the President and a director of Tonix Pharmaceuticals (Canada), Inc. since its inception in April 2013, a director of Tonix Pharmaceuticals (Barbados), Ltd. from December 2013 until it was dissolved in 2015. Lederman served as a director of Tonix Pharma Limited between December 2014 and September 2015 and Tonix Pharma Holdings Limited between December 2014 and November 2015. Since 1996, Dr. Lederman served as an Associate Professor at Columbia University, and retired on April 13, 2017. As an Assistant Professor at Columbia, Dr. Lederman discovered and characterized the CD40ligand 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 January 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 Plumbline 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 January 2007 and November 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 December 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. Since March 2013, Dr. Lederman has been the chairman of Leder Laboratories, Ltd., a whollyowned subsidiary of Leder Laboratories Inc. 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 has been a New York State licensed physician since 1985. 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.



Stuart Davidson became a Director in October 2011. Between July 2010 and October 2011, Mr. Davidson served as a director of Tonix Sub. Since 2011, Mr. Davidson has been a Managing Director of Sonen Capital. Since 1994, Mr. Davidson has been a Managing Partner of Labrador Ventures. Prior to Labrador, Mr. Davidson founded and served as CEO of Combion, Inc., which was acquired by Incyte. He also served as President of Alkermes, Inc., a biotechnology company focused on drug delivery. Mr. Davidson received his Bachelor's Degree from Harvard College in 1978 and his MBA from Harvard Business School in 1984. Mr. Davidson's prior experience as a venture capital investor, entrepreneur, and biotechnology industry executive experience in the leadership of pharmaceutical companies was instrumental in his selection as a member of our 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.

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.

Ernest Mario, PhD became a Director in October 2011. Between September 2010 and October 2011, Dr. Mario served as a director of Tonix Sub. Dr. Mario is a former Deputy Chairman and Chief Executive of Glaxo Holdings plc and a former Chairman and Chief Executive Officer of ALZA Corporation. Since April 2014, Dr. Mario has served as Chairman of Soleno Therapeutics, Inc. (formerly Capnia, Inc.), a specialty pharmaceutical company in Palo Alto, CA. Between August 2007 and February 2014, Dr. Mario served as the Chief Executive Officer and Chairman of Soleno Therapeutics, Inc. and between February 2014 and April 2014, Dr. Mario served as Executive Chairman. From 2003 to 2007, he was Chairman and Chief Executive of Reliant Pharmaceuticals, Inc. Dr. Mario is currently a director of Soleno Therapeutics, Inc. (since 2007), Celgene Corp. (since 2007) and Chimerix, Inc. (since February 2013). Dr. Mario is also Chairman of Chimerix. Dr. Mario served as a director of Boston Scientific Corp. (2001 – 2016), Kindred Biosciences, Inc. (2013 – 2016), VIVUS Inc. (2012 – 2013), XenoPort Inc. (2012 – 2015), and Maxygen Inc. (2001 – 2013). He serves as an advisor to The Ernest Mario School of Pharmacy at Rutgers University. In 2007, Dr. Mario was awarded the Remington Medal by the American Pharmacists' Association, pharmacy's highest honor. Dr. Mario brings to his service as a director his significant executive leadership experience, including his experience leading several pharmaceutical companies, as well as his membership on public company boards and foundations. He also has extensive experience in financial and operations management, risk oversight, and quality and business strategy.

Charles E. Mather IV became a Director in October 2011. Between April and October 2011, Mr. Mather served as a director of Tonix Sub. Mr. Mather has been a Managing Director of Equity Capital Markets at BTIG since March 2015 and served as its co-head of Capital Markets since March 2017. From December 2009 to February 2015 he was the Head of Private and Alternative Capital and Co-Head of Equity Capital Markets at Janney Montgomery Scott. Between May 2007 and September 2008, Mr. Mather was the head of the Structured Equity Group at Jefferies Group Inc. Prior to that, Mr. Mather held various senior investment banking positions at Cowen and Company, including as Co-Head of the Private Equity Group. From July 2015 until August 2017, Mr. Mather served as a director of the Finance Company of Pennsylvania. Mr. Mather received a BA in History from Brown University and an MBA in Finance from The Wharton School, University of Pennsylvania. Mr. Mather's extensive experience advising life science companies as an investment banker was instrumental in his selection as a member of our Board.

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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.

Samuel Saks, MD became a Director in May 2012. Between 2003 and April 2009, Dr. Saks was the chief executive officer and a director of Jazz Pharmaceuticals, Inc., a publicly-held biopharmaceutical company, which he co-founded in 2003. From April 2011 until February 2012, Dr. Saks served as interim Chief Medical Officer of Threshold Pharmaceuticals, a publicly-held biopharmaceutical company. Between November 2013 and May 2015, Dr. Saks served as the Chief Development Officer of Auspex Pharmaceuticals, Inc., a publicly-held biopharmaceutical company. From 2001 until 2003, Dr. Saks was company group chairman of ALZA Corporation and a member of the Johnson & Johnson Pharmaceuticals Operating Committee. From 1992 until 2001, Dr. Saks held various positions at ALZA, including Chief Medical Officer and Group Vice President, where he was responsible for clinical, regulatory and commercial activities. Previously, Dr. Saks held clinical research and development management positions with Schering-Plough, Xoma and Genentech. Dr. Saks formerly served as a scientific advisor to ArQule Pharmaceuticals, CMEA Ventures and ProQuest Investments. Dr. Saks is currently a director of Velocity Pharmaceutical Development LLC (since 2011), Bullet Biotechnology, Inc. (since 2012), NuMedii (since 2013) and PDL BioPharma, Inc. (since September 2015). Dr. Saks served as a director of Depomed, Inc. (2012 – 2017), Auspex Pharmaceuticals, Inc. (2009 – 2015), Trubion Pharmaceuticals, Inc. (2005 – 2010), Corixa Corporation, Cougar Biotechnology, Inc., Coulter Pharmaceuticals, Inc., Ilypsa, Inc. and Sirna Therapeutics Inc. (formerly, Ribozyme Pharmaceuticals, Inc.). Dr. Saks is board certified in oncology and received a B.S. and an M.D. from the University of Illinois. Mr. Saks' extensive scientific and medical expertise and experience in formulating partnering and business development strategies, including those involving larger pharmaceutical companies, was instrumental in his selection as a member of our Board.

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 worked for 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 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 posttraumatic stress disorder (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.

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) Stuart Davidson, Patrick Grace, Donald Landry, Ernest Mario, Charles Mather, John Rhodes and Samuel Saks 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 as 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 306, 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, 2016, the Board held 13 meetings, the Audit Committee held six meetings, the Compensation Committee held four meetings and the Nominating and Corporate Governance Committee held three meetings. The Board and Board committees also approved certain actions by unanimous written consent.

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

			Nominating and
	Audit	Compensation	Corporate
Name	Committee	Committee	Governance Committee
Seth Lederman			
Stuart Davidson		**	
Patrick Grace	**		*
Donald W. Landry			
Ernest Mario		*	
Charles E. Mather IV	*		*
John Rhodes	*		**
Samuel Saks		*	

* Member of Committee

** Chairman of Committee

Audit Committee

Our Audit Committee consists of Patrick Grace, Charles Mather and John Rhodes, with Mr. Grace elected as Chairman of the Committee. Our Board has determined that each of Messrs. Grace, Mather and Rhodes 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, 2016.

Compensation Committee

Our Compensation Committee consists of Stuart Davidson, Ernest Mario and Samuel Saks, with Mr. Davidson 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.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee consists of Patrick Grace, Charles Mather 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.

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. We believe that, during fiscal 2016, our directors, executive officers and 10% stockholders complied with all Section 16(a) filing requirements.

Involvement in Certain Legal Proceedings

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);
- 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;
- 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.

ITEM 11 - 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 2016 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 competiveness 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 2016, 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 will hold 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.

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 highest paid executive officers and up to two other highest paid individuals whose total annual salary and bonus exceeded \$100,000 for fiscal years 2016 and 2015.

							Change in		
							Pension Value and		
						Non-Equity	Non-Qualified		
				Stock	Option	Incentive Plan	Deferred	All Other	
Name & Principal		Salary	Bonus	Awards	Awards	Compensation	Compensation	Compensation	
Position	Year	(\$)	(\$)	(\$)	(\$)(1)	(\$)	Earnings (\$)	(\$)	Total (\$)
Seth Lederman	2016	472,500			292,763		_		765,263
Chief Executive Officer	2015	450,000	225,000		887,098	—	—	—	1,562,098
Gregory Sullivan	2016	335,000	—	—	79,844	—	—	—	414,844
Chief Medical Officer	2015	238,110	47,000	—	124,382	—	_	—	409,492
Bradley Saenger	2016	301,361	—		71,760	—	—	—	373,121
Chief Financial Officer	2015	215,000	64,500	—	61,017	—	_	—	340,517
Leland Gershell (2) Former	2016	33,056				—	—	392,000(3)	425,056
Chief Financial Officer	2015	350,000			234,682	_	_	_	584,682
Bruce Daugherty (4) Former Chief Scientific Officer	2015	238,110	62,275	—	168,971	_	_	_	469,356

- (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 8 to our audited financial statements.
- (2) Dr. Gershell resigned effective January 8, 2016.
- (3) Represents severance payment and consulting fees.
- (4) Dr. Daugherty's employment was terminated, effective December 31, 2016.

Grants of Plan-Based Awards in Fiscal 2016

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, 2016.

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options (#)	 se or Base Price of Awards (\$/Share)	 t Date Fair Value of and Option Awards (\$) (1)
Seth Lederman	2/9/2016	11,000	\$ 50.30	\$ 2.49
	2/9/2016	11,000	\$ 50.30	\$ 0.17
Bradley Saenger	2/9/2016	1,500	\$ 50.30	\$ 2.49
	5/27/2016	6,000	\$ 24.20	\$ 0.08
	5/27/2016	2,000	\$ 24.20	\$ 1.47
Gregory Sullivan	2/9/2016	3,000	\$ 50.30	\$ 2.49
	2/9/2016	3,000	\$ 50.30	\$ 0.17

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

Outstanding Equity Awards at December 31, 2016

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2016.

Name	Number of Securities underlying Unexercised Options (#) Exercisable	Number of Securities underlying Unexercised Options (#) Unexercisable	 Option Exercise Price (\$/Sh)	Option Expiration Date
Seth Lederman	3,500	—	\$ 300.00	5/9/2022
	6,750	_	\$ 102.00	2/12/2023
	6,708	392 (1)	\$ 158.80	2/11/2024
	8,334	1,666 ⁽²⁾	\$ 98.70	6/17/2024
	7,223	2,777 ⁽³⁾	\$ 66.80	10/29/2024
	11,550	7,350 ⁽⁴⁾	\$ 59.50	2/25/2025
	715	—	\$ 59.50	2/25/2025
	—	11,000 ⁽⁵⁾	\$ 50.30	2/9/2026
	_	11,000 ⁽⁶⁾	\$ 50.30	2/9/2026
Bradley Saenger	918	182 ⁽²⁾	\$ 98.70	6/17/2024
	796	304 ⁽³⁾	\$ 66.80	10/29/2024
	796	504 ⁽⁴⁾	\$ 59.50	2/25/2025
		1,500 ⁽⁵⁾	\$ 50.30	2/9/2026
		6,000 (6)	\$ 24.20	5/27/2026
	—	2,000 ⁽⁷⁾	\$ 24.20	5/27/2026
~ ~ ~ ~ ~		(2)		
Gregory Sullivan	2,209	441 ⁽²⁾	\$ 98.70	6/17/2024
	1,916	$734^{(3)}_{(4)}$	\$ 66.80	10/29/2024
	1,621	1,029 (4)	\$ 59.50	2/25/2025
	—	3,000 ⁽⁵⁾	\$ 50.30	2/9/2026
	—	3,000 ⁽⁶⁾	\$ 50.30	2/9/2026

⁽¹⁾ The shares subject to this stock option vested as to 1/3 of the shares on February 11, 2015, 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 February 25, 2016, 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 9, 2017, with the remaining shares vesting on an equal monthly basis over the following 24 months.
- (6) 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 \$60.00, \$70.00 and \$80.00 per share for 20 consecutive trading days, subject to a one year minimum service period prior to vesting.
- (7) 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.

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, 2016.

⁽²⁾ The shares subject to this stock option vested as to 1/3 of the shares on June 17, 2015, with the remaining shares vesting on an equal monthly basis over the following 24 months.

⁽³⁾ The shares subject to this stock option vested as to 1/3 of the shares on October 29, 2015, with the remaining shares vesting on an equal monthly basis over the following 24 months.

Equity Compensation Plan Information

The following table provides certain information with respect to our equity compensation plans in effect as of December 31, 2016.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (A)	a e I out out w	eighted- werage exercise price of tstanding pptions, arrants d 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⁾	228,676	\$	88.34	232,045
Equity compensation plans not approved by security holders		\$	_	
Total	228,676			232,045

(1) Consists of the 2012 Plan, the 2014 Plan, the 2016 Plan and the 2014 employee stock purchase plan ("ESPP").

(2) Consists of shares available for future issuance under the 2016 Plan and our ESPP. As of December 31, 2016, 212,596 shares of common stock were available for issuance under the 2016 Plan and 19,449 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. The Lederman Agreement has an initial term of one year and automatically renew 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 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;
- (1) 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. 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 2016 for services to our Company.

Name	Stock ards (\$) ⁽¹⁾	A	Option Awards (\$)	F	Fotal (\$)
Stuart Davidson	\$ 45,750	\$		\$	45,750
Patrick Grace	\$ 45,750	\$		\$	45,750
Donald Landry	\$ 45,750	\$	—	\$	45,750
Ernest Mario	\$ 45,750	\$		\$	45,750
Charles Mather IV	\$ 45,750	\$		\$	45,750
John Rhodes ⁽²⁾	\$ 68,625	\$	_	\$	68,625
Samuel Saks	\$ 45,750	\$	_	\$	45,750
Total:	\$ 343,125	\$		\$	343,125

(1) Represents the aggregate grant date fair value of restricted stock units granted in accordance with FASB ASC Topic 718. For the relevant assumptions used in determining these amounts, refer to Note 8 to our audited financial statements included in our Annual Report on Form 10-K. These amounts do not necessarily correspond to the actual value that may be recognized from the restricted stock unit grant.

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



ITEM 12- SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding beneficial ownership of our common stock as of August 30, 2017:

- 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 306, New York New York 10022.

	TITLE OF	NUMBER OF	PERCENTAGE OF
NAME OF OWNER	CLASS	SHARES OWNED (1)	COMMON STOCK (2)
Seth Lederman	Common Stock	182,040 (3)	2.40%
Bradley Saenger	Common Stock	7,936 (4)	*
Gregory Sullivan	Common Stock	18,935 (5)	*
Stuart Davidson	Common Stock	15,415 (6)	*
Patrick Grace	Common Stock	6,952 (7)	*
Donald Landry	Common Stock	14,649 (8)	*
Ernest Mario	Common Stock	79,849 (9)	*
Charles Mather IV	Common Stock	7,630 (10)	*
John Rhodes	Common Stock	24,742 (11)	*
Samuel Saks	Common Stock	12,074 (12)	*
Officers and Directors as a Group (10 persons)	Common Stock	315,709 (13)	4.13%
Rosalind Advisors, Inc. (14)	Common Stock	594,077 (15)	7.87%
Opaleye, L.P. (16)	Common Stock	413,593	5.51%

* 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 August 30, 2017 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 7,508,661 shares of common stock issued and outstanding as of August 30, 2017.

(3) Includes 60,980 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, days, 1,677 shares of common stock underlying warrants, 18,463 shares of common stock and 5,450 shares of common stock underlying warrants owned by Lederman & Co, 3,246 shares of common stock and 1,267 shares of common stock underlying warrants owned by L&L, 5,898 shares of common stock and 825 shares of common stock underlying warrants owned by Targent, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock and 410 (k) account, 50,000 shares owned through an IRA account and 3,100 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 5,157 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days.

(5) Includes 9,336 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days.

(6) Includes 4,122 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days, 7,454 shares of common stock and 1,084 shares of common stock underlying warrants owned by Lysander, LLC and 655 shares owned by Oystercatcher Trust. Stuart Davidson, as the Member of Lysander, LLC and Trustee of Oystercatcher Trust, has investment and voting control over the shares held by these entities.

(7) Includes 4,197 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days.

(8) Includes 4,047 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, 125 shares of common stock underlying warrants, 3,246 shares of common stock and 1,267 shares of common stock underlying warrants owned by L&L. Donald Landry, as a Member of L&L, has investment and voting control over the shares held by this entity.

(9) Includes 4,047 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days, 6,084 shares of common stock underlying warrants and 5,895 shares owned by Ernest and Mildred Mario Revocable Trust. Ernest Mario, as a Trustee of Ernest and Mildred Mario Revocable Trust, has investment and voting control over the shares held by this entity.

(10) Includes 4,797 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days and 300 shares of common stock underlying warrants.

(11) Includes 4,845 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days and 3,927 shares of common stock underlying warrants.

(12) Includes 4,047 shares of common stock underlying options which are currently exercisable or become exercisable within 60 days and 1,422 shares of common stock underlying warrants.

(13) Includes 105,575 shares of common stock underlying options and restricted stock units which are currently exercisable or vested or become exercisable within 60 days, 18,463 shares of common stock and 5,450 shares of common stock underlying warrants owned by Lederman & Co, 3,246 shares of common stock and 1,267 shares of common stock underlying warrants owned by L&L, 5,898 shares of common stock and 825 shares of common stock underlying warrants owned by Targent, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 417 shares of common stock underlying warrants owned by Leder Labs, 2,917 shares of common stock and 1,084 shares of common stock underlying warrants owned by Lysander, LLC, 655 shares owned by Oystercatcher Trust, 5,895 shares owned by Ernest and Mildred Mario Revocable Trust and 13,535 shares of common stock underlying warrants owned directly by the executive officers and directors.

(14) Based upon a Schedule 13G/A filed with the SEC on April 7, 2017. The mailing address for this beneficial owner is 175 Bloor Street East, Suite 1316, North Tower, Toronto, Ontario, M4W 3R8 Canada. Steven Salamon is the portfolio manager of this entity and may be deemed to beneficially own the securities held by this entity.

(15) Includes 40,169 shares of common stock underlying warrants.

(16) Based upon a Schedule 13G filed with the SEC on April 17, 2017. The mailing address for this beneficial owner is One Boston Place, 26th Floor, Boston, Massachusetts 02108. James Silverman is the president of Opaleye Management Inc., the investment manager of Opaleye, L.P., and may be deemed to beneficially own the securities held by this entity.

ITEM 13 - CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

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 relatedperson 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.

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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.

Other than as disclosed below, during the last two fiscal years, there have been no related party transactions.

On February 3, 2015, we entered into an underwriting agreement for an offering of common stock with a group of underwriters, including Janney Montgomery Scott LLC. Charles Mather, one of our directors, was a Managing Director of Janney until February 2015.

ITEM 14 – PRINCIPAL ACCOUNTING FEES AND SERVICES

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, 2016 and 2015, including review of our interim financial statements as well as registration statement filings with the SEC and comfort letters issued to underwriters were \$346,138 and \$253,271, 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, 2016 and 2015.

Tax and Other Fees

We incurred fees to our independent auditors for tax services during the fiscal years ended December 31, 2016 and 2015 of \$9,400 in each year.

PART IV

ITEM 15 – EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(c) Index to Exhibits

The Exhibits listed below are identified by numbers corresponding to the Exhibit Table of Item 601 of Regulation S-K. The Exhibits designated by an asterisk (*) are management contracts or compensatory plans or arrangements required to be filed pursuant to Item 15.

Exhibit No.	Description
3.01	Articles of Incorporation, filed as an exhibit to the Registration Statement on Form S-1, filed with the Securities and Exchange Commission (the "Commission") on April 9, 2008 and incorporated herein by reference.
3.02	Articles of Merger between Tamandare Explorations Inc. and Tonix Pharmaceuticals Holding Corp., effective October 11, 2011, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on October 17, 2011 and incorporated herein by reference.
3.03	Third Amended and Restated Bylaws, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on June 3, 2016 and incorporated herein by reference.
3.03	Certificate of Change of Tonix Pharmaceuticals Holding Corp., dated March 13, 2017 and effective March 17, 2017, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on March 16, 2017 and incorporated herein by reference.
10.01	Lease Agreement, dated as of September 28, 2010, by and between 509 Madison Avenue Associates, L.P. and Tonix Pharmaceuticals, Inc., filed as an exhibit to the amended Current Report on Form 8-K/A, filed with the Commission on February 3, 2012 and incorporated herein by reference.
10.02	Form of Class A Warrant, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on January 23, 2012 and incorporated herein by reference.
10.03	Form of Class A Warrant, dated December 4, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 5, 2012 and incorporated herein by reference.
10.04	Form of Class A Warrant, dated December 21, 2012, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on December 27, 2012 and incorporated herein by reference.
10.05	Employment Agreement, between Tonix Pharmaceuticals Holding Corp. and Seth Lederman, dated February 11, 2014, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on February 14, 2014 and incorporated herein by reference.*
10.06	Employment Agreement, between Tonix Pharmaceuticals Holding Corp. and Gregory Sullivan, dated June 3, 2014, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on June 3, 2014 and incorporated herein by reference.*
10.07	Lease Amendment and Expansion Agreement, dated February 11, 2014, by and between 509 Madison Avenue Associates, L.P. and Tonix Pharmaceuticals, Inc., filed as an exhibit to the Annual Report on Form 10-K filed with the Commission on February 27, 2015 and incorporated herein by reference.
10.08	Sales Agreement, dated April 28, 2016, by and between Tonix Pharmaceuticals Holding Corp. and Cowen and Company, LLC, filed as an exhibit to the Current Report on Form 8-K filed with the Commission on April 28, 2016 and incorporated herein by reference.
14.01	Code of Business Conduct and Ethics for Employees, Executive Officers and Directors, filed as an exhibit to the Current Report on Form 8-K, filed with the Commission on February 16, 2016 and incorporated herein by reference.
21.01	List of Subsidiaries, filed as an exhibit to the Annual Report on Form 10-K, filed with the Commission on March 3, 2016 and incorporated herein by reference.

- 23.01 Consent of Independent Registered Public Accounting Firm, filed as an exhibit to the Annual Report on Form 10-K, filed with the Commission on April 13, 2017 and incorporated herein by reference.
- <u>31.01</u> Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- <u>31.02</u> <u>Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
- <u>32.01</u> Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed as an exhibit to the Annual Report on Form 10-K, filed with the Commission on April 13, 2017 and incorporated herein by reference.
- 101 The following materials from Tonix Pharmaceuticals Holding Corp.'s Annual Report on Form 10-K for the year ended December 31, 2016, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Loss, (iv) the Consolidated Statements of Stockholders' Equity, (v) the Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements, filed as an exhibit to the Annual Report on Form 10-K, filed with the Commission on April 13, 2017 and incorporated herein by reference.

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TONIX PHARMACEUTICALS HOLDING CORP.

Date: September 1, 2017	By:	/s/ SETH LEDERMAN Seth Lederman Chief Executive Officer (Principal Executive Officer)
Date: September 1, 2017	By:	/s/ BRADLEY SAENGER Bradley Saenger Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

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CERTIFICATION

I, Seth Lederman, certify that:

- 1. I have reviewed this annual report on Form 10-K/A (Amendment No. 1) of Tonix Pharmaceuticals Holding Corp.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: September 1, 2017

/s/ SETH LEDERMAN Seth Lederman Chief Executive Officer

CERTIFICATION

I, Bradley Saenger, certify that:

- 1. I have reviewed this annual report on Form 10-K/A (Amendment No. 1) of Tonix Pharmaceuticals Holding Corp.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: September 1, 2017

/s/ BRADLEY SAENGER Bradley Saenger Chief Financial Officer